Atomic Autocrats: Authoritarian Regime Type and the Pursuit of Nuclear Weapons

Matthew D. Cebul
Advised by Prof. Barak Mendelsohn
Senior Thesis, Haverford College Political Science Department
April 22, 2013
Abstract

In this thesis, I seek to explain why some authoritarian states choose to pursue nuclear weapons development while others do not. In particular, I probe one potential explanation for nuclear proliferation that has been largely neglected by decades of scholarship on nuclear proliferation: regime type. I argue that the variation in institutional structures across authoritarian regime types can help account for differing policy outcomes, as regime structure directly impacts a leader’s cost-benefit analysis when deciding whether or not to pursue nuclear weapons. Specifically, military regimes that feature high levels of personalism (strongman regimes) are the most likely to pursue nuclear weapons development; dictators in these regimes are often in need of a combative, nationalist foreign policy to foster domestic support and regime legitimacy, and are also personally safe from many of the political and economic costs commonly associated with illicit nuclear development. To prove this argument, and to further explore the relationship between military institutions, personalism, and nuclear proliferation, I employ a quantitative analysis of proliferation patterns across all authoritarian regimes from 1950-1992, as well as a qualitative historical analysis of both the North Korean and the Libyan nuclear programs. I conclude by using insights gleaned from the case studies to make recommendations for future American counter-proliferation efforts.
Acknowledgements

This thesis would not have been possible without the help and support of many friends and faculty from the Haverford community and beyond, of whom I will mention only a few:

My work on this thesis and my Haverford academic career at large were both immeasurably improved by the support and guidance of Professor Barak Mendelsohn, whose dedication and commitment to his students even through personal tragedy has shown me the model of a great man, whose high expectations and higher words of praise have encouraged me in my work and wiped away any doubts about my future career in academia, and whose biting sense of humor has taught me to “always go for the funny.”

To my parents, who have endured long periods of radio silence throughout this past year, and who have suffered through my seemingly constant irritability when I did manage to get in touch: I love you, and thank you for putting up with me.

To Margaret Schaus, the greatest librarian that this earth has ever known: you’re not off the hook yet. I’m headed to graduate school, and will likely be sending you more 1AM emails asking for help with elusive sources. Until then, keep showing us young guns how research is really done.

To the esteemed members of Professor Mendelsohn’s thesis group, who provided valuable insights during the early stages of my research and who have provided invaluable camaraderie and moral support ever since: thank you for gently reminding me that my work is greatly aided by listening to the opinions of my peers.

And to Jixi Teng, who took a 15-minute break from his Saturday night revelries to instruct me on the proper usage of Excel equations, saving me countless hours of manual addition: cheers.

Naturally, the fault for any errors in fact or judgment found in this thesis (despite the best attempts of all the above to help me avoid them) is my own. Happy reading.

Matthew D. Cebul
Table of Contents

Chapter 1
Atomic Autocrats: Nuclear Proliferation in Authoritarian States.......................5

Chapter 2
Nuclear Proliferation and Authoritarian Regimes: A Literature Review........... 8

Chapter 3
Methodology and Hypotheses........................................................................... 42

Chapter 4
Proliferation Propensities in Authoritarian Regimes: A Statistical Analysis.... 45

Chapter 5
The North Korean Nuclear Triumph: A Strongman Regime Remains Defiant...... 52

Chapter 6
The Libyan Nuclear Reversal: A Boss-Type Regime Comes in From the Cold...... 76

Chapter 7
Preventing Proliferation: Lessons Drawn From Libya and North Korea........... 97

Works Cited.......................................................................................................105
Chapter 1

Atomic Autocrats: Nuclear Proliferation in Authoritarian States

On the morning of August 6, 1945, people from across the globe awoke to yet another day of the Second World War, unaware that the United States had just detonated the world’s first atomic bomb over the Japanese city of Hiroshima. Three days later, another atomic bomb was detonated over Nagasaki. In both cases, the damage was catastrophic. Over 100,000 people were killed and at least as many injured, and the urban centers of both cities were completely obliterated (Strategic Bombing Survey 1946, 3-4). In Hiroshima, the incredible heat wave produced by the explosion caused much of the surrounding area to spontaneously combust, creating a firestorm that enveloped the city and dealt extensive damage (ibid). Many of those who were lucky enough to survive the immediate effects of the explosion were later overcome by radiation sickness (20-22). Shortly thereafter, on August 14 Japan surrendered to the Allied powers, and World War II came to an abrupt end.

Thus, the incredible destructive power of nuclear weaponry was displayed in dramatic fashion for the entire world to see. Predictably, upon the close of World War II other major powers began nuclear programs of their own. In 1949, the Soviet Union detonated its first test bomb, beginning a nuclear arms race with the United States. The 1950s and early 1960s saw Britain, France, and China follow suit. In 1974, India announced its first nuclear test, while the Pakistani nuclear program gave chase, eventually resulting in competing nuclear tests in 1998. We can also add to these prominent cases of successful nuclear development those of Israel (which is reputed to have nuclear weapons, yet has not tested them), South Africa (which fully disarmed and dismantled its nuclear program), and North Korea. In short, the advent of atomic
weaponry sparked a wave of nuclear proliferation, as additional countries sought to join the all-exclusive and prestigious nuclear club.

Yet to call the nuclear proliferation of the past century a ‘wave’ is an overstatement of the historical record. Since 1945, only nine other countries have successfully developed nuclear weapons capabilities; in reality, the spread of nuclear technology has been relatively contained. This is not to say that other states have not considered proliferation. Indeed, nuclear proliferation has been a recurrent problem for American policymakers, as the past few decades have seen repeated challenges to international nonproliferation norms, often emanating from authoritarian regimes like those found in Libya, Iraq, and Iran. However, the number of cases of full nuclear development is strikingly small in comparison to the number of states that could have developed weapons programs; various studies claim that between 32 and 48 states have the technological and material capacity required to build a nuclear weapon, though clearly the majority of these states have not done so (Meyer 1984, Sagan 2011).¹

Thus, in this thesis I seek an answer to the general question: why do some states proliferate when others do not? However, I am primarily concerned with a narrower subset of this broader topic, namely, nuclear proliferation in authoritarian states. Picking up a line of inquiry disregarded by most political scientists, I look to explore the role that regime type plays in a state’s decision to pursue nuclear weapons; while most existing scholarship has focused on elucidating behavioral differences between democratic and non-democratic states, scholars have largely neglected to evaluate the significance of variation within non-democracies. Differences in authoritarian regime type are not insubstantial. Different types of authoritarian regimes operate

¹ It is also worth noting that North Korea, a state which we once thought to lack the technical know-how and resources to build nuclear weapons, managed to do so after a determined effort to acquire the bomb. Thus, while there are certainly technical hurdles that must be overcome (like uranium mining and enrichment) in order to produce nuclear weapons, the mantra “where there’s a will, there’s a way” should not be forgotten.
in fundamentally different ways, relying on different institutional mechanisms to enforce their rule and managing dissent through different channels; therefore, it is not unreasonable to expect that some types of authoritarian regimes may be more prone to nuclear development than others.

Therefore, I hope to demonstrate that variation across regime type is one important answer to the question: why do some authoritarian states proliferate, while others do not? Addressing this question will provide valuable insights for American policymakers, who must regularly contend with the possibility of further nuclear proliferation that threatens to destabilize the global balance of power, particularly in the Middle East. Indeed, if we can identify what type of authoritarian states are most likely to attempt nuclear proliferation, we may be able to take proactive measures to head off the danger before it becomes a reality.

With this overarching theme in mind, this thesis proceeds as follows. Chapter two provides a review of the literature from two fields of study that have for the most part remained distinct; scholarship on the causes of nuclear proliferation and scholarship regarding variations in authoritarian regime type. Chapter three briefly provides the methodology for my analysis of the effects of regime type on nuclear proliferation, sketching out both a quantitative approach and also providing the rational behind my selection of two case studies, North Korea and Libya. Chapter four delves into a statistical analysis of the probability of nuclear proliferation with respect to authoritarian regime type, using data taken from several datasets spanning the years 1950-1992. Chapters five and six explore the two case studies mentioned above, parsing the historical record in order to provide similarities and contrasts in nuclear development related to regime type. Finally, in chapter seven I offer concluding remarks on the relationship between regime type and nuclear proliferation.
Chapter Two

Nuclear Proliferation and Authoritarian Regimes: A Literature Review

Before we can address the question posed above, a review of the literature surrounding nuclear proliferation in authoritarian states is in order. Two distinct literature groups will be evaluated separately; the first details research on the causes of nuclear proliferation, and the second explores the history of authoritarian regime typologies and their recent applications.

The Causes of Nuclear Proliferation

A vast and diverse literature has evolved from decades of research to describe the causes of nuclear proliferation. While this literature review cannot reproduce the scholastic depth and detail amassed on the topic, I aim to provide a functional knowledge of the major schools of thought that characterize the debate on nuclear proliferation, and to highlight the relative dearth of attention paid to the role regime type plays in a state’s nuclear aspirations.

To begin, the proliferation literature can be cleanly divided into two camps: “supply-side” arguments, which address a state’s ability to proliferate, and “demand-side” arguments, which address a state’s desire to proliferate.\(^2\) To begin, the supply-side literature focuses on the requisite resources, material, and technological know-how used to produce nuclear weaponry as the major indicators for nuclear proliferation. For example, Singh and Way (2004) use a multinomial logistic regression analysis to determine that GDP levels and industrial capacity are strongly correlated with nuclear development; states with greater material resources are more

---

\(^2\) One brief point of clarification: in this thesis, I use the term ‘proliferate’ to signify a state’s attempt to acquire nuclear weapons. To be a proliferator, a state needs to be conducting research, building facilities, or testing technology aimed at the eventual possession of a nuclear weapon, though it need not have successfully done so yet (and states can cease to be proliferators if they give up their nuclear ambitions). The term does not include uses of nuclear energy for peaceful purposes, like nuclear power plants or medical applications of isotopic research.
likely to pursue nuclear weapons (872). Jo and Gartzke (2007) find similar results, concluding that states with key materials are more likely to explore nuclear technology. Gartzke and Kroenig (2009) also focus their attention here, asserting, “the ability to produce nuclear weapons is a necessary condition for nuclear proliferation to occur” (2009, 153).

Supply-side scholars like Jo and Gartzke insist that focusing on capabilities is the most effective way to both correctly identify latent nuclear states and to prevent them from going nuclear. However, this is not a particularly insightful contribution to the proliferation debate; it is obvious that states need certain technologies and resources to develop nuclear weapons. This paper seeks to address a more perplexing question: given that they are capable of development, why do some states proliferate when others do not? This paper is thus concerned exclusively with the demand-side literature, which evaluates a state’s willingness to proliferate. Demand-side explanations cover a significantly broader realm of analysis than do the supply-side arguments. Therefore, the next several subsections divide the demand-side literature into explanations based on realism, neoliberal institutionalism, constructivism, domestic politics, and regime type.

---

3 It should be noted that nuclear proliferation is a relatively rare occurrence even among states that scholars like Singh and Way would classify as ‘nuclear capable’. Their aim is merely to establish that states that lack certain industrial benchmarks are particularly unlikely to attempt nuclear development—however, this says nothing about decisions to proliferate or forgo weapons within the set of states that do meet those criteria (which is why this thesis approaches the topic from the demand side, or a state’s will to proliferate).

4 The only truly important aspect of ‘supply side’ scholarship is the debate regarding exactly how many states are ‘nuclear capable’. Sagan (2011) notes that inconsistencies in coded variables, most importantly the availability of enriched uranium and plutonium, have complicated several quantitative studies of latent nuclear states. For example, Meyer’s (1984) original coding of potential nuclear states employed ten indicators of nuclear capacity, including a measurement of indigenous uranium deposits in each state. Meyer concluded that 34 states were capable of nuclear development in 1982 (Sagan 2011, 229). However, Stoll’s (1996) update of this data, and a following study from Hymans (2004), removed the indigenous uranium requirement, assuming that all states could acquire enriched uranium on the open market (ibid). Removing this vital choke point of nuclear development lead Stoll and Hymans to assert that 48 states are capable of nuclear development, an overestimate according to Sagan (Hymans 2006a, 4; Sagan 2011, 229). Regardless, this paper takes technological capability as a precursor to the main question; of those states that we know to be nuclear capable, why have some proliferated and others restrained?
Perhaps the most commonly cited justification for nuclear weapons acquisition is their value as deterrents, an argument grounded firmly in the realist tradition. Waltz’s foundational work “Theory of International Politics” exposes the reader to a harsh outlook on international relations; we live in an anarchic world, in which states can depend only on self-help to survive (1979, 111). Mearsheimer (1995) furthers asserts that states will attempt to maximize their military power relative to other states in order to guarantee their security; because they cannot be sure of the intentions of others, each state is forced to allocate resources for its own protection against potential threats (10-12). Indeed, for Mearsheimer the only way to truly provide for one’s security is to become the hegemon. Waltz (2003) moderates this claim; given the immense destructive power of nuclear weapons and the lack of an effective defense, nuclear weapons can guarantee state security even absent hegemonic status (see also Sagan 1996). Thus, realism predicts that states should be inexorably driven to develop nuclear weapons if they are capable of doing so; no other tool can provide for their security in a world of nuclear-armed states.

Though it provides a succinct account of states’ desire to acquire the bomb, realism runs into immediate difficulty when confronted with the historical record of nuclear proliferation. In short, very few nations have developed a nuclear capacity, and several of those who have then voluntarily relinquished their arsenal. Realists have posited several explanations for this puzzling development. First, security guarantees from great power states may convince weaker states that it is unnecessary to arm. However, relying on the nuclear umbrella of another power is a strategy that contradicts the basic realist impulse towards self-help; as Hymans (2006b) explains, “at the very core of realism lies the notion that friends today may become enemies tomorrow […]” Thus, the dominant strategy of states is to go for the bomb themselves and thus avoid any unpleasant
surprises” (456). As those opposed to extended deterrence suggest, would the United States really sacrifice New York to save Berlin (ibid)? Additionally, Solingen (2007) notes that the lack of a security guarantee from major powers did not cause states like Egypt, Libya, South Africa, Argentina, or Brazil to cling to weapons programs (25). Similarly, some realists also contend that great power coercion has generally kept the lid on proliferation by intimidating (or inducing) potential proliferators into submission. Yet international pressure has also proven an ineffective check in several cases (North Korea, Pakistan, and Israel), demonstrating that coercion alone is not enough to deter determined states from acquiring the bomb (ibid).

Mearsheimer (1990) and Frankel (1993) provide another realist explanation for the absence of nuclear development. They argue that the bipolar nature of the Cold War served to stabilize the international order and prevent minor states from proliferating. Both predicted that upon the close of the Cold War proliferation would rise; confronted by the drawdown of American and Soviet power from Europe and the rise of a multipolar system, states would once again feel compelled to compete over security. Yet despite these grim predictions, the past twenty years have not borne witness to an explosion of nuclear proliferation, and certainly not one in Europe. Again, history’s nuclear modesty disproves realist claims (Rublee 2009, 7-8).

Paul (2000) attempts to avoid this problem entirely by reinterpreting the realist account of state behavior. Paul asserts that, in zones of high conflict, states will behave according to traditional realist logic. However, states are also aware that arming themselves may trigger an escalating security dilemma with surrounding states, which would ultimately threaten their security; thus, if they reside in moderate or low zones of conflict, states will choose to forego nuclear weapons to escape the security dilemma (5). While Paul’s logic appears to be a convenient, updated realist model, his argument is actually a perversion of the fundamental

---

5 For more on states’ reluctance to rely on the U.S. nuclear umbrella during the cold war, see Goldstein (1995).
principles of realism. What makes the security dilemma a dilemma for realists is that states cannot merely will their way out of its clutches; Paul assumes that states can simply decide to trust one another enough to ignore the overriding systemic pressure to provide for their own defense regardless of the current balance of power, an assumption anathema to realist thought. Paul’s model is also unable to explain cases in which non-threatened states like Libya and Romania chose to pursue nuclear weapons capacity, as well as cases in which threatened states like Egypt and Saudi Arabia abstained from nuclear development.

This last argument brings to light yet another concern: if states react to threats and not merely power (as Walt suggests in his seminal work on alliances), then how states perceive threats is an important part of any explanation of nuclear proliferation. Walt (1987) provides four factors that influence how a state perceives another state, including aggregate power, offensive power, geographic proximity, and ‘aggressive intentions’ (21-26). While one might claim that the first three of these are clearly delineated and easily discerned, the intentions of one’s neighbor are often difficult to determine in international politics. Indeed, Jervis (1976) dedicates an entire book to the prevalence of misperception and poor judgment about the nature of the distribution of capabilities in international relations. Thus, it may be that those cases that deviate from systemic realist predictions are the result of leaders’ miscalculation of their states’ strategic position. However, this argument weakens the original realist position by cracking open the black box of state decision making; even if states all have similar preferences, system-level realist explanations cannot account for the variation in individual leaders’ perceptions of events. In addition, it is only a short jump from considerations of a leader’s perceptions of systemic forces to considerations of her cost-benefit analysis at large. Indeed, it may be the case that the leader did not fail to appropriately assess systemic pressures, but was rather swayed by other,
non-systemic considerations that impacted her ultimate decision. This is especially the case for states that are clearly aware of the threat that they face from opposing states, yet still consciously choose to refrain from nuclear development (like Saudi Arabia’s response to the Iranian threat thus far, or various European states’ abstention from nuclear proliferation during the Cold War despite the looming Russian threat).

Finally, another similar incarnation of realist thinking seeks to fuse system-level pressures with unit-level factors to better explain state behavior. Called neoclassical realism, this theory suggests that the balance of power and states’ relative capabilities drive their foreign policy decisions, but that these pressures must be filtered through domestic actors and unit-level circumstances that shape the eventual outcome. As Rose (2008) writes, “Neoclassical realists argue that relative material power establishes the basic parameters of a country’s foreign policy; they note […] that ‘the strong do what they can and the weak suffer what they must’. Yet they point out that there is no immediate or perfect transmission belt linking material capabilities to foreign policy behavior” (146-147). Thus, neoclassical realists tow the line on the importance of systemic factors (namely, the balance of power), yet move away from traditional realist thought by admitting that unit level factors often play a key role in foreign policy decisions.

Neoclassical realists highlight several intervening variables at the unit level that can impact foreign policy. The first is the decision-makers themselves; while traditional realists have assumed that states act in their rational best interests, neoclassical realists note that misperceptions by state leaders can lead to irrational foreign policy choices. As Rose (1998) writes, “Neoclassical realists […] argue that the notion of a smoothly functioning mechanical transmission belt is inaccurate and misleading […] would-be analysts of foreign policy thus have no alternative but to explore in detail how each country’s policymakers actually understand their
situation” (158). For example, if a state’s leaders misperceive a threat from another rising power, they may fail to balance against that state simply because they do not fully understand their geopolitical circumstances. Second, neoclassical realists draw attention to the strength of state apparatuses; if a state cannot access its full material power because it cannot extract the needed resources from its society, then their foreign policy decisions will likely not reflect what simple balance of power calculations might suggest (161). State weakness can cause leaders to avoid unpopular decisions, and thus to make popular foreign policy decisions even if these actions fail to efficiently address systemic pressures (163). For example, the most efficient way for a state that seeks to balance against a rising power to marshal its military forces is to impose a draft; however, knowing that the public will protest such a move, state leaders instead try to strengthen their army by other means (perhaps by providing increased pay and benefits for soldiers to incentivize enlistment). In short, these two intervening variables demonstrate that “foreign policy is linked to systemic incentives but not wholly determined by them” (Rose 1998, 164).

Applied to nuclear proliferation, neoclassical realism would suggest that while security concerns are the primary motivator for state behavior, the actual implementation of nuclear programs is dependent on state leaders’ perceptions of threat and their ability to mobilize resources towards the long term and costly nuclear development process. While this account better addresses cases in which states’ nuclear development fails to line up with systemic pressures, neoclassical realism is also an incomplete explanation for nuclear proliferation. By admitting the importance of unit level factors and leaders’ perceptions to foreign policy decisions, neoclassical realism opens the door to other unit-level factors that have little to do with the global balance of power. A litany of important leadership calculations come to mind: are the leaders revisionist, or status quo oriented; do they perceive domestic threats to their regime
from other actors within the state, or are they secure; and are the leaders principally or
ideologically opposed to some types of policies? This brief list demonstrates that, by
surrendering the key realist emphasis on states as like units, neoclassical realism really promotes
an explanation that is not realist at all; as Legro and Moravcsik (1999) assert, “The incorporation
of variation in underlying domestic preferences […] undermines (if not eliminates) the
theoretical distinctiveness of NCR [neoclassical realism] as a form of realism by rendering it
indistinguishable from nonrealist theories about domestic institutions, ideas, and interests” (28).

This brief discussion illustrates that the realist account of nuclear proliferation is
incomplete. Importantly, Solingen (2007) notes that nuclear proliferation should provide easy
cases for realist explanations. Nuclear weapons are widely regarded as the ultimate security tool,
as they practically assure state security from external threats; thus, the deck is stacked towards
realist accounts of nuclear proliferation, which focus entirely on state security (5). This makes
realism’s inability to explain numerous cases of nuclear proliferation (or lack thereof)
particularly noteworthy. In sum, while security concerns certainly matter for our explanations of
nuclear proliferation, realism doesn’t provide the full story. As Solingen (2007) concludes:

At issue is not the theory’s [realism’s] valuable insights but their unquestioned
acceptance as the driving force of all nuclear decisions despite significant shortcomings:
too many anomalies of insecure states forgoing nuclear weapons […] the reality of an
overwhelming majority of states renouncing them despite uncertainty, anarchy and self-
help; elastic and subjective definitions of self-help, vulnerability, and power itself;
inconclusive, open-ended operational implications of self-help for nuclear behavior;
hegemonic protection as neither necessary nor sufficient for nuclear abstention;
overestimation of ‘state’ and the expense of ‘regime security’; and concerns with
falsifiability (27).

We must therefore search elsewhere for more detailed explanations of variation in nuclear
proliferation between states. As a final comment, neoclassical realism was on the right track in
including state and leader preferences in its explanations of foreign policy; while it makes their argument difficult to label as a purely realist explanation, it likely brings their theories closer to the reality of states’ decisions to proliferate. Later on, this thesis will explore additional domestic factors in greater depth. However, other system-level explanations must first be considered.

Neoliberal Accounts of Nuclear Proliferation: The Nuclear Non-Proliferation Regime

Like realist accounts, neoliberal institutionalist theories accept that systemic pressures act as powerful motivators for state behavior, especially regarding security concerns. However, neoliberals contend that these pressures can be mitigated through the formation of international institutions, which can facilitate predictable, reliable cooperation between states. As Keohane and Martin (1995) explain, “Institutions can provide information, reduce transaction costs, make commitments more credible, establish focal points for coordination, and in general facilitate the operation of reciprocity” (42). For atomic-minded neoliberals, the Nuclear Non-Proliferation Treaty (NPT) is the institution of choice. Originally opened for signatures in 1968, treaty membership has since expanded to 190 signatories, with only India, Pakistan, North Korea, and Israel abstaining (Way and Sasikumar 2004). Several scholars explain that, by providing a clear pathway towards denuclearization and a stable set of expectations for member state behavior (and also by imposing political and economic costs on those who abandon the regime), the NPT has fundamentally altered the cost-benefit calculations that states make when choosing between proliferation and forbearance (Paul 2000, 8-10; Solingen 2007, 28; Rublee 2009, 10). In other words, the NPT helps states escape the security dilemma by making their behavior more predictable and by encouraging them to cooperate to achieve the mutual benefits of membership (access to civilian nuclear energy and international prestige) (Way and Sasikumar 2004, 11-13).6

---

6 Similarly, Paul (2000) notes that economic interdependence also acts as an institutionalist check against nuclear proliferation; given that economically interdependent states would damage their own economic health by attacking
The neoliberal account moves beyond our original realist claims by providing a plausible account of why the vast majority of states would choose to abstain from nuclear weapons development. However, neoliberal institutionalism is not without its flaws. First, Solingen (2007) notes that there is no way to directly prove that states’ rational cost-benefit analysis is what caused them to join the NPT, as opposed to great power coercion, domestic political concerns, side payments, or their normative beliefs about nuclear weaponry. Similarly, there is no clear proof that NPT incentives are the reason why states continue to adhere to the NPT; while states that have entered the treaty may find it difficult to reverse their commitments, Solingen suggests that “perhaps the very conditions that led states to sign and ratify the NPT […] can also explain subsequent compliance better than the NPT itself” (31). Betts (2000) makes this point even more forcefully, asserting that the treaties “are effects of nonproliferation, not causes of it […] if the NPT or CTBT themselves prevent proliferation, one should be able to name at least one specific country that would have sought nuclear weapons or tested them, but refrained from doing so, or was stopped, because of either treaty. None comes to mind” (69). In short, we need to know why states chose to sign the NPT before we can assert that the treaty itself is effective.

Importantly, Solingen (2007) also notes that neoliberalism, like realism, treats states as like units, assuming that governments are monolithic actors with fixed systemic interests (31). But this is not the case; state interests are shaped not just by systemic factors, but also by the varying domestic constituencies that comprise the state (see also Way and Sasikumar 2004, 6). Different domestic coalitions, oftentimes with divergent interests, compete using various channels of power in an attempt to shape state policy in their favor. These domestic interests, then, are just as relevant for state policymaking as are system-level concerns, a fact on which I one another, they pose less of a threat to each other, allowing them to relegate security concerns to the backburner while pursuing important economic goals (9).
will focus greater attention later on.

**Constructivist/Ideational Accounts of Nuclear Proliferation: The Nuclear Taboo**

While realism and neoliberalism are concerned with the effect of material pressures on a state’s decision to proliferate, constructivism posits a different driver for state behavior. Constructivism points to institutions as tools of state socialization, which can establish and entrench powerful international norms or “logics of appropriateness” that ultimately shape states’ understandings of their interests and thus constrain state behavior; over time, institutions can encourage states to hold “shared beliefs about what actions are legitimate and appropriate in international relations” (Sagan 1996, 73; see also Finnemore and Sikkink 1998).

Rublee (2009) applies this normative theory to nuclear proliferation, arguing, “multilateral institutions can socialize states and transform their basic preferences so that nuclear weapons are no longer a necessary or acceptable part of national defense” (Rublee 2009, 3). Thus, for constructivists like Rublee the NPT is not merely about cost-benefit analysis; rather, the treaty serves to champion a normative standard of non-proliferation that has steadily gained purchase throughout the international system. Tannenwald (2007) calls this anti-proliferation norm “the nuclear taboo,” a familiar phrase denoting nuclear weapons as unacceptable weapons of mass destruction that all civilized states ought to reject on principle (45-46). Tannenwald asserts that, by gradually shifting both global public opinion and the beliefs of individual state leaders, the nuclear taboo has become a powerful deterrent to nuclear proliferation (47-51).

However, it is not entirely clear that the nuclear taboo that Tannenwald describes is as

---

7 Rublee also incorporates lessons from social psychology to describe what causes states to adhere to these norms, highlighting persuasion (I now believe that X is better than Y), social conformity (I believe that Y is better than X, but all other states prefer X, so I will support X), and identification (my ally supports X, so to solidify my relationship with her I too will support X) as three psychological motives for adherence to the non-proliferation regime (25-29).
influential or far-reaching as she claims. To begin, constructivist accounts suffer from the same lack of evidentiary support as the neoliberal accounts, as it is difficult to definitively prove that states rejected nuclear weapons specifically as a result of their socialization into a non-nuclear culture; perhaps they did so in response to systemic pressures or domestic factors. Moreover, while the horrors of Hiroshima and Nagasaki have conditioned states and their people against the use of nuclear weapons, the nuclear taboo does not necessarily entail a categorical rejection of their development (Solingen 2007, 32). Excluding the five NPT nuclear weapon states, at least fifteen other states have actively pursued nuclear weapons capacity since their original deployment in World War II; indeed, some of the most public displays of nuclear prowess (the 1998 Indian and Pakistani nuclear tests) encountered only momentary condemnation before fading out of the public spotlight (33-34). Additionally, major states like the United States, China, France, and Russia all continue to defend their right to deploy nuclear weapons in certain circumstances, hypocritically undermining the nuclear taboo that they enforce via the NPT (ibid).

Furthermore, many believe that current NPT signatories may be forced to acquire weapons in response to rogue state development, a situation that Saudi Arabia, Turkey, and Egypt may soon face in relation to Iranian nuclear development (ibid). While the nuclear taboo may hold for now, it may reveal its fragility if non-weaponized states are confronted with dire imbalances of power.

Finally, constructivists have relatively little to say about competing ideational motivations regarding nuclear weapons, most notably those that involve state identity. O’Neill (2006) highlights the international prestige and status that come with a functional nuclear weapons program as a significant factor in several states’ decisions to go nuclear (3-6). In an insightful remark, Sagan (1996) suggests that “military organizations and their weapons can therefore be envisioned as serving functions similar to those of flags, airlines, and Olympic
teams: they are part of what modern states believe they have to possess to be legitimate, modern states” (74). One good example of this argument is the French nuclear program. Charles de Gaulle viewed a French nuclear program as an essential symbol of French nationalism, independence, and grandeur after World War II; for de Gaulle, Frenchmen needed the nuclear program to reaffirm to themselves their belief in France as a great power (Sagan 1996, 79). This argument aligns well with Hyman’s (2006a) work, which details how a leader’s national identity conception shapes his foreign policy decisions. De Gaulle believed that France’s greatness and power was an essential component of its being France, a belief about French national identity that guided his choice to pursue a nuclear arsenal (Hyman 2006a, 20).8

Therefore, the constructivists’ account of nuclear forbearance is weakened by competing ideational motives for proliferation. If normative accounts can be used to explain both nuclear proliferation and forbearance, then the relative importance and explanatory power of either norm remains unclear. Given our resulting dissatisfaction with constructivism, along with our doubts about realism and neoliberal explanations, we need to move beyond the system level of analysis and discuss more detailed and specific accounts of nuclear proliferation, namely, those explanations located at the state and individual level of analysis.

Domestic Accounts of Nuclear Proliferation: Redefining State Interests

Thus far, our explanations for nuclear proliferation have focused on system-level motivations; security threats, material incentives, and normative commitments are all justifications for nuclear development that affect each state similarly regardless of its internal dynamics. However, a growing body of literature has come to challenge the assumption that a

---

8 Here, the ‘levels of analysis’ structure of this literature review breaks down; these ideational explanations are clearly linked with the individual level of analysis, as it is the individual decision makers themselves who are influenced by normative concerns (states in and of themselves are not moral or ethical agents—it is their leaders that are driven by such concerns).
state’s internal politics are irrelevant to nuclear decision-making. As Campbell, Einhorn, and Reiss (2004) assert, “not only regional and international developments drive potential proliferation; domestic political upheaval and bureaucratic politics can also have an overriding and potentially decisive influence on the fateful decision to move down the nuclear path” (28). On this topic, Sagan (1996) provides a particularly insightful comment, remarking, “Nuclear weapons programs are not obvious or inevitable solutions to international security problems; instead, nuclear weapons programs are solutions looking for a problem to which to attach themselves so as to justify their existence” (65, emphasis added).

Though less established than realist and neoliberal arguments, state-level accounts have made several important contributions to our understanding of nuclear proliferation. First, just as states garner international prestige and status from successful nuclear development, leaders can use nuclear weapons as a potent nationalist symbol to bolster domestic support.9 As Solingen (2007) writes, “From Argentina under Perón to Pakistan, North Korea, and the Middle East, leaders have explicitly wielded nuclear myths of invincibility and modernity to boost domestic appeal” (Solingen 2007, 42; see also O’Neill 2006). Indeed, Lavoy (1993) explicitly focuses on the dynamics of nuclear myth making and its impact on a government’s decision to proliferate or to forgo weapons development, arguing that elites that desire a nuclear program work to propagate myth’s of nuclear grandeur in order to generate popular support for the program, which in turn makes proliferation more likely (199).

Second, as mentioned previously, the decision to go nuclear can also stem from the result of bureaucratic competition between interest groups. For example, elite businessmen who fear the economic costs of international isolation might lobby against nuclear development, while nuclear scientists and the military establishment are likely to speak out in favor of the program.

9 The Iranian case is an excellent example of this. See Chubin (2006).
Crucially, these actors do not merely attempt to persuade the leader to proliferate or abstain, but rather use their power and influence to directly impact change. As Sagan explains, “bureaucratic actors are not seen as passive recipients of top-down political decisions; instead, they create the conditions that favor weapons acquisition by encouraging extreme perceptions of foreign threats, promoting supportive politicians, and actively lobbying for increased defense spending” (Sagan 1996, 64; see also Perkovich 1998, 16, and Perkovich 1999, 447).

As another example, Solingen (2007) provides a thoughtful account of proliferation predicated on the domestic considerations of the leader. While she recognizes the importance of national security concerns, Solingen highlights that state leaders are primarily concerned with regime security (4-5). For Solingen, this means that the leader’s perception of nuclear weapons is contingent upon their strategy to maintain political office. To that end, Solingen identifies two basic types of leaders. On the one hand, internationalizing leaders seek to promote economic growth and stability through globalization and international interdependence; because pursuing nuclear capacity is likely to trigger global backlash against the state, internationalizing leaders are likely to avoid proliferation. On the other hand, inward-looking leaders scorn economic liberalization, choosing to implement protectionist, isolationist policies that privilege state control over the economy and ensuring their survival by distributing wealth and status to key societal groups. Because international backlash is therefore less troubling for these leaders (and the benefits of nationalism and prestige more useful), they are more willing to begin weapons programs (41-42). Solingen proves this relationship with case studies in Asia and the Middle East; Asian states, with their focus on globalization, tend to abstain from nuclear development, while inward-looking Middle Eastern states more often opted for nuclear development.
Solingen’s (2007) work flows neatly into other individual-level considerations about leadership preferences. For example, Maria Rublee argues that the individual preferences and opinions of key decision makers are an underappreciated yet vital aspect of nuclear policymaking. She uses the South African nuclear program as an example, describing how Prime Minister P.W. Botha was stung by the western rejection and isolation of his apartheid state, and thus became paranoid about acquiring nuclear weapons for his “emotional comfort”; on the other hand, Prime Minister F.W. de Klerk was strongly motivated to restore South Africa to the community of nations and end its international isolation, and thus resolved to end the nuclear program before he had even taken office (Kamrava 2012, 56).

Moreover, Kinne (2005) provides a more theoretical approach to leadership decision-making by predicting elite behavior through poliheuristic theory. Poliheuristic theory argues that policymakers are confronted with overwhelming quantities of information when making important decisions; in order to sift through the complexity, leaders resort to heuristics, or shortcuts, in reasoning (115). One particularly important shortcut is the “non-compensatory” rule, which tells leaders to reject all policy options that result in a negative outcome on a particular variable (for example, reject all policy options that are overly expensive). Crucially, because the continued survival of the regime is a top priority for leaders, the political arena is always non-compensatory with regards to foreign policy; thus, policymakers will reject any foreign policy option that has negative political repercussions. While leaders may have serious diplomatic or economic issues to resolve, those issues take a backseat to political concerns (ibid; see also Ezrow and Frantz 2011, 150-151). Applied to nuclear proliferation, poliheuristic theory suggests that leaders will pursue nuclear weapons if they perceive them to have positive benefits in the domestic political arena, and will abstain from developing if they feel that development
will incur negative political consequences, even if objectively better foreign policy options exist. In other words, while system-level calculations may predict that a state should proliferate in some circumstances and not others, it is ultimately the leader whose tenure is on the line—thus, domestic politics can trigger unnecessary proliferation (South Africa, Libya), and perhaps even prevent leaders from appropriately providing for state defense (though this is more unlikely).

The state-level theorists make several important contributions to the proliferation literature, foremost among which is their renewed focus on regime security, as opposed to state security, as a key driver of nuclear proliferation. However, two reservations are in order. First, these theorists do not claim that system level concerns are unimportant, or that domestic level explanations will explain every case; their insight is simply that leaders must balance realist system-level concerns as well as domestic political concerns when formulating nuclear policy. As Solingen explains, “such accounts do not suggest that classical security considerations are irrelevant to nuclear postures. Rather, leaders and ruling coalitions interpret security issues through the prism of their own efforts to accumulate and retain power and home” (52-53).

Second, while Solingen’s linkage of inward-looking and internationalizing states to proliferation outcomes is unique, she stops short of explaining the differing domestic government structures that facilitate these strategies. In line with the theme of this paper, perhaps certain types of regimes are more likely than others to pursue inward-looking economic strategies due to the nature of their institutions and structure of governance, as opposed to governmental structures establishing themselves around a chosen economic policy. If this is the case, then Solingen’s conclusions could actually be the result of a relationship between regime type and nuclear proliferation, which is the research interest of this paper.
Regime Type and Nuclear Proliferation: A Topic Abandoned

While the above theories offer numerous competing interpretations of the causes of nuclear proliferation, most theorists seem to agree on at least one basic conclusion: regime type plays a minimal role in the likelihood of proliferation (Sagan 2011, 236). Most scholarship done on this topic is framed as a comparison test between proliferation tendencies in democratic and authoritarian states; as a whole, this literature has leaned towards democracies as the more likely proliferator. Jo and Gartzke (2007) claim that, while regime type has no effect on a state’s decision to begin a nuclear program, democracies are more likely to successfully complete programs once begun, a result which they attribute to vulnerability of democracies to nationalist pressures (179). Singh and Way (2004) arrive at a similar conclusion, demonstrating that democracy makes states more likely to acquire nuclear weapons once weapons programs were initiated (876). However, Sasikumar and Way (2009) find minimal correlation between democracy and proliferation, though they assert that their data weakens the claim that democracy reduces proliferation (92-93). Finally, Solingen (2007) finds no relationship between regime type and proliferation in any of her case studies (273-274).

Though these studies provided data about the relationship between regime type and nuclear proliferation, all of them focused their explanations on other variables that they deemed to be of greater importance (like industrial capacity, security threats, and GDP). Thus, regime type is generally regarded as an unimportant factor for nuclear proliferation, and research along these lines is underdeveloped. In addition, these studies’ preoccupation with the democracy-dictatorship dichotomy obscures a lucrative research topic. Each author unceremoniously lumps all authoritative regimes into the same basket, without thought for significant differences between them; however, perhaps different types of authoritative regimes are more likely to
proliferate than others. Minimal attention has been paid to this question. Therefore, this paper proceeds to a review of the literature surrounding authoritarian regime typology and behavior.

**Authoritarian Regime Typologies: Breaking Down Autocracy**

Contemporary society is well accustomed to authoritarianism, which has been used for decades to describe systems of government that eschew democratic principles in favor of limited competition and repression of civil society. Yet despite our frequent recourse to the language of authoritarianism, defining the term is no easy task. Conceptually, we tend to think about authoritarianism in the negative; authoritarianism is all that democracy is not. Yet this quick description of authoritarianism is deficient, as it fails to constructively organize the world of authoritarian states into analyzable elements; as Brooker (2000) writes, “The term ‘authoritarian’ is so widely applicable that it is difficult to develop a theory which can cover so many diverse cases without becoming either banal or incoherent” (22).

Early studies of authoritarianism, notably those of Arendt (1951) and Friedrich and Brzezinski (1956), exemplify this problem. Immediately following World War II and with Nazi Germany and Stalin’s Russia in mind, these scholars focused on totalitarianism as the ultimate form of dictatorship (Brooker, 9). Both works highlight the importance of an all-encompassing ideology and the implementation of ideological propaganda to totalitarian regimes (Arendt 1951, Part 3, Friedrich and Brzezinski 1956, Chap. 7, 11). However, it soon became apparent that the original focus on totalitarianism failed to do justice to the vast majority of authoritarian regimes; dividing non-democracies into only totalitarian and authoritarian states ignores important differences within the vast majority of authoritarian states. Moving forward, Linz’s original 1975 work “Totalitarian and Authoritarian Regimes” was an important step towards more nuanced

---

10 There are two articles relevant to this question, Hymans (2008) and Weeks (2011). However, it will make more logical sense to discuss them at the end of the following section.
typologies of authoritarian regimes. Linz separates systems of governance into democracies, totalitarian states, and authoritarian states; from there, he provides a comprehensive literature review to help analyze different types of authoritarian regimes, and formulates his own unique typology (2000, Chap. 4). However, Linz’ work encounters significant difficulties. First, he acknowledges that his typology excludes traditional systems of authority (monarchies), as well as sultanistic regimes (also called personalist regimes, discussed later) (143-144). Moreover, his typology is unwieldy; he provides eight different ideal types of authoritarian regimes, and concludes that the typology’s complexity makes it impossible to actually use in real studies of existing regimes (Chap. 5). Indeed, a glance at Linz’s definition of authoritarianism clearly demonstrates the study’s lack of parsimony; as Linz writes, authoritarian regimes are “political systems with limited, not responsible, political pluralism, without elaborate and guiding ideology, but with distinctive mentalities, without extensive nor intensive political mobilization, except at some points in their development, and in which a leader or occasionally a small group exercises power within formally ill-defined limits but actually quite predictable ones” (159).

It thus appears that the study of authoritarian regimes is a more challenging task than that which early scholars originally addressed. Much of this difficulty lies in the creative adaptation of authoritarian regimes, which have improved their governance strategies through the incorporation of institutions and practices that we commonly associate with democracy; these “pseudodemocracies” have rendered obsolete early classificatory schemes, and therefore require a more detailed approach to regime typology (Diamond 2002, 23).

Fortunately, a growing body of literature on authoritarian regimes has greatly improved on Linz’s work. Perhaps the single most important contribution is that of Geddes (1999; 2003; 2012), which synthesizes past research on authoritarianism into a novel, clear, and usable
typology of authoritarian regimes. Geddes claims that authoritarian regimes can be broken into three types, based on who holds power. First, military regimes are those led by a core group of military officers that choses who will rule and also maintains steady influence over the policies that the government enacts (Geddes 2003, 51; Brooker 2000, 44-52). Second, in single party regimes, also referred to as dominant party regimes, one party controls access to political office and dictates government policy, though other minor parties are often allowed to compete in elections (Geddes 2003, 51; Brooker 2000, 37-45). In single party regimes, the dominant party is not merely a sham or fabricated construct of the dictator; it is the party apparatus and upper leadership itself that effectively controls government, and the ruler generally lacks independence from party influence. Finally, in personalist regimes, also referred to as sultanistic regimes (see Linz and Chehbabi 1998), the ruler himself maintains control over government policy and employment, marginalizing both party and military apparatuses from decision-making (Geddes 2003, 51; Brooker 2000, 52-58). These regimes are also characterized by the use of patronage systems to buy off key supporters (Geddes 2003, 53-55; Hadenius and Teorell 2006, 3).

Additionally, Geddes (2003) demonstrates the utility of her typology by using models of political coordination to highlight important differences in lifespan between the three regime types. First, military regimes have the shortest life span, on average lasting 9.5 years (78). Geddes (2003) attributes this relative instability to the nature of the military itself. Because officers are primarily concerned with the reputation and integrity of the military, they often have short-term political goals, and seek to ‘return to the barracks’ once these goals are achieved; similarly, when confronted with political opposition and the potential fracturing of the armed forces, these officers will prefer to exit government and return to their positions as respected military leaders (54-60; Brooker 2000, 5). In comparison, personalist regimes fare far better,
averaging 15.5 years in power (78). Geddes claims that because those in power are dependent on the dictator for their political futures, the elite cannot risk challenging him; if the dictator falls, so does the rest of government (60-62). Finally, single party regimes were clearly the most durable, averaging 29 years. For Geddes (2003), single-party regimes constitute a simple coordination game; because everyone in the party enjoys the fruits of political office, they will all ultimately support the party (even if they disapprove of any individual leader) and work together to maintain the regime. Cooptation is the preferred strategy over exclusion, as regimes seek to make as many people dependent on the party structure as possible (59-60).

Geddes’ typology is notable for its simplicity and ease of practical application. However, her work is not without criticism; indeed, Geddes’ typology has sparked a series of articles that challenge and amend her work to reflect various other aspects of authoritarian regimes. To begin, Hadenius and Teorell (2006, see also 2013 manuscript coauthored with Wahman) note two key shortcomings of Geddes’ typology. First, it fails to include monarchic regimes, a key flavor of authoritarianism that Geddes excludes from her original study, though which she does include in later articles (2006, 4). Second, Hadenius and Teorell question the utility of the personalist regime type, claiming that personalism is not a defining feature of authoritarian regimes, but is rather a factor that can be more or less present in any regime type (ibid).\textsuperscript{11} This leads Hadenius and Teorell to formulate a new typology of authoritarian regimes from 1972-2003, based on how political power is maintained: via hereditary succession (monarchies), the use or threat of military force (military regimes), or popular election (electoral regimes) (2006, 5-6). Electoral regimes are also broken down into several variants; no party regimes, single party regimes (the original Geddes classification), and limited multi-party regimes (7). The authors use their

\textsuperscript{11} This is a particularly important critique of Geddes’ work that is echoed by several other authors, and which will be featured prominently later on in this thesis.
typology to improve on Geddes’ original estimates of regime durability; limited multi-party regimes are actually the most fragile form of authoritarianism (averaging only 9.03 years), while monarchies are clearly the most durable (averaging 25.4 years) (14).

Cheibub, Gandhi, and Vreeland (2010) base their typology on a different aspect of authoritarian regimes. While dictators are not truly accountable to the people that they rule, they must rely on someone to keep the house in order; thus, dictators depend on the support of key elites to maintain power (Ezrow and France 2011, 81-82). This means that dictators must cater to the desires of this elite group, or risk defection. Indeed, most dictatorships are ended by means of internal coups, as opposed to popular uprisings or death of the dictator (ibid). As Ezrow and France (2011) write, “Elites serve as dictators’ primary constituents […] The dynamics of elite-leader relations in dictatorships provide critical insights into the factors that underlie the foreign policy decisions of autocratic leaders” (150). Cheibub, Gandhi, and Vreeland (2010) build on this argument, suggesting that because the dictator is primarily concerned with maintaining elite unity, the best measure of regime type is the kind of “inner sanctum” that each dictator develops to control and monitor his elite subordinates (84). This leads the authors to separate authoritarian regimes into three types; those managed by juntas (military regimes), those managed by political bureaus (party regimes), and those managed by family and kinship networks (monarchies) (84). While these distinctions are only marginally different from those proposed by Hadenius and Teorell (the three major regime types are the same), Cheibub, Gandhi, and Vreeland advance our understanding of regime typologies by explicitly linking the type of regime to an expected variation in policy. As they assert, “Because real decision-making power lies within these small institutions, they generally indicate how power is organized within the regime, to which forces dictators are responsible, and who may be likely to remove them. They produce different
incentives and constraints on dictators which, in turn, should have an impact on their decisions and performance” (84).

Finally, Lai and Slater (2006) create another unique typology that will feature prominently in later parts of this work. Lai and Slater make two important contributions to the literature on authoritarian regimes. First, they attempt to redirect scholarly attention away from the upper echelons of autocratic leadership and towards the institutions that make their rule possible. Lai and Slater suggest that Geddes and other typologies like those listed above are overly focused on who controls decision making (despotic power), when in fact we should be concerned with how those decisions are ultimately enforced (infrastructural power) (115). They note that especially in Geddes’ typology, “Military and party institutions are portrayed as potential constraints on executive prerogative, not as the leadership’s organizational foundation for rule,” a misrepresentation of the way that authoritarian leaders consolidate and maintain their rule (ibid). Indeed, Lai and Slater note that different types of infrastructural power manifest different vulnerabilities. In particular, military regimes tend to be significantly less capable of managing resistance than are party regimes, due to their lack of party structures that contain factionalism, provide basic regime legitimacy, and ameliorate the desire to rebel (114).

Second, Lai and Slater widen the critique of Geddes’ personalist category originally voiced by Hadenius and Teorell. Given that the institutions of control are the focus of attention, the personalist category serves only to obscure the all-important mechanisms by which those regimes maintain power; personalist regimes can enforce their rule using primarily military force or via party systems. Lai and Slater demonstrate the problem with Geddes’ typology with a brief glance at the numbers. Geddes classifies 37 regimes as purely personalist, and an additional 29 as some type of hybrid; thus, we lack an appropriate understanding of regime function in a
significant number of cases (115). Lai and Slater conclude that personalism is a trait that can be more or less prevalent in both military and party regimes, and should be represented as such to avoid obfuscating key differences between authoritarian regime types.

These considerations lead Lai and Slater (2006) to employ a new typology oriented around two variables, despotnic power (oligarchic vs. autocratic rule) and infrastructural power (party vs. military institutions), resulting in four regime types (116). The table that they provide, reproduced below, neatly summarizes these divisions.

**Figure 1: Slater’s (2003) Institutional Typology of Authoritarian Regimes**

<table>
<thead>
<tr>
<th>Infrastructural Power (Who Executes?)</th>
<th>Oligarchic</th>
<th>Autocratic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party</td>
<td>Machine</td>
<td>Bossism</td>
</tr>
<tr>
<td>Military</td>
<td>Junta</td>
<td>Strongman</td>
</tr>
</tbody>
</table>

Here, we see that Lai and Slater’s (2006) typology allows for a more nuanced analysis of regime behavior; it allows us to select for both the level of personalism and the type of supporting institutions when evaluating policy choices, revealing relationships that studies using the Geddes’ typology may have missed. This aspect of Slater and Lai’s work will be explored further in the following subsection.

In short, several distinct regime typologies have emerged in the literature, each of which classifies regimes according to different facets of their rule. None of them are flawless; as Diamond (2002) notes, “We must appreciate that classificatory schemes like the ones in these articles impose an uneasy order on an untidy empirical world […] these approaches remind us that most regimes are ‘mixed’ to one degree or another” (33). Moreover, each typology captures certain aspects of authoritarian regimes better than the others; thus, it is important to select a
typology appropriate to one’s specific line of inquiry. In the next section, I will review several studies that have employed the distinctions in authoritarian regime type shown above.

Behavioral Differences Across Authoritarian Regimes: Why Typologies Matter

The regime typologies depicted above are relatively recent additions to the literature on authoritarianism. However, they have flourished in conjunction with scholarship that predicts substantive behavioral differences across regime types. To begin, the preliminary focus of this scholarship was an analysis of variance in regime longevity. We have already learned that in general, military regimes are less durable than civilian regimes, and both are outlasted by monarchies, with some discrepancy regarding personalist regimes. We also know that leaders are primarily concerned with maintaining the support of the key elite that ensure their political survival. Additional scholarship has sought to explain these empirical results; most important are studies of electoral authoritarianism, also called competitive authoritarianism. Coined by Levitsky and Way (2002), competitive authoritarianism describes authoritarian regimes that govern in an ostensibly democratic fashion (holding elections and maintaining formal legislatures), yet consistently violate the rules that these institutions establish. As Levitsky and Way (2002) write, “incumbents routinely abuse state resources, deny the opposition adequate media coverage, harass opposition candidates and their supporters, and in some cases manipulate electoral results. [Dissenters] may be spied on, threatened, harassed, or arrested. Members of the opposition may be jailed, exiled, or […] even assaulted or murdered” (53).

While such systems could not be considered democratic by any stretch of the

---

12 Cheibub, Gandhi, and Vreeland (2010) demonstrate the importance of measurement decisions by replicating three studies that use the POLITY dataset. The authors question the way in which some variables are defined in the POLITY dataset, and use their own typology of democratic states in place of the POLITY data to challenge conclusions drawn in the articles (90-97).

13 Bueno de Mesquita et al (2003) describe this group of key supporters as the dictator’s “winning coalition” (51). The goal for the dictator is to rely on as small a winning coalition as possible while still maintaining regime stability.
imagination, the last half-century has witnessed a dramatic rise in the number of competitive regimes—50% of all post-World War II authoritarian regimes have held regular elections (Ezrow and Frantz 2011, 67). The reason for this explosion of Diamond’s (2002) ‘pseudodemocracies’ is likely the same as that for the relative longevity of civilian regimes: formally democratic institutions make authoritarian regimes more stable. Indeed, several authors have provided the theoretical background for this claim. Gandhi and Przeworski (2006, 2007) argue that dictators use institutions like political parties and legislatures to help coopt the opposition, distributing spoils and making minor policy concessions to mollify potential dissent. Magaloni (2008) advances this idea, claiming that political parties and elections allow dictators to credibly agree to power-sharing arrangements; without a systematic, structured mechanism for the provision of concessions (i.e. the spoils of political office and access to power), the dictator has no way to reliably promise his winning coalition the inducements required to garner their support. Dictators need ways to reliably temper their corrupt and often murderous behavior to earn the trust of the elite; electoral party systems provide one such mechanism. Finally, Gandhi and Lust-Okar (2009) and Ezrow and Frantz (2011) highlight various additional benefits that elections provide authoritarian regimes, such as improved regime legitimacy and clearer information about regime popularity and the strength of the opposition (Ezrow and Frantz 2011, 68-71).

Studies of authoritarian regime type have also expanded beyond concerns about longevity towards several new research topics, beginning with the differing conflict propensity of authoritarian regimes. Peceny, Beer, and Sanchez-Terry (2002) use Geddes’ typology in a study of conflict between authoritarian states and the possibility of a ‘dictatorial peace’, finding that certain authoritarian dyads are unlikely to experience conflict; no two personalist regimes or two military regimes have ever gone to war with one another. Additionally, Debs and Goemans
(2010) use the Cheibub, Gandhi, and Vreeland typology to evaluate the likelihood of war across authoritarian regime types in comparison to democratic states. Because the tenure of democratic leaders is less sensitive to the outcome of international bargaining than is the tenure of their authoritarian counterparts, and because democratic leaders face a comparatively safer retirement than do authoritarian leaders, democratic regimes are more likely to propose the compromises necessary to avert war than are authoritarian states (439-440). More importantly, however, Debs and Goemans (2010) find that within authoritarian regimes civilian dictators are less likely to wage war than are military dictators, because civilian dictators are significantly more likely to enjoy a safe retirement (440-441).¹⁴

Moreover, Lai and Slater (2006) use their own typology to arrive at similar conclusions to Debs and Goemans, but they provide an alternative explanation. For Lai and Slater (2006), military regimes are more conflict prone than other types of authoritarian regimes simply because they are less institutionally stable. Military regimes rule through coercive institutions, and therefore are unable to generate regime legitimacy as easily as single-party regimes can; they lack the ability to draw in and mobilize large sections of society in support of the regime, a hallmark of party structures (117). Therefore, military regimes use external conflict as a way to spark a nationalist rally-around-the-flag effect that simultaneously diverts attention from domestic problems and bolsters regime legitimacy (118). The authors’ findings accord well with Miller’s (1995) work, which argues that authoritarian regimes are likely to resort to diversionary war because they face fewer political costs for beginning wars than do democracies (767).

¹⁴ Importantly, Debs and Goemans (2010) recognize the utility of their methodology for future studies. As they write, “Although these are novel results, our setup is by no means limited to the study of war, and has broader implications to the study of international relations and comparative politics. Specifically, we argue that the leader’s policy choice depends on how that specific policy affects his or her tenure, given his or her regime type” (442). This thesis seeks to take a similar approach to the study of nuclear proliferation in authoritarian states.
Finally, Weeks (2012) provides a psychological explanation for heightened conflict propensity in military regimes, noting that military leaders are predisposed to perceiving the status quo as threatening, and to accepting the use of military force as both acceptable and routine in international relations. This indoctrination in a military-style morality lowers the perceived costs for conflict in military regimes (333).

Thus, a growing literature surrounds the study of authoritarian regime type. However, few scholars have addressed the effect of regime type on nuclear proliferation. Only two works are worth noting. First, Hymans (2008) argues that personalist regimes, which he calls neopatrimonial regimes, are so predisposed to corruption and inefficiency that they routinely bungle nuclear development projects. In a particularly memorable passage, Hymans writes:

> Neopatrimonial rulers’ fundamental political illegitimacy inexorably turns them into bad bosses. In particular, their usual response to the three classic management tasks of motivation, coordination, and delegation is to lean heavily on bribery and blackmail, divide-and-conquer, and micromanagement. Despite—or perhaps because of—the nuclear program’s importance in the eyes of the top leader, it is unlikely to be spared from these typical flaws of neopatrimonial management. Therefore, we can anticipate that such regimes will (1) alienate or even eliminate their best scientists, promote political hacks, and generally engage in routine, counterproductive churning of personnel; (2) make suboptimal, shifting, and even bizarre technical choices, while undermining efforts to develop a long-term, coherent action plan and indeed setting various wings of the effort at odds with each other; and (3) exhaust the program and its resources through repeated ‘crash’ efforts with unreasonable deadlines and distracting side projects. All of these organizational dysfunctions may seriously compromise or even derail a nuclear weapons research and development (R&D) effort, no matter how well financed and long-running it may be (274).

Hymans (2008) supports his claim by highlighting the history of both the Iraqi and Romanian nuclear programs, which he claims were beleaguered by the management flaws described above.
Hymans (2012) further extends this argument, noting that the neo-patrimonial dictator’s incessant micromanagement disrupts the professional autonomy of the scientific team working on the project, and adding several new case studies like North Korea and Yugoslavia (26). While Hymans’ work lacks a rigorous quantitative study of authoritarian regimes, it does provide substantial historical evidence to support the claim that nuclear programs begun by personalist regimes will likely suffer from serious organizational deficiencies.15

However, this thesis is not concerned with the bureaucratic efficiency of a state’s nuclear program. Though an important issue, this thesis seeks to address a more fundamental question; what factors lead different types of authoritarian regimes to pursue nuclear weapons capability in the first place? On this count, Weeks and Way (2011) stands out as the only study to link nuclear proliferation to regime type. In the previous section, we learned that most scholarship has dismissed regime type as an explanatory variable for nuclear proliferation. Weeks and Way (2011) challenge this assumption, arguing that previous scholars, who focused exclusively on comparisons between democracy and dictatorship, failed to account for potentially significant institutional variation among non-democracies (5). They note that a leader’s motives for and costs of nuclear proliferation are shaped by the domestic environment in which she finds herself; certain institutional settings may make nuclear weapons more appealing, while also helping to mitigate the potential hardships that come with nuclear development (6). In particular, Weeks and Way (2011) argue that personalist leaders are both strongly motivated to acquire nuclear weapons and are uniquely unencumbered by domestic obstacles to nuclear development that characterize other regime types. Personalist dictators want nuclear weapons for several reasons:

15 Hymans’ claim is supported by Ezrow and Frantz (2011), who note that personalist dictators tend to receive awful advice from their policy advisors; advisors are too scared of the dictator to deviate from recommending the dictator’s preferred policy. This often causes personalist dictators to behave rashly, basing their decisions off of skewed information (155-161).
first, in order to stoke the fires of nationalism, uniquely important for the personalist leader considering her oppressive style of rule; second, in order to satisfy the military, which provides vital support to the regime (and which often wants the prestige of a nuclear program); third, as a guarantee against aggression from foreign states, which often disapprove of the personalist regimes’ domestic policies; and finally, to satisfy the dictator’s narcissistic desire to obtain international status, a personality trait common to personalist dictators (11). Moreover, personalist dictators are relatively unaccountable to most domestic actors, leaving them free to spend the vast majority of state resources in whatever manner they see fit. This heavy-handed control also leaves them less likely to care about the damaging affects of international isolation than other regime types, as the damage generally does not affect the leader himself (12-13). The authors hypothesize that these factors combined provide personalist dictators with especially favorable conditions for nuclear proliferation.

To demonstrate their point, Weeks and Way (2011) run several types of statistical analysis, but it is their preliminary data collection that is particularly relevant for my purposes. The authors provide a bar graph that illustrates the percent of regime years that feature the pursuit of nuclear weapons broken down into personalist and non-personalist authoritarian regimes. The graph demonstrates that personalist regimes are significantly more likely to pursue nuclear weapons in any given year than are non-personalist regimes, lending strong support to their original hypothesis (the graph has been reproduced below).

While it thus seems clear that personalist regimes tend to proliferate, the data presented by Weeks and Way only tells part of the story. As is evident, Weeks and Way do not provide individual columns for military and civilian regime types here, leaving us unable to determine differences across those regime types. But more importantly, their analysis rests on the premise
that all personalist regimes are institutionally similar; as Lai and Slater demonstrate, this assumption is manifestly false. Personalist regimes can be supported by either military or party structures (albeit ones that are weaker in relation to the dictator than they are in purely military or single-party regimes), and these institutional differences may affect differences in regime policy as well. In other words, Weeks and Way (2011) fail to account for a potentially significant lurking variable in their data.

Indeed, Lai and Slater (2006) highlight just this problem with studies that attribute belligerent foreign policy to personalist regime type. Here, Lai and Slater (2006) argue that it is in fact military regimes that are prone to aggression, not personalist ones. As they write, “to the extent that other scholars have uncovered an empirical relationship between personalization and belligerence, we submit that it is spurious. ‘Personal’ regimes are not more belligerent because they are personalized, but because military regimes are systematically more likely to become personalized than party regimes” (119, emph. added). Something similar may be happening with Weeks and Way’s proliferation data; perhaps personalist states are more likely to pursue nuclear
weapons simply because many military regimes, which have incentives to pursue an aggressive foreign policy (including nuclear development), are actually categorized by the authors as personalist regimes.¹⁶ No work to date has addressed this oversight regarding authoritarian regime type and nuclear proliferation.

A Brief Synopsis: Where To Go From Here?

In summary, we have seen that common system level explanations of nuclear proliferation, be they realist, neoliberal institutionalist, or constructivist, often fail to provide an adequate explanation for patterns of nuclear proliferation. While nuclear weapons have clear significance for state survival at the systemic level, their potency as tools of domestic politics and as guarantors of regime survival is often overlooked, to the detriment of our understanding of nuclear politics. Indeed, once the black box of domestic politics is opened, it becomes apparent that nuclear proliferation cannot be understood without reference to both its system level effects and its place in the political landscape within the state.

However, most of that scholarship that does address the domestic significance of nuclear weapons has thus far shunned one logical domestic explanation for nuclear proliferation: regime type. Focused on the differences between democratic and non-democratic regimes, most scholars ignored crucial distinctions within non-democratic regimes that are relevant for studies of nuclear proliferation. Indeed, even within the literature that specializes in authoritarian regime type, very little work has been done to apply regime typologies to proliferation behavior. Moreover, those studies that do address regime type in relation to nuclear proliferation suffer

¹⁶ Recall that, according to Lai and Slater, military regimes tend to resort to aggressive foreign policies because they are vulnerable to domestic opposition, and thus seek to build legitimacy by fostering nationalist sentiment and diverting attention from domestic problems (117-118). While their study is geared around the dependent variable of conflict initiation, the logic should still hold when the dependent variable is the pursuit of nuclear weapons, as nuclear programs have similar uses as tools to generate nationalism and divert attention from other domestic issues. Indeed, nuclear programs may themselves be the impetus for tension and conflict with another state.
from a narrow focus on the personalist regime type; while personalism may well be an important characteristic of many authoritarian regimes, those regimes classified as ‘personalist’ exhibit important institutional differences that may influence both their willingness and ability to proliferate. It is these institutional structures (either military or party based) that determine how an authoritarian leader enforces his decisions, and even personalist dictators are ultimately beholden to those structural mechanisms that maintain their regimes. Given the potential significance of nuclear development as a tool of legitimation and diversion in domestic politics, we must consider institutional variation as a relevant factor in a leader’s decision to pursue nuclear weapons; thus, studies of nuclear proliferation need to employ regime typologies that effectively delineate these institutional variations. This thesis attempts to provide one such line of research.
Chapter 3

Methodology and Hypotheses

As we have seen, studies of nuclear proliferation in authoritarian regimes are few and far between, and those that do exist fail to account for one potentially important explanatory variable: regime type. This thesis attempts to rectify this gap in the literature, in two ways.

First, I will combine the dataset on nuclear proliferation employed by Weeks and Way (2011) (which they take from Singh and Way (2004)) with that of Lai and Slater (2006), to arrive at a new dataset which provides the years in which an authoritarian state pursued nuclear weapons and its regime type, based on the Lai and Slater typology. This will help to uncover any causal relationships that are buried in the ‘personalist’ category as presented by Weeks and Way (2011), by clearly distinguishing both the type of institutional support (either military or party structure) and the level of personalism (either low or high).

Above, we learned that military regimes are systematically less stable than party regimes. This should make military regimes more susceptible to nuclear proliferation for two reasons. First, military regimes are more likely to resort to high profile, aggressive behavior (like nuclear weapons development) in order to divert attention from domestic problems; and second, military regimes stand to benefit disproportionately from the nationalist rally-around-the-flag effect triggered by nuclear programs, which would accord support to a regime type that traditionally lacks legitimacy. In addition, we have learned that military elites are psychologically predisposed to viewing the outside world through the lens of security, and to preferring policy options that maximize military strength against these threats, making military regimes increasingly willing to pursue nuclear weapons programs. Moreover, we have also seen

---

17 We might also add to these reasons that military leaders may be hard-wired to think in terms of national defense and security, artificially inflating the importance of a nuclear program to government policy.
arguments suggesting that personalist regimes are uniquely capable and motivated to pursue nuclear weapons, for a variety of reasons. This leads us to two hypotheses:

**Hypothesis 1:** Military regimes are more likely to pursue nuclear weapons than are party regimes.

**Hypothesis 2:** Personalist regimes are more likely to pursue nuclear weapons than are oligarchic regimes.

These hypotheses can be competitively tested using the Lai and Slater (2006) typology, which breaks down authoritarian regimes into either military or party regimes and either high or low levels of personalism. Combined, these hypotheses result in a ranking of probabilities for proliferation in authoritarian regimes, which can be expressed using Lai and Slater’s (2006) regime types:

**Hypothesis 3:** The probability of nuclear proliferation in authoritarian regimes should vary by regime type as follows: Strongman (personalized military) > Junta (oligarchic military) > Boss (personalized party) > Machine.

It should be apparent that, while the strongman and machine categories are easily ranked as most likely and least likely to proliferate, the ordering of junta and boss regime types remains unclear. Their ranking depends on the relative importance of military rule and personalism to nuclear proliferation; thus, my statistical analysis should help determine which variable is the more salient factor.

Second, this thesis features several case studies to supplement the statistical analysis outlined above. The case studies aim to trace the history of nuclear programs in two authoritarian states, in order to provide a deeper understanding of how regime institutions can impact nuclear policy by changing the incentive structure surrounding the development of nuclear weapons.
Specifically, this thesis explores North Korea’s successful nuclear program and Libya’s dramatic reversal of its nuclear program as two model cases for the impact of regime type on nuclear policymaking. These case studies compare nuclear policymaking in two regimes that Lai and Slater (2006) classified as both strongman and boss-type at some point during their process of nuclear development. The cases will provide a clearer demonstration of how the structure of government and its relationship to domestic politics shapes the ways in which leaders approach nuclear development. They will also provide a level of detail and nuance about each state that goes above and beyond their regime type. Earlier, I noted Diamond’s earlier claim about the imperfections of any regime classification system; the case studies provided here will help to move beyond the reductive simplicity of regime typologies, and provide a more colorful depiction of the complexities of nuclear policymaking in authoritarian states.
Chapter 4

Proliferation Propensities in Authoritarian Regimes: A Statistical Analysis

To establish a baseline for the detailed case studies to follow, an analysis of the likelihood of nuclear proliferation in different authoritarian regime types would be useful. This thesis provides a basic statistical evaluation of this question by combining data from two sources. First, Singh and Way (2004) employs the “Correlates of Proliferation” dataset, which lists various state characteristics (like industry level and GDP levels) and their correlation with nuclear proliferation. More importantly, the Correlates of Proliferation dataset provides a list of every country in the world between the years 1945 and 2000, describing in each year whether a state was ‘exploring’ nuclear options, ‘pursuing’ nuclear development, or had ‘acquired’ nuclear weapons. The authors provide clear delineations between these three categories. A state is coded as acquiring nuclear weapons from the year that it first possessed a functional nuclear weapon, generally indicated by a successful weapons test, until the year in which clear evidence is available to prove that the state has dismantled its nuclear program.18 More broadly, a state is coded as in pursuit of nuclear weapons from the year in which it takes active measures to further advance its nuclear program, until clear evidence exists to prove that the state has given up its pursuit. Singh and Way (2004) further explain that to be coded as pursuing nuclear weapons, “states have to do more than simply explore the possibility of a weapons program. They have to take additional further [sic] steps aimed at acquiring nuclear weapons, such as a political decision by cabinet-level officials, movement toward weaponization, or development of single-use, dedicated technology” (866). And most expansively, a state is coded as exploring nuclear

18 It should be noted that not all of the nuclear capable states tested nuclear weapons in the same year that they successfully constructed them—Singh and Way (2004) note that Pakistan, for example, likely had nuclear technology years before it revealed its success in its 1998 nuclear tests (866). Israel has also never tested a nuclear weapon, yet is widely believed to have had a nuclear capacity for some time.
weapons from the year in which political authorization was given to research potential options for nuclear development, even if those options are never actually pursued (866). 19

Second, Lai and Slater (2006) provide a dataset that classifies every state between 1950 and 1992 by various regime types. 20 They first divide states into democracies, military authoritarian regimes, and party authoritarian regimes, and then further distinguish each authoritarian regime as one type in the four-fold typology described above (either as a Machine, Junta, Boss, or Strongman regime) (119-120). 21 Lai and Slater (2006) test each regime type’s propensity for conflict initiation, demonstrating that military authoritarian regimes are systematically more likely to initiate conflict than are any other regime type (including democracies) (122-123). While I am not directly interested their analysis of conflict initiation, I can use the Lai and Slater (2006) data in combination with that of Singh and Way (2004) to assess the likelihood of nuclear proliferation across each regime type.

Thus, for this thesis I have repurposed the data on proliferation years from Singh and Way (2004) with the corresponding data on regime type from Lai and Slater (2006) to create a new dataset that can assess average proliferation patterns across regime type. The time period ranges from 1950-1992 (the maximum range coded by Lai and Slater), and the dataset includes the 121 states that Lai and Slater (2006) have coded as authoritarian regimes at some point during that time period; the dataset does not include democratic states, as my research inquiry is

19 It should be noted that these categories are mutually exclusive; once a state begins to pursue nuclear weapons, it is no longer coded as exploring, and once a state acquires nuclear weapons, it is no longer coded as pursing. Similarly, it is not necessary that a state follows a natural progression across these three types; a state may skip the 'exploration' phase entirely, and immediately begin pursuing nuclear weapons.
20 Because of the duration of Lai and Slater’s dataset, my statistical analysis is limited to the years 1950-1992. Failing to consider more recent regime years that feature nuclear proliferation (Iran and Libya) may slightly distort my results; thus, this analysis should be taken with a grain of salt. However, my analysis of the two case studies in the chapters to follow extends beyond this time frame.
21 To determine differences between regime types, Lai and Slater (2006) used variables selected from the Polity III dataset, which allowed them to distinguish levels of personalism, and a variable from the Banks’ Cross National Time Series Archive, which enabled them to measure whether the government was controlled by military or civilian authorities (119-120). These datasets and variables are not presented here, as it appears that these measures of executive independence and civilian/military control are common and uncontentious.
entirely focused on comparisons within authoritarian regimes, not between authoritarian and
democratic regimes. The principle unit of measurement is the regime year; each state is coded
as either a military or party regime, as one of the four regime types from the Lai and Slater
typology, and as abstaining, exploring, or pursuing nuclear weapons for every year between 1950
and 1992 (or for every year within that range in which data was available). This should allow me
to perform basic probability calculations similar to the one shown by Weeks and Way (Figure 2
above). The dataset also allows me to record results for both the exploration and pursuance of
nuclear technology across regime type; though I have provided no hypotheses about differences
between the two, it will be useful to see what percent of authoritarian states have even
considered nuclear development (the broadest possible measure of proliferation) in tandem with
percentages on states that have actually taken political measures to build a nuclear arsenal.

Results:

Figure 3 below neatly summarizes the calculations performed on my aggregated dataset.
Much of the data accords to the original hypotheses provided above. To begin, the Strongman
regime type clearly outpaces every other regime type in terms of proliferation. This makes sense,
as the Strongman regime type demonstrates high personalism and military-style rule, both of
which were factors predicted to increase the likelihood of nuclear proliferation. Similarly, while
the Machine regime type (low personalism and party-style rule) was the second most likely to
explore nuclear options, it was the least likely to actually pursue nuclear development, again
consistent with the predicted hypotheses. Moreover, the data demonstrates that military regimes

\[\text{It should also be noted that the data from these sources is imperfect. In some cases, Singh and Way (2004) could not find evidence regarding nuclear development in some states for some time periods (which is often a secretive process). In other cases, Lai and Slater (2006) were unable to effectively code regimes into a particular regime type, particularly during transitional years or for particularly opaque regimes. Finally, data is not available on all states throughout the time period (data on some states starts later than 1950, or demonstrates gaps). However, on the whole the data is notably comprehensive, and will certainly suffice for the elementary statistical methods employed here.}\]
are significantly more likely to both explore and pursue nuclear weapons than are party type regimes. This result supports hypothesis 2 shown above, and bolsters Lai and Slater’s claim that it is in fact the military nature of regimes that make them prone to proliferation, and not merely their level of personalism. Indeed, it is particularly telling that, despite there being nearly twice as many total years coded as boss regimes (1214) than as strongman regimes (616), *more than twice* as many strongman regime years featured the exploration of nuclear options than did boss regimes (the count was 47 to 23), and the number of regime years featuring the pursuit of nuclear development was nearly equal across both regime types (the count was 37 in strongman to 45 in boss). Thus, when high levels of personalism are held constant, military regimes are more likely to proliferate than are party regimes.

However, another prominent aspect of the data contradicts Lai and Slater’s (2006) claim.
Recall that we were previously unsure of how to rank the junta and boss type regimes, given our two hypotheses; we lacked information on which variable (level of personalism or regime structure) was more likely to foster attempts at nuclear proliferation. Now, the data clearly indicates that boss type regimes are more likely to explore and pursue nuclear weapons than are junta type regimes, and junta type regimes are only marginally more likely to pursue nuclear weapons than are machine type regimes. Here, we see that personalism is relevant for nuclear proliferation; a low personalist military regime is no more likely to pursue nuclear weapons (and indeed, is less likely to even explore the nuclear option) that a party regime of similarly low levels of personalism, and is significantly less likely to pursue nuclear weapons than are high personalist party regimes.

This thesis suggests that this reported paucity of nuclear development in junta type regimes is likely the case for several reasons. First, the sheer number of junta type regimes is on the decline. Between the years 1950-1992, the Lai and Slater (2006) codings present only 152 junta regime years, out of 3,442 total regime years; thus, junta type regimes years make up only approximately 4.41% of all authoritarian regime years within this range. Indeed, Diamond (2002) notes that the traditional military dictatorship has almost entirely disappeared, as rulers now prefer to employ electoral and party systems (however corrupt they may be) to legitimize their rule (27). The heyday of junta-style dictatorships was likely prior to the advent of the atomic bomb; now, they are a dying breed. Thus, the percent of proliferation years for junta regimes may be low simply because the number of existing junta regimes has wilted during the

---

23 Interestingly, in both the junta and boss categories more years were spent ‘pursuing’ nuclear weapons than were spent ‘exploring’ nuclear options. While this difference is likely insignificant for the junta category (there are only three years in the entire dataset in which a junta regime pursues nuclear development, and two years in which one explores nuclear options), the different is significant for the boss category. However, much of this gap is likely taken up by one nuclear program; Libya jumped straight into the pursuit phase, spending 22 years pursuing nuclear weapons without first exploring.
nuclear age. In addition, it should be noted that given the low number of cases, any result for the junta regime type may be statistically insignificant. Of those 152 junta regime years, only three were found to demonstrate the pursuit of nuclear weapons. This result is highly sensitive to minor coding variations. For example, Lai and Slater code Argentina as a strongman type regime from 1976-1983; many scholars consider Argentina to have been ruled by a military junta during that time, in which Argentina was also pursuing nuclear development. If just those seven years were instead coded as junta type regimes, junta type regimes would jump ahead of strongman type regimes as the most likely to proliferate.\textsuperscript{24} Thus, we may wish to take our judgments on the junta-type regimes with a hefty grain of salt.

However, assuming that the Lai and Slater codings are indeed accurate, another theoretical argument can be made to explain the lack of proliferation among junta type regimes. Put simply, junta style regimes don’t have the requisite lifespan to bother with nuclear development. Above, we learned from Geddes (2003) that military regimes are the shortest lived of any regime type; vulnerable to elite fractionalization and public pressure, military leaders face a strong pressure to return to the barracks as soon as their limited political aims are fulfilled. This fact is borne out by the data provided on junta type regimes. The longest lived junta regime in my dataset is found in the Yeman Arab Republic (lasting fifteen years); however, most other instances of junta regime type span less than ten years, and many last for less than five. Given these relatively short timeframes, it is thus unsurprising that junta regimes do not often bother to even explore nuclear weapons technology; their priorities are short-term and direct, while

\textsuperscript{24} This is also a reflection of the difficulty of the type of statistical analysis that this paper presents. While assessing average probabilities of proliferation is a handy guideline for what we might expect from more detailed analysis, its significance is limited by the size of the regime type population. While both Lai and Slater (2006) and Weeks and Way (2011) progress to significantly more advanced statistical methods to validate their claims, I lack the methodological training to perform similar tests; such analysis on this question would likely be a fruitful future research topic, though not a necessary one for this thesis.
nuclear development is a long-term, complicated project that would not provide the regime with any immediate benefits. In other words, junta type regimes have little domestic incentive to pursue nuclear weapons, as their resources can be better spent elsewhere given their needs.

In sum, a quick glance at the historical data reveals support for the hypotheses presented above. Military regimes are significantly more likely to pursue nuclear weapons than are party regimes; strongman regimes (high personalism and military) are the most likely to proliferate overall, and machine regimes (low personalism and party) are the least likely. In addition, the data sheds light on the relative importance of military rule and personalism as correlates for nuclear proliferation. While military regimes are more likely to proliferate than party regimes, military regimes with low levels of personalism are less likely to proliferate than highly personalist civilian regimes, indicating that personalism is in fact an important factor regardless of a regime’s institutional structure, and disproving the ordering found in hypothesis 3 above. However, holding a high level of personalism constant, it is also clear that regimes relying on the military for institutional support are more likely to proliferate than those relying on party structures, demonstrating that military support is also an important correlate of nuclear proliferation. In short, Weeks and Way (2011) and Lai and Slater (2006) each provide part of the correct picture.
The North Korean Nuclear Triumph: A Strongman Regime Remains Defiant

Born from the aftermath of World War II, North Korea has been an embattled state since its inception. Guided by the Great Leader Kim Il-Sung and his son and successor Kim Jong-Il, North Korea steadily pursued nuclear weapons over the later decades of the 20th century. North Korea’s defiant nuclear posture has led it to a position of severe international isolation, forcing its people to endure terrible hardship and suffering. Yet for better or worse, in 2006 North Korea finally claimed victory over its adversaries with its first successful nuclear test. This chapter explores the motivations that drove North Korea’s apparent desperation to acquire a nuclear weapon. In particular, I focus on the importance of changes in regime institutional structure over time to explain nuances in North Korean nuclear policy. As we will see, both the personalist style of Kim Il-Sung and the increasingly power and influence of the military in decision making played important roles in the evolution of North Korean nuclear policy.

The North Korean Regime: The Beginnings of a Dictatorship

A background of the North Korean regime’s origins and ideology provides an important backdrop to my study of the North Korean nuclear program. Korea was a colony of the Japanese empire from August 22, 1910 until August 15, 1945 (Nahm 1988, 223). In order to make the colonial process of resource exploitation as efficient as possible, Japan attempted to assimilate Koreans into Japanese culture, enacting policies designed to stifle Korean cultural and political growth. As Nahm (1988) notes, “…the very soul of the Korean people faced the danger of extinction” (224). During this time, some Koreans elected to flee to Manchuria, where they cooperated with the Chinese to organized resistance movements against their Japanese overlords;
among them was Kim Il-Sung, who began his meteoric rise to power as a guerilla leader in Manchuria (Pollack 2011, 26-28).

The end of World War II brought considerable change to the Korean peninsula. The Soviets looked to install a figurehead communist leader above the 38th parallel; they decided to support Kim Il-Sung, whom the Soviets had interacted with during his time in Manchuria (Pollack 2011, 26-28). To enable this transition, the Soviets swept away the Japanese system of rule, printing new money, changing the educational system, and imposing communist style regulations on the economy (Nahm 1988, 333). During these transitional years, Kim Il-Sung solidified his authority with Soviet assistance, installing himself and his supporters in positions of power in the new government while removing or assassinating rival communist figures. In September 1948, Kim Il-Sung was chosen as the premier of the Supreme People’s Assembly, and in 1949 he became the head of the newly formed Korean Workers Party (KWP), now firmly in control of the levers of power in North Korea (Nahm 1988, 334-336, 364-368).

While solidifying his authority, Kim Il-Sung saw the concurrent American military withdrawal from Korea as an opportunity to reunify the peninsula under his rule. Thus, in June 1950 the Korean People’s Army (KPA) crossed below the 38th parallel, beginning the Korean War. While the North Korean troops routed the unprepared South Koreans, their early successes were stymied and eventually reversed by a determined UN resistance led by American forces. But just as these coalition forces were about to claim victory, they too were met with Chinese resistance, eventually fighting to a stalemate along the original border. After years of fighting and negotiations, the Korean War ended with the signing of the Korean Armistice Agreement in July 27, 1953 (Nahm 1988, 370-377; Pollack 2011, 30-34).
The Korean War had great personal significance for Kim Il-Sung, who became painfully aware of his tenuous position; his survival was entirely predicated on military assistance from China and the Soviet Union. Thus, as he began to rebuild his now-shattered country, Kim Il-Sung sought to ensure that North Korea would never again be so vulnerable (Nahm 1988, 378). To begin, in the years following the war Kim Il-Sung crushed any remaining internal opposition to his rule, purging the upper military ranks and dismissing, imprisoning, or executing thousands of government figures after public show trials. In so doing, Kim Il-Sung also cast off the remnants of Soviet control over North Korea, firmly establishing his personal dominance over policymaking (Pollack 2011, 38-40; French 2007, 53-54).

More importantly, in a 1955 speech Kim first introduced the concept of Juche. Commonly translated as ‘self-reliance’ or ‘self-determination’, Juche quickly became the guiding philosophy behind the North Korean flavor of communism (Pollack 2011, 35-36; Nahm 1988, 379). Juche orients North Korean society around the drive for independence from malevolent, imperialist forces, and asserts that political independence requires self-sustainability and chawi (self defense). Given the need for self-defense, Juche accords the military a prominent place in the social hierarchy, above that of the traditional Marxist working class (French 2007, 30-31). Juche also enshrines the role of a single national leader responsible for guiding the people through the socialist transition, cementing Kim Il-Sung’s position as the ultimate authority figure (36). To further idealize this position of power, Kim Il-Sung relied on a personality cult surrounding his rule (Byman and Lind 2010, 52-54). From the beginning of his rule, Kim Il-Sung was touted as the visionary founder of the Korean state, destined to bring prosperity to Korea, to defend her from imperialist enemies, and ultimately to reunify the peninsula. North Koreans to this day are required to wear lapel pins with his image as a symbol.
of respect and homage to their Great Leader, and his birthday (April 15) is the most significant national holiday (Byman and Lind 2010, 52-53; French 2007, 67).

The importance of *Juche* to North Korean society cannot be overstated. As French (2007) notes, “*Juche* permeates every aspect of North Korean life and is officially the ruling creed of the country, forming its national mythology”; *Juche* is effectively a state religion (30, 47). Moreover, the personality cult that legitimized the Kim Il-Sung’s rule has become a permanent fixture of the *Juche* ideology, and has passed down from father to his son Kim Jong-Il, who maintains his own mythical narrative (Byman and Lind 2010, 53). Indeed, the North Korean regime is now dependent on this fabricated cultural history; as French (2007) explains, “It [the cult of personality] is now such an integral part of North Korea society that to end the cult in the way that Khrushchev was able to with Stalin, or Deng with Mao, would be impossible; it would be likely to hasten the total collapse of the country, endangering the regime’s survival” (49).

What institutions did Kim Il-Sung rely on to support his rule? North Korea features a mix of both party institutions and military rule. To begin, political life in North Korea is entirely centered on the omnipresent Korean Worker’s Party, of which Kim Il-Sung was the chairman. This party apparatus seeks to incorporate all North Koreans into its folds by funneling political activity through party-created organizations, the better by which to monitor and subdue the masses (Byman and Lind 2010, 49). Access to information is tightly controlled, and ideological immersion is the name of the game. As Byman and Lind (2010) write:

…the government has quashed the development of an independent civil society. All organizations are created, operated, and monitored by the Korean Works’ Party (KWP). Students, for example, are organized into the Kim Il-Sung Socialist Youth League, which is responsible for political indoctrination of all youths aged eighteen to twenty-eight. By inserting the party into every organized social interaction, the regime obstructs the development of revolutionary political thought or activity” (49).
Thus, the regime stifles dissent by diffusing itself throughout social and political life. In addition, party membership is implicitly tied to Juche; combining this party structure with the ideological fervor of Juche enabled Kim Il-Sung to mobilize the masses in support of his rule, in particular his new economic policies, which called for rapid industrial development (French 2007, 77).

Yet indoctrination is not entirely sufficient to keep order in North Korea. Dissidents are punished severely, and are often sent to political ‘reeducation’ camps, which feature horrid living conditions, food scarcity, and frequent executions (Byman and Lind 2010, 57-58). French (2007) describes the oppressive environment:

For North Koreans political re-education camps are a real threat, along with torture and forced labour. Estimates of the number of such camps range from ten to fifteen large-scale institutions holding in total between 200,000 and 250,000 prisoners [...] the overall effect of the repressive atmosphere is that it is impossible to be silent in the DPRK and not show overt support for the regime, nor is it possible to create an obviously private realm—all life must be lived within the socialist Juche consensus” (28).

In short, what the regime fails to do with words and ideas, it does with the threat of brute force.

In their dataset, Lai and Slater (2006) code the North Korean regime as a boss-type regime. While North Korea is a difficult case to code, this is likely the case because throughout the range of the dataset the Korean military as an institution was subservient to the Korean Worker’s Party and Kim Il-Sung, and lacked real influence over policymaking. However, this thesis will demonstrate that the years following Kim Il-Sung’s death brought important changes to the institutional structure of the North Korean regime; incidentally, these changes coincide with important shifts in North Korean nuclear policymaking.

The North Korean Nuclear Program: The Long Road to the Bomb

North Korea’s nuclear aspirations likely began during the Korean War, motivated purely by security concerns. During the war, General MacArthur famously requested permission to use
tactical nuclear weapons, and President Eisenhower himself hinted at the possibility in the event that negotiations failed (Oberdorfer 2001, 252). After the war, the U.S. extended its nuclear umbrella to South Korea, deploying nuclear weapons in military facilities there (Mazarr 1995b, 93). And as noted above, the Korean War left Kim Il-Sung feeling vulnerable and dependent on alliance connections with China and Russia that were at best uncertain. In sum, North Korea needed a nuclear deterrent to provide a guarantee against future American intervention.

The first tangible instance of North Korean nuclear development occurred in 1965, when North Korea received a research reactor from the Soviet Union, which they located at Yongbyon (Oberdorfer 2001, 252-253; Mazarr 1995b, 94). Little is known from then until the end of the 1970s; Lai and Slater (2006) have North Korea coded as ‘exploring’ from 1965 to 1979. Russian intelligence believes that in the late 1970s, Kim Il-Sung “authorized the North Korean Academy of Sciences, the army, and the Ministry of Public Security to begin implementation of a nuclear weapons program, including rapid expansion of existing facilities at Yongbyon” (Oberdorfer 2001, 253). However, it was not until 1984 that American intelligence spotted the construction of a larger nuclear reactor at Yongbyon (Mazarr 1995b, 94; Oberdorfer 2001, 250). In response, the U.S. sought to increase international scrutiny on Pyongyang, pressuring the Soviet Union into using its leverage to get North Korea to sign the Non-Proliferation Treaty. The Soviet Union promised Pyongyang that they would provide four modern Light Water Reactors (LWRs) in exchange for North Korean ratification of the NPT. While North Korea was hesitant, in 1988 it signed the NPT (Mazarr 1995b, 94). Unfortunately for North Korea, the Soviets soon found themselves in an economic tailspin and were unable to complete the LWR project, leaving North Korea attached to the NPT with nothing to show for it (Oberdorfer 2001, 255).
During this time, American intelligence had become increasingly aware of North Korean nuclear development. In March 1986, satellite imagery located suspicious cylindrical craters around Yongbyon, likely the site of explosive testing, which dated back to 1983 (Oberdorfer 2001, 250). In that same month, the Americans observed the beginnings of a much larger building at Yongbyon, the shape and design of which was suited to a plutonium reprocessing plant (251). Sufficiently anxious, the incoming Bush administration decided to alert China, the Soviet Union, South Korea, and Japan about their findings, in the hopes that these countries might encourage North Korea to agree to the IAEA safeguards agreement, which entails regular inspections (Oberdorfer 2001, 255-256). North Korea adamantly refused inspections, citing the threat of American nuclear weapons deployed in South Korea (257). But in a stroke of good fortune, in 1991 the Soviet Union collapsed; in order to facilitate diplomacy with Russia, President Bush announced that all deployed tactical nuclear weapons would be recalled (which including those in South Korea). North Korea was surprised in December 1991, when South Korean president Roh Tae Woo proclaimed that “as I speak, there do not exist any nuclear weapons whatsoever, anywhere in the Republic of Korea” (Oberdorfer 2001, 258-260).

This concession came at the perfect time. 1991 had been a challenging year for Kim Il-Sung, who had just lost his long-time Soviet ally and benefactor, triggering a serious energy shortage and economic downturn (Oberdorfer 2001, 260). At the same time, China was moving to normalize relations with Seoul, and was pressuring North Korea to make peace with the South (261). These pressures, in combination with the conciliatory and diplomatic approach of outside powers, brought North Korea to the bargaining table. That winter, North and South Korea signed the December Accords, which recognized the legitimacy of both states and featured various other peace-building measures, the closest the two states had become since the Korean War (262). In
another meeting that December, Pyongyang and Seoul pledged not to “‘test, manufacture, produce, receive, possess, store, deploy or use nuclear weapons’ and not to ‘possess nuclear reprocessing and uranium enrichment facilities’” (264). Most importantly, in return for the cancelation of the annual U.S.-ROK Team Spirit military exercise, North Korea agreed to permit IAEA inspectors to visit Yongbyon, which began in May 1992 (264-268).

However, the terms of these accords quickly fell apart. North Korea was unprepared for the technological resources that IAEA inspectors had at their disposal; inspectors confirmed that the meager amounts of plutonium declared by North Korea was likely only a fraction of their total amount of reprocessed plutonium (Oberdorfer 2001, 269-270). Pressure began to build on North Korea to accept more onerous inspections, straining North-South relations and stalling the implementation of the December Accords. To try and coerce Pyongyang into agreement, South Korea and the United States announced the resumption of the Team Spirit exercises; furious, North Korea ceased negotiations with South Korea and threatened to refuse existing IAEA inspections (273-274). In response, the IAEA upped the ante by demanding ‘special inspections’ at sites not declared as nuclear facilities by North Korea but that the IAEA suspected as being so (277-279). North Korea refused, and in March of 1993 announced its intent to withdraw from the NPT (ibid). While American negotiating teams convinced North Korea to retain its NPT commitment, negotiations in 1993 and much of 1994 did nothing to ease the tension; the Korean peninsula was spinning towards a nuclear crisis (Mazarr 1995b, 97, Oberdorfer 2001, 291-294).

Yet just as the Clinton administration was pushing for UN sanctions and drawing up war plans, a diplomatic breakthrough emerged. Jimmy Carter traveled to North Korea as a private citizen, meeting personally with Kim Il-Sung and urging compromise on the nuclear issue

---

25 This delay was also the result of South Korean domestic politics; with Roh a lame duck president coming into an election year in 1992, some South Korean politicians purposefully attempted to slow down normalization with the North (as they thought that for some reason normalization would benefit the opposition) (Oberdorfer 2001, 272).
In the meetings, Kim Il-Sung agreed to temporarily freeze nuclear development and allow IAEA inspectors to remain in the country. In response, the United States halted its drive for UN sanctions and agreed to hold bilateral negotiations that summer. Kim Il-Sung also agreed to a North-South summit, a high-profile diplomatic reengagement with the South, though he would not live to see it to fruition.

Bilateral negotiations between the U.S. and North Korea on July 8, 1994, the exact same day that Kim Il-Sung died of a massive heart attack. While North Koreans were devastated by the news, negotiations were only delayed for a few weeks. This time around, the North Korean diplomats were businesslike and ready to reach an accord. The result of the negotiations was a milestone treaty called the Agreed Framework, which contained several phases. In Phase 1, North Korea would agree to maintain its freeze on nuclear development, to store used fuel rods, to permit full NPT inspections, and to restart peace negotiations with South Korea. In response, the United States would issue a security guarantee against the use of nuclear weapons in Korea, begin opening ‘interest sections’ (small embassies) in North Korea to enhance economic ties, support the construction of two LWRs to be finished by 2003, and provide fuel shipments for North Korea’s short term energy needs. In Phase 2, after the LWRs passed a certain level of construction, North Korea would grant inspectors access to previously off-limits nuclear waste sites and ship their stored fuel rods to another country. And finally, in Phase 3 South Korea would complete construction of the LWRs, and North Korea would dismantle the reactors and reprocessing plants at Yongbyon.

While the Agreed Framework was sound on paper, it ran aground when the parties involved attempted to implement the agreement. While North Korea had agreed to restart negotiations with the South, animosity remained high. This was particularly problematic for the
LWR agreement; while South Korea had agreed to foot the bill, North Korea refused to accept the reactors if they were branded as South Korean (Oberdorfer 2001, 365-368). Eventually a compromise was reached, but other problems quickly arose. In September of 1996, a North Korean submarine was found on the South Korean shore, triggering a massive manhunt for North Korean infiltrators. In response to the incursion, South Korean President Kim Young Sam indefinitely suspended the LWR agreement, and Washington halted its fuel transfers; in response, North Korea threatened to back out of the Agreed Framework and resume nuclear development (389-391). That December, the U.S. cajoled North Korea into issuing a formal statement of regret and to finally assent to peace talks involving China, the U.S., and South Korea, and the U.S. and South Korea resumed the LWR project and fuel transfers (392). Several meetings were held in Geneva in 1997 and 1998, but little progress was made.

The general intransigence of the North Korean regime in the years following the Agreed Framework is surprising; during this time, North Korea was entirely dependent on external aid for its survival. In 1995 a massive flood left an already weakened North Korea without the crops necessary to feed its people; that year, they asked the UN for nearly $500 million in aid to recover from the disaster (Oberdorfer 2001, 370). From 1996 to 1998, privation was rampant, as the government-run rationing system completely disintegrated under the stress of resource scarcity; estimates of famine deaths range from 500,000 to over 2 million fatalities (386-399). One might have expected this position of profound weakness to make North Korea more willing to adhere to the Agreed Framework, but Pyongyang continued to drag its feet. The North’s economic implosion also didn’t stop it from test-launching a three-stage Taep’o-dong missile in August 1998, which triggered further international consternation (410-414).
As the 21st century approached, however, it appeared that the winds were once again shifting on the Korean Peninsula. North Korea made diplomatic strides with several key interlocutors. First, in 1999 North Korea received an American delegation headed by William J. Perry, who discussed a ‘grand bargain’ approach to bilateral negotiations; if North Korea gave up its nuclear program and stopped building and exporting missiles, the United States would accord full diplomatic recognition to Pyongyang. While Perry thought that the North Koreans were uninterested, in September North Korea agreed to ban further missile testing in return for the easing of some American sanctions (Oberdorfer 2001, 423). Then, in October 2000 Vice Marshal Jo Myong Rok flew to Washington to personally invite President Clinton to Pyongyang to discuss an agreement based on Perry’s suggestion. Preoccupied, Clinton sent Secretary Albright in his stead. While there, Kim Jong-il took Albright to a choreographed performance, where at one point an image of the Taep’o-dong missile was displayed; Kim assured Albright that the earlier missile test was North Korea’s first and last such endeavor (437).

Concurrently, in early 2000 South Korean president Kim Dae Jung struck a reconciliatory tone, expressing his desire to arrange another North-South summit meeting and publically speaking well of Kim Jong-Il, an unprecedented move for a South Korean politician (427). North Korea responded positively, resulting in the June Summit meeting. Kim Dae Jung was accorded full honors in Pyongyang, and the two leaders negotiated an agreement about economic and humanitarian cooperation, and also expressed a desire to work towards reunification in future meetings (430-432). At this time, North Korea was also working to reestablish or forge new diplomatic ties with China, Russia, Great Britain, Germany, and several other states (435). These efforts culminated in the 2002 diplomatic rapport between Japan and North Korea. Relations between the two countries had been strained by the revelation of several North Korean
kidnappings of Japanese citizens in the 1970s and 1980s. By personally apologizing for the abductions, Kim Jong-Il convinced Japanese Prime Minister Junichiro Koizumi to sign the Pyongyang Declaration, a statement of intent to normalize diplomatic relations and encourage economic cooperation between the two states (Funabashi 2007, 1-8).

Thus, North Korea was opening up to the outside world. But it soon became clear that any progress on the nuclear issue had been superficial. American intelligence efforts had discovered evidence of continued nuclear development in violation of the Agreed Framework dating back to 1997, in particular, uranium enrichment research with help from the infamous AQ Khan network (Funabashi 2007, 118-124). However, in a 2002 diplomatic meeting North Korean negotiators appeared to spell it out explicitly. Kang Sok-ju, North Korea’s first deputy minister of foreign affairs, told the Americans that North Korea considered the Agreed Framework nullified as a result of America’s failure to provide North Korea with the LWRs and President Bush’s inclusion of North Korea in the ‘Axis of Evil’. He also repeatedly mentioned an indigenous uranium enrichment program, and claimed that the United States needed to sign a nonaggression pact, lift all economic sanctions, and compensate North Korea for its tardiness in constructing the LWRs in order to induce further cooperation (94-95). The United States issued a press release publically reporting North Korea’s intentions and halted heavy oil shipments; in response, that December North Korea resumed construction of nuclear facilities, removed IAEA seals and monitoring equipment, and expelled all remaining inspectors. In January 2003, North Korea officially withdrew from the NPT, and that February the IAEA referred North Korea to the UN Security Council (Funabashi 2007, 103-104). The Agreed Framework was shattered.

Extensive negotiations over the past decade, called the Six Party Talks, have ultimately proven unsuccessful. To begin, the precursor to the Six Party Talks was the April 2003 trilateral
talks between the U.S., North Korea, and China. This conference ended in abysmal failure; North Korea informed the United States that it had a functional nuclear weapon, that they could test one to prove it, and that they were prepared to transfer the technology to external actors if further provoked (Funabashi 2007, 331-332). This disaster somehow led to the first round of the Six Party Talks, beginning in August in Beijing. This first engagement was similarly unproductive; the talks featured vitriolic threats from North Korea to test a nuclear device, and the DPRK delegation ultimately torpedoed the other delegates’ efforts to craft a joint statement (338-348). The second round, held in February 2004, was only marginally better. Notably, China encouraged the United States to adopt a softer bargaining position, allowing North Korea to begin dismantlement with a ‘freeze’ on nuclear development instead of immediately submitting to ‘complete, verifiable, and irreversible dismantlement’. While the United States was initially cold to this proposal, other parties involved were significantly more receptive. The round as a whole again concluded without the formation of a joint statement (346-353).

The third round began on June 23rd (my birthday), 2004. This time, the delegates began to make progress. Agreement was beginning to form around the ‘freeze option’, by which North Korea agreed to halt nuclear development as a midway point on the road to complete nuclear dismantlement (Funabashi 2007, 357-360). The American delegation brought a proposal detailing their version of the ‘freeze for compensation’ route, and they and the North Koreans spent several hours discussing it. However, no agreement was made about the appropriate sequencing of North Korean concessions and particular American inducements; again, the round ended with only a chairman’s statement signaling the intent of the parties to reconvene.

---

26 The tension and strain felt by the delegates was especially acute for the Chinese hosts, who had taken on a de facto organizational role for the talks. Funabashi (2007) reports that North Korean deputy foreign ministry Kim Yong-il had to abort a late night meeting with Chinese foreign minister Li Zhaoxing, because by the time that Kim arrived Li was heavily intoxicated (346).
While the beginning of the fourth round was delayed by a surprise 2004 announcement from North Korea that they were withdrawing from the Six Party Talks and that they had successfully manufactured nuclear weapons, determined diplomacy from China, the United States, and South Korea eventually brought the DPRK back to the table (Funabashi 2007, 371-374). Indeed, it was the fourth round that yielded the most promising results, as the delegates were finally able to collectively sign a Joint Statement which spelled out a plan of action. North Korea committed to an early re-ratification of the Non-Proliferation Treaty and the IAEA safeguards agreement (a freeze on nuclear development), in return for the sequential provision of economic and energy assistance, a U.S. security guarantee, and further discussions on diplomatic relations with the United States as North Korea continued to dismantle its program (Funabashi 2007, 380-390). However, the various parties clarified their interpretation of their obligations in separate statements following the announcement. For example, North Korea insisted on including a clause regarding the provision of LWRs, to which the United States was adamantly opposed. In return, the U.S. wrote in additional clauses watering down their commitment; the LWRs would now be provided ‘at an appropriate time’, and the U.S. explicitly noted in later speeches that the ‘appropriate time’ was once North Korea had entirely dismantled its current nuclear programs and was in full adherence to NPT regulations and IAEA inspections (391).

Ultimately, the Joint Statement from the fourth round befell the same fate of the Agreed Framework: promising on paper, but overwhelmed by circumstances. In the August 2005 Banco Delta Asia scandal, the United States arrested 87 members of a criminal syndicate that smuggled weapons and laundered money with the assistance of North Korea, and issued sanctions on the bank through which they operated (Funabashi 2007, 411). That November, the fifth round of the Six Party talks were dominated by concerns about North Korean money laundering activities; in
response, North Korea refused to engage in the Six Party talks until the bank sanctions were recalled and its assets unfrozen (415-416). Then, in July 2006 North Korea reneged on its moratorium against missile testing, launching seven missiles in succession (Pollack 2011, 148). Three months later, on October 9 North Korea detonated its first nuclear weapon (Funabashi 2007, 463). In response, the United Nations issued Resolution 1718, demanding the immediate termination of the DPRK nuclear program. The Six Party talks continued into 2007 and 2008, but the North Korean commitments were hollow; while they agreed to shutter the Yongbyon reactor, their ‘secret’ uranium enrichment program rendered the reactor obsolete, and North Korea refused adequate inspections of nuclear waste sites (Pollack 2011, 153-155).

Then, in the spring of 2009 North Korea publically announced its intent to explore highly enriched uranium (HEU) development (which they had secretly done for some time already), and carried out a second nuclear test (Pollack 2011, 157, 137). In response, the United Nations adopted Resolution 1874, further sanctioning nuclear materials and adding sanctions for DPRK weapons exports (165-166). In November 2010, Pyongyang announced the construction of a new uranium enrichment facility at Yongbyon (175). And most recently, on February 12, 2013 North Korea tested a third nuclear device, this one likely relying on a HEU core instead of the older plutonium variety (Warrick 2013, 1). Clearly then, North Korea has successfully ascended into the nuclear club, despite the international community’s best efforts at containment.

Causes of North Korean Proliferation: A Function of Changing Regime Dynamics

Given this condensed history of North Korean nuclear development, what can be said of the DPRK’s motivations for its dogged pursuit of nuclear technology? To begin, the realist account is the most succinct explanation for the beginnings of the program. Born out of conflict and in a semi-permanent state of war with the South, North Korea needed a nuclear weapon to
deter the future threat American intervention, and also to counter South Korea’s superior conventional forces (Mazarr 1995b, 100). But as time went by, the nuclear program took on even greater significance, becoming the crux of North Korean foreign policy and enabling the DPRK to ‘punch above its weight’ in international politics. Oberdorfer (2001) explains:

Whether by blunder or design, North Korea discovered by early 1993 that its nuclear program, with its potential to destabilize Northeast Asia and affect the prospects for nuclear proliferation in other parts of the world, was its most valuable asset in transactions with the outside world, especially after the loss of its Soviet ally and the devaluing of its relations with China. Pyongyang played its card brilliantly, forcing one of the world’s richest and most powerful nations to undertake direct negotiations and to make concessions to one of the world’s least successful states. The nuclear threat proved, up to a point, to be Pyongyang’s great equalizer (336).

This point is crucial; North Korea used its growing nuclear program as leverage to force the United States into direct negotiations, because U.S. diplomatic recognition of North Korea was a highly prized policy goal (Mazarr 1995b, 100). Oberdorfer (2001) further bolsters this point in his description of Kim Jong-Il’s discussion with Secretary Albright, noting “the most important compensation […] would be the visit to North Korea of the president of the United States, which in its view would end its pariah status and be tangible acceptance of its legitimacy and sovereignty for all the world to see. Even more than economic or other benefits, this had been the central objective of North Korea, especially since the collapse of the Soviet Union” (439). In short, North Korea sought to buy international legitimacy (and thus security) through the bilateral negotiations that inevitably came along with its nuclear development.

The problem with this picture is that North Korea had ample opportunity to cash in on its diplomatic successes, yet it continuously failed to do so. The 1994 Agreed Framework was a victory for North Korea; it had earned a security assurance from the United States, and the
successful implementation of the agreement promised economic assistance and the construction of several LWRs that would have alleviated North Korea’s energy woes. In addition, the Agreed Framework provided the groundwork for the eventual establishment of official diplomatic ties with the United States. The agreement also came during a period of severe economic hardship for the North that threatened regime stability; if there was ever a need in North Korea for improved relations with surrounding states, the mid-1990s was the time. Yet North Korea worked to water down their treaty obligations, delay implementation, and eventually reject outright the agreement in favor of continued nuclear development. A similar story also emerges from the Six Party Talks; just as it seemed that the parties had reached an understanding, North Korea torpedoed the negotiations with a nuclear test. Indeed, it is difficult to reject the conclusion that North Korea had simply used the Six Party talks to stall until they could fully develop their nuclear capacity. Thus, the systemic-level leverage theory fails to explain why North Korea did not capitalize on the benefits of its diplomacy when it had the chance.

An analysis of North Korean domestic politics is likely to fill in the details that are missing above. One state-level explanation of the North Korean nuclear program is identity politics. Kim Il-Sung’s *Juche* ideology was highly xenophobic, and was predicated on the notion that North Korea needed be entirely self-sufficient both to remain safe from enemies and ultimately to achieve national greatness. This national identity significantly impacted DPRK nuclear development. As we have learned, nuclear programs are often powerful symbols of independence and nationalism. Thus, compromising on the nuclear issue would have been difficult to reconcile with North Korea’s isolationist ideology; North Koreans could have perceived the regime as caving to international pressure, a move that would sever the regime from its revolutionary *Juche* beginnings and gut regime legitimacy. This identity problem made
North Korea extremely hawkish during negotiations; while a compromise could theoretically be made on the issue, it needed to be one that the North Koreans could portray as a victory for the their cause of national greatness. In more familiar language, the North Koreans needed a way to save face, or preserve ch’emyon (respect). As Oberdorfer (2001) reports on negotiations in the early 1990s, saving face was “a matter of tremendous, almost overwhelming, importance to the reclusive North Korean regime. ‘For us, saving face is as important as life itself,’ a senior North Korean told Representative Ackerman during his visit to Pyongyang” (278).

The history of the North Korean nuclear program is littered with instances in which national identity interfered with negotiations. To begin, North Korea could not accept the IAEA special inspections in the early 1990s because their findings would discredit the regime; as Oberdorfer continues, “in the court of international opinion, North Korea would face demeaning condemnation. Such a prospect was intolerable for Pyongyang. As the tension increased, the country’s minister of atomic energy, Choi Hak Gun, told IAEA inspectors, ‘Even if we had done it [cheated], we would never admit it” (278). Furthermore, North Korea took issue with the 1994 Agreed Framework in part because the vital LWR reactors would be publically provided by South Korea. North Korea perceived this as a slight against its national pride, and it vehemently refused to appear dependent on South Korean charity (365-366). Moreover, during the Six Party talks North Korea insisted on the provision of LWRs as per the Agreed Framework, despite heavy American opposition. As Funabashi (2007) explains, “For North Korea, if the United States would again agree to commit itself to the idea of provision of light-water reactors to North

---

27 This example is only one instance of a larger problem regarding North-South relations that vastly complicated the negotiation process; it was extremely difficult for the United States to maintain its commitment to South Korea without angering North Korea, or to accommodate North Korea without incurring dissent from South Korea. If the United States ever shifted too much to one side, the other would refuse to cooperate; thus, these tensions over national pride continuously frustrated efforts to implement treaty agreements (Oberdorfer 2001, 301-303).
Korea, it would symbolize that the United States had returned to its commitment under the Agreed Framework. And that would allow North Korea to save face” (Funabashi 2007, 401). And finally, North Korea refused to continue participating in the Six Party talks after the Banco Asia Delta scandal, for to come back to the talks would imply that North Korea was in severe financial straits, and thus too weak to resist international economic pressure; again, North Korea would lose face (418). Funabashi (2007) says it best when he concludes “The North Korean nuclear crisis is an expression of a deep identity crisis on the part of North Korea—which has been left behind by the world, by the times, by history itself—as well as a regime crisis” (474).

It thus seems that ideology and state identity are inextricably linked to the nuclear issue in North Korea. However, this explanation is still unsatisfactory, as it again fails to account for the events surrounding the Agreed Framework. North Korean negotiators were ready to bargain during the 1994 negotiations; brinksmanship had been set aside for constructive policymaking, and state ideology in no way obstructed the compromises necessary to reach an accord. Indeed, North Korea heralded the negotiations as a great triumph, saving face by promoting their steadfastness in the negotiating process. Oberdorfer (2001) provides further context:

DPRK negotiator Kang Sok Ju called the agreement ‘a very important milestone document of historical significance’ and was greeted with ceremonial honor at Pyongyang airport when he returned from Geneva. He and his team were honored at a banquet given in the name of […] Kim Jong Il. The Workers Party newspaper, Nodong Sinmun, hailed the agreement as ‘the biggest diplomatic victory,’ and boasted, ‘we held the talks independently with the United States on an independent footing, not relying on someone else’s sympathy or advice” (358).

28 It is worth noting that the idea of maintaining ‘regime legitimacy’ when a sizable portion of the national population is starving to death seems to be somewhat absurd. However, it seems that once the regime had dug its ideological grave, it had no choice but to lie in it; to admit that the Juche ideology had failed was to invalidate the entire ideological history of the North Korean regime, undercutting regime legitimacy and vitally threatening Kim Jong-Il’s tenure. However, this could have been a dramatic miscalculation on Pyongyang’s part—it does seem likely that the North Koreans would have appreciated more food, even if that meant accepting that their government had pursued a monumentally foolish economic policy over the past several decades.
Thus, the problem was not that the Agreed Framework was incompatible with the North Korean *Juche* ideology; rather, some other aspect of North Korean domestic politics must have interfered with the accord’s implementation.²⁹

A better answer involves a closer look at the structure and leadership of the North Korean regime. To begin, Kim Il-Sung was a model personalist dictator, governing North Korea with absolute authority during his tenure; all key matters of state ran through him, and he was highly averse to delegating authority, preferring to micromanage state business (French 2007, 57). In addition, Kim Il-Sung’s personality cult left him beyond reproach; as the visionary leader of the DPRK, his will was obeyed without question (ibid). This means that Kim Il-Sung himself was likely the driving impetus behind the dramatic about face in DPRK policy that lead to the Agreed Framework. Indeed, Pollack (2011) notes that even as his health declined, “Kim Il-sung nevertheless continued to retain near exclusive control of the nuclear negotiations and of US-DPRK relations” (113). Indeed, Kim Il-Sung’s personal intervention was crucial to breaking the diplomatic brinksmanship of the early 1990s; he personally met with Jimmy Carter to discuss nuclear policy, and then personally intervened in some of the tedious bureaucratic arrangements to help hasten the beginning of negotiations (Oberdorfer 2001, 338). Thus, an explanation of North Korean nuclear policy-making centers on the beliefs and calculations of Kim Il-Sung.

Why did Kim Il-Sung support the Agreed Framework? As we have seen, the early 1990s was a trying time for the north; the Soviet Union had dissolved, Russia and China both officially recognized South Korea, and the North Korean economy was in a tailspin. Kim Il-Sung needed to find a way to stabilize his weakening country and begin the necessary process of economic

²⁹ It is also important to recall that the government in North Korea maintains strict control over the flow of information in the country. Thus, even if the government’s policy choices are not entirely in line with the *Juche* ideology, they could simply manipulate the facts and present their actions in a nationalistic light (as they do quite frequently). Considering that the government and party promulgate the ideology, they should be able to bend and frame their actions in whatever light they so choose.
reform. However, the nuclear issue impeded progress (Pollack 2011, 100-101; Oberdorfer 2001, 340). As Pollack (2011) notes, “Kim Il-sung grasped that without an agreement to defer the nuclear impasse, North Korea would not be able to halt its economic implosion” (115). This pressure led Kim Il-Sung to reverse his defiant posture, and open his government to compromise; indeed, his command was essential to bring about this change. As Pollack (2011) writes, “Kim Il-Sung’s decisive intervention in the nuclear crisis revealed his awareness of the North’s increasingly dire circumstances. Kim had the internal stature and authority to undertake audacious moves, including the prospect of North Korea ultimately forgoing nuclear-weapons development. He would not live long enough to see completion of the understandings reached with Jimmy Carter, but he alone was able to broach such possibilities” (119-120, emph. added).

Thus, the personalist structure of the North Korean regime directly contributed to the 1994 halt in nuclear development. However, a different regime emerged after the death of Kim Il-Sung, resulting in different policy outcomes. In particular, the military took on a much more significant role under the rule of Kim Jong-Il, who heavily courted the generals throughout much of the 1990s. The vast majority of his public appearances were to military sites or institutions; he ordered a full-scale military mobilization at the height of the 1996-1997 famine, at the expense of already scarce resources; he personally promoted large numbers of military officers, providing them with gifts like luxury cars and lavish parties; and the Supreme People’s Assembly was increasingly filled with military men (Oberdorfer 2001, 396-397, 414-415). In addition, in 1998 the Supreme People’s Assembly appointed Kim Jong Il not as president (left vacant in honor of Kim Il-Sung), but rather as head of the National Defense Commission, declaring that military position to be the highest state office (414). Perhaps most importantly, in his 1999 New Year’s Day editorial Kim Jong-Il introduced the phrase *songun* (“military first”) to describe the
appropriate ideological orientation for the future of North Korea (Pollack 2011, 127). As Oberdorfer concludes, Kim Jong-Il “was relying less on the party for control and governance than on the military from his posts as supreme military commander and chairman of the National Defense Commission” (Oberdorfer 2001, 408; Pollack 2011, 127).

This behavior reflects not merely a shift in policy, but rather a fundamental restructuring of the systems of governance and the legitimation of power in North Korea. Whereas Kim Il-Sung was able to quell bureaucratic infighting and dissent from the military due to his absolute authority, Kim Jong-Il struggled to maintain the same control during the transition period. Indeed, it has been suggested that the military establishment disfavored the succession of Kim Jong-Il entirely; as French (2007) reports, “several well-informed commentators […] believe that the escalation in importance of the military-first line was originally conceived as part of the compromise between the military leadership and Kim Jong-il after Kim Il-sung’s death, where the army hierarchy grudgingly accepted his ascendance to power in return for a greater role in the power structure and in policy-making” (218). Here we see that, while the formal institutions of governance were nominally the same, the actual locus of power under the rule of Kim Jong-Il shifted away from the Korean Workers Party and towards the military apparatus. Kim Jong-Il increasingly relied on ‘martial values’ to legitimize his rule, and increasingly shaped his policies based on the preferences of the military elite (French 2007, 60). In short, Kim Jong-Il became a military dictator; North Korea was evolving from a boss-type to a strongman-type regime.

The rise to power of the Korean People’s Army had significant and observable impacts on nuclear policymaking in North Korea. In particular, the friction between the military (which scorned negotiations) and the Foreign Ministry (which was eager to conclude an agreement) became increasingly apparent in the years after the death of Kim Il-Sung. On September 27th
1994 (during the Agreed Framework negotiations), the military issued a public statement denouncing the legitimacy of the negotiations and adamantly rejecting the IAEA’s request for ‘special inspections’, demonstrating “an outbreak of open bureaucratic warfare between the army and the Foreign Ministry in Pyongyang over making a key concession in Geneva” (Oberdorfer 2001, 354). Later, in the trilateral negotiations of 2003, frustrated Foreign Ministry officials frankly told American negotiators that the military controlled their negotiating positions, and that they had no leeway whatsoever to write their own talking points (Funabashi 2007, 333). And again, in the third round of the Six Party talks, the North Korean negotiator spoke at length about a ‘very powerful sector’ in North Korean society that coveted nuclear weapons as a symbol of achievement and prestige, an obvious reference to the military (358). Perhaps the clearest instance of military manipulation occurred during the fourth round of the Six Party talks. During a discussion the North Korean delegate left to receive a phone call; upon returning, he abruptly stated that nuclear weapons reductions of any sort were no longer negotiable, and the talks ended for the day. The other delegates assumed that the phone call had come from the North Korean military, which likely disapproved of the compromises made during that round (380).

These interactions and numerous others shed light on the behind-the-scenes power shifts that characterized the North Korean regime after Kim Il-Sung, and provide an account of nuclear policymaking during this time. While Kim Il-Sung was alive, he used his power to turn North

---

30 Funabashi notes that this encounter may well have been scripted by the North Korean diplomats in order to make it appear that their hands were tied in negotiations (333). However, every good lie contains a kernel of truth; in the case of North Korea, the sheer number of instances that revealed tension between the military and the Foreign Ministry suggest that the Foreign Ministry was indeed bullied, if not completely controlled, by the military.

31 On an even more comical note, Funabashi (2007) relays a similar story regarding the inclusion of LWRs in the Six Party negotiations. As he writes, “During one of the U.S.-North Korean bilateral consultations, Kim Gye-gwan referred to the need to satisfy the North Korean military, saying that ‘the only way that the army will accept an agreement in this round is if it contains light-water reactors.’ Hill immediately responded, ‘so you need a peaceful light-water reactor and the institution that wants it is the military?’” (399-400).

32 Little record exists to explain exactly why the North Korean military was so adamantly opposed to nuclear development; perhaps the top military echelons feared American power, or perhaps they had their own domestic motivations for maintaining nuclear development (nuclear prestige). However, the history of U.S.-DPRK negotiations seems to indicate that the KPA was strongly in favor of continued nuclear development.
Korea towards compromise and rapprochement with the West. But soon after he died, the military began to flex its institutional muscles. The Kim Jong-Il regime came to increasingly rely on a military ideology and support to maintain its rule; as a result, over time Kim Jong-Il’s policy preferences have become more closely aligned with those of the Korean People’s Army. And as the military grew in strength, it gained access to bureaucratic channels through which it could directly influence the nuclear negotiations, using them to undercut additional compromises, unravel past accords, and to further bolster North Korean nuclear development. Indeed, with hindsight it seems likely that no matter what progress had been made at the Six Party talks, North Korea was dead set on nuclear development; by that point, the Kim Jong-Il regime was too invested in the ‘military first’ ideology (and the military itself was too influential) to turn back. The result of these changing power dynamics has been the continued pursuit of nuclear weapons by the DPRK despite severe economic hardship and several chances for diplomatic drawdown.

In short, changes in the structure of the North Korean regime (from a party-oriented system to a military system) significantly impacted nuclear development; while classifying North Korea as a particular regime type is difficult, the historical evidence indicates that as the regime came to rely more on the military for support and legitimacy, it became increasingly prone to the pursuit of nuclear weapons. In addition, the North Korean case demonstrates that high levels of personalism in government can also facilitate the prompt reversal of nuclear policy. While Kim Il-Sung’s regime had pursued nuclear weapons for security purposes, he was able to quickly and effectively bring his country to a non-proliferation agreement when a policy change became necessary; it was only after he died that North Korea fully committed to weapons development, as a result of the regime’s newfound military ties. This ability of personalist dictators to rapidly adapt their policies to suit changing circumstances will be further explored in the next chapter.
Chapter 6

The Libyan Nuclear Reversal: A Boss-Type Regime Comes in From the Cold

The history of the Libyan nuclear program shares several similarities with that of the North Korean program. Both countries were led by powerful personalist dictators that espoused highly nationalistic and anti-Western ideologies to prop up their rule. In addition, both nations experienced serious economic downturn and international isolation during the 1990s. Yet while North Korea remained steadfast in its pursuit of nuclear weapons, in 2003 Libya shocked the world with a dramatic about-face, announcing that it would systematically dismantle its entire WMD program and provide unimpeded inspections as per the IAEA Additional Protocol. In less than a year, Libya rejoined the international community, coming in from the same nuclear cold in which North Korea still languishes today. In this chapter, I argue that the variation in outcomes between North Korea and Libya stems from the difference in regime type across both states. While North Korea’s shift towards the strongman regime type predisposed Pyongyang to continued nuclear development, Libya’s development under the rule of Qadhafi shifted away from its roots in a military coup and towards an established (albeit restricted) system of civilian participation (a boss type regime). Indeed, the institutional power that Qadhafi maintained in this system was an essential part of his decision to change course, allowing him to rapidly reengage with the international community and decisively end a burgeoning nuclear program that he had spent the previous three decades developing.

Libya Under Qadhafi: Regime Structure and Ideology

In 1969, Captain Muammar al-Qadhafi and a cohort of other military figures (the Free Officers Movement) deposed the Libyan monarch King Idris (Solingen 2007, 220). Styling themselves as the Revolutionary Command Council (RCC), this military group fumbled around
for several years following the coup trying to establish a workable system of governance. Their first real attempt at systematic organization materialized in 1971; after abolishing all political parties, they created the Arab Socialist Union (ASU), a unifying party designed to mobilize the public under the revolutionary rule of the RCC (Vandewalle 2008, 11; Bahgat 2007, 138). Yet in a rather ironic problem, the Libyan public was too politically apathetic to engage with the ASU; Qadhafi was the head of a revolution with no revolutionary fervor (Vandewalle 2012, 84).

The ASU’s failure led Qadhafi to scrap his plans for a traditional single-party system. In a famous 1973 speech at Zuwara, Qadhafi proposed a radically new political system bordering on direct democracy, calling for a “People’s Revolution” to begin the transition (Mattes 2008, 56; Vandewalle 2012, 82). The speech triggered years of bureaucratic chaos; while Qadhafi advocated the dismantlement of existing state structures, his vision was not accompanied by corresponding organization or planning. Throughout 1974 and 1975 friction arose within the RCC itself about the country’s future direction; indeed, in 1975 several members of the RCC attempted to depose Qadhafi (Vandewalle 2012, 99-100). While the coup failed, it ultimately drove Qadhafi to act authoritatively to realize his yet opaque vision of the Libyan state.

Following the coup attempt, Qadhafi purged the government and military apparatus of critics and opponents, and cut the size of the RCC to himself and four loyal supporters (Vandewalle 2008, 18-19). Sufficiently empowered, Qadhafi then embarked on a dramatic revolutionary mission to create a ‘stateless society’, a political philosophy that he described to the masses in in three short works, together called The Green Book (Vandewalle 2012, 100-101). The Green Book argued that both the bureaucratic institutions of government and private economic actors (like business owners and private entrepreneurs, which Qadhafi called ‘parasites’) served only to corrupt and damage society; only a state in which the people
themselves directly engaged in national policymaking and in which economic resources were evenly distributed could be just. Thus, Qadhafi abolished private businesses, and the state subsumed all economic activity (105-107). This process was well underway by March 2, 1977, when Qadhafi at Sabha renamed the state “The Socialist People’s Libyan Arab Jamahiriyya,” also called “the Republic of the Masses” (Vandewalle 2012, 103; Bahgat 2007, 138).

Qadhafi’s economic upheaval was matched by similarly disruptive changes to Libyan political life. The Green Book called for the establishment of political legislative bodies at the local level called Basic People’s Congresses, which met several times a year to debate societal issues and propose policy solutions. They also elected members to Basic People’s Committees, charged with executing the decisions of the people’s congresses. In practice, however, these local administrative bodies did not attend to serious substantive issues beyond local concerns; rather, they submitted resolutions to a similar body at the national level called the General People’s Congress, which shaped the resolutions from the various local congresses into national policy. The General People’s Congress also nominated members of the General People’s Committee, a council of ministers that functioned as an executive branch for the General People’s Congress (Mattes 2008, 58-59). Qadhafi also banned political activity outside of the congresses. Thus, the congress system allowed Qadhafi to channel political participation and dissent through specific bureaucratic institutions of his choosing (Vandewalle 2012, 127).

While in theory this congress system resembles a direct democracy, Qadhafi added several checks to ensure the inefficacy of the congress system, and thus his complete control over national policymaking. The General People’s Committee was supposed to operate via electing a small secretariat (analogous to a cabinet) that could help run the group; however, members of the secretariat were in practice selected by the regime itself (Vandewalle 2012, 104).
In addition, the congresses were only allowed to debate certain aspects of national policy—foreign policy decisions and economic planning were beyond their purview (103). But more important than these checks were the Revolutionary Committees. Answering directly to the regime, the revolutionary committees were originally intended to be agents of indoctrination, further convincing Libyans to participate in the Basic People’s Congresses (Vandewalle 2012, 119). However, they soon evolved into a tool of regime control, operating outside the law and holding authority over the congresses, monitoring their activity and blocking any policy measures that were deemed contrary to the spirit of the revolution (Mattes 2008, 59, 66-68). Indeed, the revolutionary committees and their ‘revolutionary jurisdiction’ even held sway over the General People’s Congress (Vandewalle 2012, 119). In short, the establishment of an informal structure of government (the revolutionary structure) alongside the civilian congress system allowed Qadhafi to provide an outlet for popular participation in policymaking while simultaneously protecting his authority. As Vandewalle (2012) concludes, “by centralizing all political expression in the Popular Committee system, by clearly stating that no political activity could take place outside it, and by awarding the revolutionary means of governing precedence over the formal political institutions in 1979, the regime ensured that it contained and controlled all political expression or dissent” (134).

During the 1970s, Qadhafi also fostered a fiercely independent and nationalist ideology to legitimize his rule. Qadhafi idolized Nasser and his pan-Arab dream; upon Nasser’s death in 1970, Qadhafi sought to emulate his rule and become the new leader of pan-Arabism (Vandewalle 2012, 79). Qadhafi coupled pan-Arabism with a strong anti-imperialist stance, blaming the West for the Arab world’s plight; as Vandewalle (2012) writes, “Dignity and the indignities suffered at the hands of the West have continually been mentioned by Qadhafi to
invoke a powerful sense of unity. History—and historical wrongs inflicted by the West on Libya—have been used from the beginning to create a sense of shared suffering and exploitation” (123). Following this ideology, Qadhafi closed American foreign bases that had operated in Libya during the Sanusi monarchy, and expelled all Italians from Libya in retaliation for massacres orchestrated by Mussolini in the 1920s (Solingen 2007, 221). Similarly, virulent public condemnation of Israel as an imperialist power was a cornerstone of Qadhafi’s revolutionary stance; Qadhafi even funded Palestinian terrorist groups like Palestinian Islamic Jihad in an attempt to weaken the Israeli position (Bowen 2006, 13-14). Finally, Qadhafi’s personal charisma played an important role in the regime’s formative years; his boldness and conviction in his revolutionary confrontation with the West earned him respect and grandeur among Libyans and helped to add momentum to the revolution (Vandewalle 2012, 125).

Lai and Slater (2006) code Libya as a strongman-type regime from 1969 through 1976, corresponding to the time in which the RCC controlled Libya as Qadhafi solidified his rule and organized the government outlined in the Green Book. From 1977 onwards, Libya is coded as a boss-type regime, reflecting the completed establishment of the congress system and the proclamation of the new Libyan Jamahiriyya in that year. The following section will explore how this shift away from a military style of rule ultimately impacted Qadhafi’s ability to halt the Libyan nuclear program.

**The Libyan Nuclear Program: Struggling Development in the Jamahiriyya**

In 1968, King Idris of Libya signed the NPT (Rublee 2009, 151). But when Qadhafi swept into power in the following year, building a nuclear weapon was a top priority from day one (Singh and Way code Libya as beginning pursuit of nuclear weapons in 1970, skipping the exploration step). He first sought to acquire a prefabricated nuclear weapon from China, sending
Major Abdelsalam Jallud (Qadhafi’s closest military advisor) there in 1970 to attempt to purchase a weapon. Then, in 1973, Libya offered to pay off India’s entire foreign debt ($15 billion) in return for a nuclear weapon (Solingen 2007, 213). However, China and India’s definitive refusal led Qadhafi to recognize that buying a nuclear weapon “off the shelf” was impractical; an indigenous nuclear program was needed (Bowen 2006, 8). For the purpose of clarity, this thesis subdivides this section on Qadhafi’s attempt to develop such a program roughly by decade.

The 1970s: Libya’s “Civilian” Nuclear Program

Given that purchasing a nuclear weapon was not a viable option, Qadhafi sought throughout the 1970s to elicit technical support from various countries for the creation of an indigenous ‘civilian’ nuclear program, from which he could eventually develop weapons technology (Bowen 2006, 27). To begin, Libya recruited nuclear scientists from neighboring Arab states like Egypt, Iraq, and Syria throughout the 1970s to provide the technical knowledge and training required for a nuclear program (ibid). In addition, Libya sought assistance from other nuclear states, though most of these efforts failed. In 1974, Libya signed an agreement with Argentina for assistance in uranium mining and processing technology; however, the deal led only to the basic training of Libyan geologists (ibid). In 1975, Libya attempted to acquire a research reactor from the United States, but the request was blocked by the State Department. And in 1976, Libya approached France with a similar request, which was also rejected (28).

Thus, most of Libya’s original diplomatic overtures were unsuccessful. However, Qadhafi did manage to made headway with two important actors. First, in 1975 the Soviet Union agreed to provide Libya with a small research reactor, to be housed in a nuclear facility called the Tajura Nuclear Research Center (TNRC) (Bowen 2006, 28; Solingen 2007, 213). The agreement
was conditioned on Libya’s actual ratification of the NPT that year, and the conclusion of an IAEA safeguards agreement (accomplished in 1980) (Bahgat 2007, 129). At the time, the Soviet Union was confident in its ability to monitor and control the pace of development in Libya, and was thus unconcerned about the risk of nuclear proliferation; however, in hindsight it is clear that Qadhafi ratified the NPT merely as a cover to obtain the research reactor and the beginnings of a weapons program (Rublee 2009, 152; Bowen 2006, 29). Second, in the mid-70s Qadhafi made inroads with the Pakistani nuclear program. Qadhafi hoped that, in return for the provision of funding and raw materials for the Pakistani nuclear program, Pakistan would supply Qadhafi with the technology, designs, and expertise necessary to construct his own bomb (Bowen 2006, 29-30). In particular, Libya provided Pakistan with uranium yellowcake, the basic ingredient of a uranium enrichment program; between 1978 and 1981 Qadhafi purchased over 2,263 tons of yellowcake from neighboring Niger, and had re-exported over 100 tons to Pakistan (ibid; Solingen 2007, 213). While the exact nature of their cooperation remains unclear, Pakistani nuclear scientists frequented Libya in the late 1970s, and some Libyan scientists received training in Pakistan as well. However, cooperation began to deteriorate upon the overthrow of Pakistani president Zulfikar Ali Bhutto in 1977, prior to any transfers of highly sensitive technology (Bowen 2006, 31).

In short, while Libya’s early attempts to acquire nuclear technology were mostly rebuffed, they did manage to foster some connections with nuclear powers and begin the early stages of nuclear development. However, technical difficulties and political circumstances in the 1980s would soon hamper Libyan nuclear development.

---

33 Libya also went to war with Chad in 1973; some speculate that the war was actually a cover for Libyan expansion over the Aouzou Strip, which contains vast uranium deposits (Solingen 2007, 213).
The 1980s: Stalled Nuclear Development Amidst Libya’s Confrontation with the West

The 1980s saw continued attempts by Libya to further its nuclear program. However, these efforts saw little success. To begin, the 10MW Soviet research reactor promised in the 1975 deal came online, facilitating research in uranium enrichment and other areas of nuclear physics at the TNRC, which employed 750 Libyans by the mid-80s (Solingen 2007, 213). In addition, documents revealed by the IAEA indicate that in 1984 Libya purchased a pilot plant for uranium to plutonium conversion from “a far-eastern country” (presumably Japan), and pursued conversion research throughout the 1980s (Bahgat 2007, 130). Finally, Libyan scientists received training on centrifuge-based techniques for uranium enrichment throughout the 1980s from various states (ibid). However, despite foreign assistance the Libyans simply didn’t have the technical expertise required to overcome key technological hurdles; while clandestine research was underway at the TNRC, the program had hit a wall, and was effectively stalled out until the mid-1990s (Bowen 2006, 32; Solingen 2007, 213).³⁴

In the meantime, Libya’s relationship with the international community was going downhill. As we have seen, Qadhafi relied on a confrontational foreign policy against Western regimes as a crux of his pan-Arab ideology, leading him to fund terrorist organizations and plan subversive plots against non-revolutionary Arab governments like Egypt and Tunisia, and to publically encourage violent attacks against moderate Arab regimes (Bowen 2006, 13-14). Predictably, Qadhafi’s radically aggressive foreign policy resulted in Libya’s estrangement from the Arab world. More importantly, Qadhafi’s relationship with the United States quickly soured; many of the ‘moderate’ Arab governments targeted by Qadhafi were American allies. In

³⁴ In one of the more comical historical notes on Libyan nuclear development, Libya ordered a uranium conversion facility from a Japanese company, the parts of which began arriving in 1986. Unfortunately, the company failed to include instructions on how to put the modules together, or how to operate the facility once constructed; the Libyans left the useless parts in storage until the late 1990s (Bowen 2006, 35).
addition, and the U.S. was also frustrated by several other events, including Qadhafi’s nationalization of the oil industry in Libya (at the expense of American companies) and the 1979 embassy attack in Tripoli (which the Libyan government took no steps to prevent) (Bahgat 2007, 142; Bowen 2006, 14). These frustrations led President Carter to impose economic sanctions on Libya in 1980 for terrorist activity (Solingen 2007, 221). In addition, the situation only became more acrimonious under the Reagan administration. Reagan cut diplomatic ties with Libya in January 1981; that December, Reagan ordered a travel ban, and the following March signed an embargo on Libyan oil exports and oil equipment sales to the increasingly violent state (Vandewalle 2012, 130-131).

Libya met this international opprobrium with revolutionary fire, refusing to back down from anti-American rhetoric and subversive behavior. In 1986, a bomb exploded in LaBelle nightclub in West Berlin, often frequented by American soldiers, which killed several Americans. In response, the United States initiated *Operation El-Dorado Canyon*, sending airstrikes to various military targets in Libya that killed 70 people, including Qadhafi’s daughter (Bowen 2006, 16-17). Then, in 1988 an airplane exploded over Lockerbie, Scotland, killing all 259 passengers (Bahgat 2007, 143). An investigation led to arrest warrants for two Libyan officers believed to have planted explosives on the aircraft (Bowen 2006, 17). In January 1992, the UN Security Council adopted Resolution 731, demanding that Libya surrender the suspects to an international trial; predictably, Libya refused. That March, the Security Council responded with Resolution 748, followed by Resolution 883 later that year, which imposed sanctions banning the sale of oil equipment to Libya and freezing some Libyan foreign assets (52). Qadhafi’s Libya found itself increasingly isolated in international politics; as Solingen (2007) writes, “Qadhafi had managed to translate self-reliance into pariah status for his country” (213).
It is also of crucial importance to note the failing health of the Libyan economy during the 1980s and early 1990s. From its beginnings, Qadhafi’s regime was almost entirely dependent on revenues from its booming oil industry to sustain its rule; throughout the 1970s, oil exports accounted for 99.9% of regime income (Vandewalle 2008, 22; Vandewalle 2012, 87, 90). Qadhafi used this oil money to bankroll the systems of patronage that ensured elite support, and also to bolster spending on welfare, education, and medical care to earn legitimacy from the people (Solingen 2007, 220). While this strategy was effective in the early 1970s as a result of the 1973 oil price spike, reliance on oil revenues prevented the regime from diversifying the Libyan economy and led to foolhardy economic management (Vandewalle 2008, 23). Thus, when oil prices fell during the 1980s, an ill-structured Libyan economy naturally contracted; Libyan revenues declined from $21 billion in 1980 to $6.5 billion in 1986 (Solingen 2007, 222). Moreover, the regimes dependency on petrodollars made sanctions against the Libyan oil industry particularly effective; by cutting off all equipment sales, the United States effectively precluded Libya from modernizing its oil industry, as its equipment was entirely based on American machinery and parts (Bowen 2006, 54-55). As we will see, this economic downturn significantly impacted Libyan policymaking in the 1990s.

The 1990s: Qadhafi Comes in From the Cold

At first glance, Qadhafi’s decision making during the 1990s appears bipolar. On the one hand, Qadhafi upped the ante on nuclear development, reinvigorating attempts to develop a weapon after the project had run into difficulty during most of the 1980s. In 1995, Bahgat (2007) reports that the Libyan leadership decided to reinvigorate the program, with a specific focus on the centrifuge-enrichment path to weapons grade uranium (131). This decision led to Libya’s decision to approach the infamous A.Q. Khan in 1997, a momentous occasion for Libya’s
struggling nuclear program. Over the next six years, the A.Q. Khan network provided a wide range of technology, equipment, and invaluable instruction on the nuclear process, including thousands of older L-1 gas centrifuges, new shipments of modern L-2 centrifuges, and even the designs for a nuclear weapon (Solingen 2007, 213-214; Bahgat 2007, 130; Bowen 2006, 36-37). Libya reportedly paid between $100 and $500 million dollars for this support (Bowen 2006, 39). Moreover, during the early 2000s, Libya also received illicit shipments of uranium hexafluoride ($\text{UF}_6$) from North Korea, a key ingredient in the production of nuclear fuel (Bahgat 2007, 131).

In short, by 2003 Libya was well on its way towards a sustainable, indigenous uranium enrichment program; IAEA estimates suggest that at the time they abandoned their nuclear program, Libya could have produced a nuclear device within 3-7 years (Rublee 2009, 154).

On the other hand, Qadhafi was steadily moving towards rapprochement with the West. By the early 1990s, Qadhafi’s regime was under pressure on all sides. First, the 1986 American airstrike left a real impact on Qadhafi, proving to him the potency of American power and the dangers of international isolation (Vandewalle 2012, 167). In addition, by the early 1990s the Libyan economy was at a standstill, registering barely 1% growth per year, unemployment around 30%, and rising inflation (Solingen 2007, 222-223). In particular, the multilateral UN sanctions were starving Libya of the materials needed to maintain its oil production, threatening a key pillar of regime survival (Vandewalle 2012, 153-154). As a result, economic stagnation quickly translated into dissatisfaction with the Qadhafi regime and the emergence of political dissent. Economic troubles also severely limited Qadhafi’s ability to maintain elite support; oil revenues bankrolled his system of elite patronage, and without them Qadhafi had few carrots to offer his constituents (ibid). Indeed, in 1993 Abdessalam Jalloud, Qadhafi’s longtime advisor, organized another unsuccessful military coup, leading to a regime crackdown and numerous
arrests (ibid). In this increasingly hostile environment, some of the opposition resorted to violence, in particular militant Islamist groups, which in 1995 targeted Qadhafi himself for assassination (Bowen 2006, 55).

It was thus plainly evident that Qadhafi needed to improve Libya’s economic condition before he was run out of power; it was time for Libya to come in from the cold. Qadhafi had become aware of this downward trend towards the end of the 1980s, and had already begun to extricate his government from Libyan economic life. By the mid 1990s, Qadhafi had removed the ban against retail trade and facilitated the opening of select private businesses free from state subsidies, begun to close unprofitable state-run businesses, and created several banks to facilitate foreign investment (Vandewalle 2012, 161-162). However, this process of infitah (economic opening) was a process inextricably linked to Qadhafi’s foreign policy decisions; Qadhafi could not successfully liberalize the Libyan economy without first making amends to the international community and bringing about the end of the UN sanctions. In short, Qadhafi needed a way back into the global market.

Thus, economic imperatives led to a dramatic change in Libyan foreign policy, and ultimately altered the course of Libyan nuclear development. While the policy shift had likely been gaining momentum for several years, the first tangible instance of conciliatory behavior came in 1998, when Libya accepted a UK-US proposal to extradite the Lockerbie bombers to the Netherlands for a trial in return for the suspension of UN sanctions (Rublee 2009, 153-154. As Bowen (2006) writes, “The Lockerbie decision signaled a sea-change in the regime’s external relations and brought about the possibility of restoring economic and political links with the
In 1999, Qadhafi followed these diplomatic steps with a bigger one, secretly informing the United States of its willingness to begin negotiations regarding its nuclear program (Rublee 2009, 153). While the U.S. could not publically engage in bilateral negotiations with a state that had openly sponsored terrorism, Libya’s recently thawed relations with Britain and the reopening of a British embassy in Libya offered a channel for discussion (Bowen 2006, 59-60). In this first secret diplomatic engagement, Britain focused on permanently resolving the Lockerbie issue as a precondition to the permanent alleviation of sanctions and other topics of negotiation. However, in 2000 talks were suspended, as Clinton feared that word of the talks might be leaked, causing havoc during an election year (ibid).

Talks resumed under the Bush administration in late 2001, after President Bush was convinced of their importance. During these sessions, Libya provided valuable intelligence regarding Al-Qaeda suspects and operatives in the wake of 9/11, another confidence-building measure that signaled Qadhafi’s seriousness about the negotiating process (Bowen 2006, 61). In 2002, British negotiators again met with the Libyans, who agreed to take full responsibility for the Lockerbie bombing and also provided the British with assurances that they were willing to cooperate on WMD disarmament (Bowen 2006, 62). However, no action was taken on either count until 2003; that March, Libya sent intelligence chief Musa Kusa (a high ranking figure) to Britain to request a secret trilateral meeting with Britain and the United States about WMD disarmament (Solingen 2007, 214; Bahgat 2007, 125).

After the March meeting, events in various arenas rapidly fell into order. In June 2003, Qadhafi publically announced that Libya’s socialist experiment had failed; immediate liberalization of the economy was key to growth. To that end, he appointed Harvard graduate

35 Around this time, Libya also began to cooperate with Egypt, Jordan, and Yemen (states previously subjected to Qadhafi’s vitriolic rhetoric) on counter-terrorism issues and quietly withdrew its support for Palestinian terrorist groups, instead affirming the role of the Palestinian Authority (57).
Shukri Muhammad Ghanem as prime minister, and ordered him to begin the process of serious economic privatization (Bowen 2006, 58). That August, the UN Security Council received an official letter of apology from Libya accepting responsibility for the Lockerbie bombing and offering to pay each victim’s family 10$ million; in return, the UN permanently lifted all existing sanctions (65). Then, in October Britain and the United States intercepted a German-flagged ship bound for Libya carrying advanced nuclear centrifuges. While it remains unclear whether Libya tipped off the British about the shipment as a gesture of good faith or whether Libya was still attempting to amass nuclear materials, the interdiction quickly led to the Libyan nuclear endgame (Solingen 2007, 214; Bowen 2006, 66). On December 19, Libya announced its intentions to completely and verifiably dismantle its entire WMD program; the following January, it ratified the CTBT, and that March it signed the IAEA Additional Protocol, leading to the cessation of U.S. sanctions later that year (Bahgat 2007, 125, 130; Solingen 2007, 226). Finally, in 2006 the about-face was completed when full diplomatic relations were restored between Libya and the United States (Bahgat 2007, 127).

Causes of Libyan Nuclear Proliferation and Reversal: Qadhafi Turns on a Dime

How can we explain Libya’s motivations to pursue and then abandon nuclear weapons? To begin, while security concerns were a salient factor in the North Korean case, they play a minimal role in the Libyan case. Despite Qadhafi’s public haranguing about the dangers of Israel’s nuclear weapons program to the Libyan state and the violent imperialism of other western powers, it is clear that these threats were self-constructed by Qadhafi starting from the very first days of his rule. Absent his aggressive rhetoric and nuclear development, neither Israel nor the United States had any interest in conflict with Libya—their policies were driven in reaction to Libyan belligerence, not the other way around (Solingen 2007, 215). More revealing
are statements from Qadhafi himself downplaying the strategic value of nuclear weapons;
Solingen (2007) highlights Qadhafi’s later admission that a Libyan nuclear weapon “had no
target”, and exposed the state to greater risk as opposed to providing security (215-216). While
these later statements are at clear odds with Qadhafi’s early rhetoric, Solingen (2007) continues
on to provide a key insight into Qadhafi’s decision making:

His contradictory statements and actions over time […] reinforce the observation that
Libya’s nuclear efforts were less likely to stem from structural power considerations than
from Qadhafi’s domestic needs to buttress his regime and personal power. Regime
security rather that state security was his foremost motivation for seeking nuclear
weapons since the 1970s and for abandoning them in 2003. Threats would be constructed
and deconstructed according to Qadhafi’s perceptions of popular receptivity at home and
in his region (216).

In other words, if security concerns played a role in Qadhafi’s nuclear policymaking, they did so
with regards to his personal tenure, and not out of fear of Western aggression.

As Solingen (2007) suggests, a better explanation for Libya’s original pursuit of nuclear
weapons focuses on the fluctuating domestic utility of nuclear weapons for the Libyan regime.
As we have seen, at the beginning of his rule Qadhafi relied on a militant, nationalist attitude
towards the West in order to legitimize his new leadership and rally support from the people. As
was the case with North Korea, self-reliance and xenophobia were essential aspects of Qadhafi’s
populist ideology (Solingen 2007, 221). The development of nuclear weapons was perfectly
suited to this ideology; Qadhafi used the symbolic value of his nuclear program to demonstrate
his willingness and ability to defy the West (215). The nuclear program also improved Qadhafi’s
personal prestige and grandeur by highlighting his role as the leader of the Arab resistance;
Qadhafi set himself up to be new Nasser, countering the Israeli nuclear menace with an atomic
weapons program of his own (Bahgat 2007, 132-133). In short, Qadhafi’s legitimacy and regime security were greatly aided by the pursuit of nuclear weapons.

This state-level account also explains why Qadhafi suddenly changed directions on nuclear development in the late 1990s. While international defiance and hyper-nationalism had proven useful for Qadhafi’s early rule, by the time the 1990s rolled around Libya was in a bind. Pan-Arabism was dead, and the Libyan economy was suffering as a result of decades of mismanagement and the tightening international sanctions (Solingen 2007, 222-223). Qadhafi found that his belligerently isolationist foreign policy was no longer paying dividends; rather, it was throwing fuel on the fire of economic instability, which directly threatened his regime.36 Indeed, dragging Libya out of its economic malaise required a corresponding shift in foreign policy towards reintegration with the international community. Rublee (2009) provides clear evidence of this point, claiming, “By settling the Lockerbie dispute and giving up its WMD, Libya could end the sanctions, develop its oil fields, and increase its economic growth. Salama estimated that lifting of sanctions would mean ‘a several billion dollar infusion into the Libyan economy and new jobs for thousands of Libyans’” (156). In addition, Qadhafi’s estrangement from the Arab world had dulled his image as a regional leader, a position that he had prized since his rise to power; relinquishing his nuclear arsenal provided a way for Qadhafi to regain his prestige. As Rublee (2009) asserts, reintegration with the West “would allow Qadhafi to take on a new leadership role and give him the international acceptance he had desired for so long. Libyan state newspapers declared that in ‘making such a courageous decision, Libya would serve as a role model that would be emulated by great and small powers alike” (161). In short,

36 It should also be noted that as Qadhafi ran out of funds to buy off the elite, dumping resources into the nuclear program became an increasingly costly venture that traded off with funds for other key groups. Solingen (2007) claims that spending on the nuclear program was sapping funds that could be used to placate an increasingly agitated military, which could have revolted against Qadhafi if it felt that it was not receiving necessary resources (223).
Qadhafi’s nuclear policy was purely opportunistic; Libya pursued nuclear weapons when it was in Qadhafi’s personal interest, and abandoned the program when it was no longer politically or economically expedient to maintain.

Thus, state-level accounts provide a more detailed explanation for Libyan nuclear policymaking. However, our picture as currently drawn fails to address the variation in outcomes between North Korea and Libya. The North Korean regime was also faced with severe international isolation and a more damaging economic crisis than what Libya endured, which led to incredible hardship, famine, and death for hundreds of thousands of North Koreans; yet Pyongyang still persisted in nuclear development. Indeed, a closer look at the Libyan case demonstrates that Libya did not need to dump its nuclear program to salvage its economy. The United Nations suspended sanctions in April of 1999 after Libya relinquished the two Lockerbie suspects; only after that did Libya make real offers to give up their nuclear program (Rublee 2009, 156). While American sanctions were an irritant, investment from European states and their oil companies following the lifting of UN sanctions likely would have proven sufficient to rejuvenate and sustain the Libyan economy even with a continued American embargo; it was the multilateral sanctions that really turned the screws on the Libyan regime, and those sanctions were predicated on Libyan support for terrorism, not the nuclear program (157). 37 In other words, if the North Korean regime managed to ride out the tough times, it is hard to see why Libya could not have also maintained its defiant nuclear posture versus the United States.

Resolving this question again leads us to the importance of regime type to nuclear decision-making. To start, the short answer is that Qadhafi himself had a change of heart. He

37 Indeed, American oil companies were the ones that stood to lose out after the relaxation of UN sanctions; if the American embargo held, European companies would likely gobble up their Libyan oil contracts—there was thus a structural incentive in the United States to remove the sanctions that Libya may have been able to exploit, had they chosen to continue with their nuclear development (Rublee 2009, 151-158).
decided that the isolationist ideology that had sustained his rule was no longer the ideal path to follow; Libya needed to move in an entirely new direction in order to flourish in the 21st century. As Rublee (2009) puts it, “Qadhafi rethought what it meant to be a successful country” (158). The evolution of Qadhafi’s mindset is reflected in various personal statements, though one 2002 interview is particularly informative:

‘The history of mankind is not fixed,’ he offered, 'and it does not go at one pace. Sometimes it moves at a steady pace, and sometimes it is very fast. It is very flexible all the time. The past stage was the era of nationalism -- of the identity of one nation -- and now, suddenly, that has changed. It is the era of globalization, and there are many new factors which are mapping out the world.’ (Anderson 2003; see also Solingen 2007, 223-224).

Here, Qadhafi has fundamentally adapted his ideological position, and was willing to be ‘flexible’ in an attempt to guide Libya into a new era and to stay abreast of the changing tides of history. Once this decision was made, we can see why Qadhafi was willing to bargain away his nuclear program; it no longer served any purpose under his new ideological framework, and was actually more useful as a bargaining chip that could bring the United States to the table after decades of Libyan subversion. Rublee (2009) describes this change in terms of security; she argues that Qadhafi had “rethought what security means. Security is no longer obtained through conflict and confrontation; instead, diplomacy and cooperation are the path to a secure state” (162). In short, Qadhafi’s decision to renounce nuclear weapons flowed naturally from his newfound conception of Libya’s place in the international community.

---

38 This likely explains why Libya continued to acquire nuclear technology through 2003, despite Qadhafi’s clear desire to negotiate disarmament for the past several years; they needed to have the component pieces of the program in order to have a valuable bargaining chip at all (Bowen 2006, 67).

39 While Rublee is overly focused on the state as the focal point of security concerns, her analysis holds equally well when we consider that Qadhafi was primarily concerned with his regime’s security; reconnecting with the international community offered both economic growth and a renewed presence as a leading figure in the Arab world, both of which provide regime legitimacy and stability.
However, the longer (and more interesting) answer involves Qadhafi’s *ability* to change direction so easily. As the North Korean case demonstrated, it seems that Kim Il-Sung *had* wanted to make a change in foreign policy (albeit perhaps not as drastic or immediate a shift as what Qadhafi managed), yet his work was stymied and eventually undone as a result of changes in the structures of North Korean power and governance triggered by his death. Even if Kim Jong-Il had wished to continue his father’s work, it seems likely that he would have been unable to do so given military opposition to disarmament. Which begs the question: what did the Libyan military think about Qadhafi’s plans? Indeed, where was the military at all?

In fact, Qadhafi had judiciously worked to preserve his freedom and independence from the military throughout his rule. While all authoritarian regimes depend to some extent on coercive force, Qadhafi ensured that his core political base was free of military influence and that the military played a minimal role in Libyan politics (Vandewalle 2012, 146-147). Vandewalle (2012) further details Qadhafi’s systematic marginalization of the Libyan military:

> Although Libya’s armed services had grown substantially—from 7,000 in 1969 to 85,000 by 1988, after which their size was reduced as a result of Libya’s defeat in the war in Chad—they were never allowed to develop a professional ethic that could have created a distinct corporate identity or distinct interests […] Libya’s military was never assigned tasks meant to safeguard the regime. Instead, it was carefully located, and its leadership regularly rotated, between garrisons in the country’s seven military regions” (145)

In other words, while his economic planning may have been subpar, Qadhafi’s understanding of institutional politics and regime survival was superb; he established his rule in such a way that no

---

40 Ironically, the recent overthrow and execution of Qadhafi suggests that his calculations about the importance of nuclear weapons to regime security may have been misguided. The Libyan regime was exposed to American intervention in support of the rebels that made regime survival highly improbable; had Qadhafi possessed a nuclear deterrent, perhaps the international community would have thought twice before sending military forces to Libya. Meanwhile, North Korea withers in a perpetual economic malaise, yet the regime is impervious to external meddling.
single group was powerful or unified enough to challenge his authority, especially the military, potentially his most powerful challenger.

This foresight paid great dividends for Qadhafi in the 1990s. With the economy in shambles and Libya an international pariah, a potentially explosive fissure emerged within Qadhafi’s elite coalition about the future direction of the country. Technocratic pragmatists pushed Qadhafi to begin the process of structural economic reform; traditionalist hard-liners aligned with the revolutionary committees wanted Qadhafi to remain defiant in the face of international pressure, as they believed that his defiance was key to his domestic legitimacy (Takeyh 2001, 65). Predictably, the top military echelon sided with the hard-liners, strongly opposed to both liberalizing economic reforms as well as to Qadhafi’s eventual decision to draw back the nuclear weapons program (Solingen 2007, 225). While Qadhafi remained oddly silent in this debate for the first half of the 1990s, he eventually favored the technocrats (Rublee 2009, 158-160). Acting decisively in the late 1990s, Qadhafi began issuing statements in the daily newspaper (Al-Jamahiriya) lambasting the hard-liners’ unwillingness to adapt, stating “we cannot stand in the way of progress…the fashion now is the free market and investments” (Takeyh 2001, 66). More importantly, Qadhafi went on a government purge, marginalizing the revolutionary committees and their allies and privileging the technocrats (ibid). With the opposition to reforms sidelined, Qadhafi was free to revamp his foreign policy, leading to the release of the Lockerbie suspects and the ensuing wave of diplomatic concessions.

At this crucial juncture, Qadhafi needed leeway to act without fear of internal sanction. He achieved that freedom as a direct byproduct of the institutional structures of governance that he created in the 1970s. By relying on a bureaucratically complex and disaggregated system of congresses and committees, Qadhafi allowed limited political participation and provided
legitimacy for his regime without fear of mass popular mobilization under one banner. Similarly, by constantly shuffling and reordering the military ranks, cleverly dividing them across the country, and diligently excluding them from political life, Qadhafi left the military too weak and disorganized to present a unified front, quashing potential military opposition to his leadership before economic reform and nuclear disarmament ever became salient issues. Thus, when the time came Qadhafi was able to turn his nuclear policy on a dime, boldly leading his country towards nuclear disarmament in a way that no dictator before him had dared to attempt.

In sum, Qadhafi was able to avoid North Korea’s fate as a result of the institutions that supported his rule; while Kim Jong-Il came to depend on the military for support and legitimacy, and thus became increasingly beholden to its policy preferences, Qadhafi’s relative independence allowed him to reverse his nuclear policy when political expedience dictated a change in course. While most scholars rightly attribute the change in Qadhafi’s policymaking to the dire economic circumstances that he faced during the 1980s and 1990s, they are wrong to overlook the structural factors that allowed Qadhafi to effectively respond to these dynamic pressures.
Chapter Seven

Preventing Proliferation: Lessons Drawn From Libya and North Korea

This thesis has explored the relationship between regime type and nuclear proliferation in authoritarian states. While most scholars consider regime type to be an unimportant factor in a state’s decision to pursue nuclear weapons development, I have argued that this conclusion is hasty and mistaken; previous scholarship overlooks critical institutional distinctions between different types of authoritarian regimes that impact a leader’s calculations about the domestic costs and benefits of a nuclear weapons program. In particular, I have attempted to corroborate two hypothesized correlates of nuclear proliferation based on regime type and to further detail the relationship between them: high levels of personalism and military-style dictatorships.

To do so, I approached the topic from two fronts. First, I borrowed regime type data from Lai and Slater (2006) and nuclear proliferation data from Singh and Way (2004) to create a dataset of authoritarian regimes and their proliferation patterns from 1950-1992. This dataset enabled me to run a basic probability analysis of nuclear proliferation across various regime types. While these methods are limited in their explanatory power, they provide clear support for both hypotheses; personalist regimes are more likely to proliferate than non-personalist regimes, and personalist military regimes (strongmen) are the most prone to proliferation. The statistical analysis also sought to compare the relative salience of military and personalist type regimes to nuclear proliferation by comparing high personalist civilian regimes (bosses) to low personalist military regimes (juntas). While the data indicated that boss regimes were more likely to proliferate than juntas, this conclusion should be taken with caution, as the small number of junta-type regime years in the dataset mean that minor coding variations could significantly alter the results. However, assuming the accuracy of Lai and Slater’s (2006) codings, I also provided a
potential explanation for the relative dearth in proliferation years in junta regimes; given their short life span, junta regimes simply do not have the time to devote resources to a long-term nuclear project, and will instead prefer policies that satisfy their short-term goals.

Second, I bolstered my statistical analysis with research on several case studies, which provide the historical detail and nuance needed to appropriately understand the relationship between military institutions, personalism, and nuclear proliferation. I compared the nuclear weapons programs of Libya and North Korea, two states that Lai and Slater (2006) coded as both strongman (high personalism, military) and boss (high personalism, civilian) regimes at some point during their nuclear development. From these case studies, I drew several insights. To begin, nuclear development may be based on both external and internal motivations. While the origins of the North Korean program are firmly rooted in standard security concerns about American power, Kim Jong-Il’s persistence in nuclear development after the conclusion of the 1994 Agreed Framework (and in the face of severe economic deprivation) muddles the simple realist account. Similarly, the Libyan program was not truly tied to national security; rather, it arose and was eventually dismantled for the sake of regime security and internal legitimacy. In short, the Libyan and North Korean case studies lead us to reject the basic realist account as an insufficient measure of nuclear proliferation. In Putnam’s (1988) language, leaders play a two-level game when deciding on the merits of nuclear development, pandering to both key domestic elites and the international community; thus, leaders will pursue policies that satisfy both their international and domestic interests. Therefore, greater attention must be paid to the state-level factors that shape authoritarian leader’s nuclear decision making.

To this end, my case studies compared two states with similar ideological stances (isolationist and highly nationalist), which faced similar international opposition, and which
experienced similarly dire economic circumstances during crucial points in the history of their nuclear development, yet which ultimately chose opposing policy options. I demonstrated that one key difference between the cases was the type of institutions (either military or civilian) that the leader depended upon to support his rule. In North Korea, the death of Kim Il-Sung brought about a subtle yet important shift in the structure of governance in Pyongyang; as the new regime became increasingly dependent on the military for ideological legitimacy and support, Kim Il-Song’s foreign policy became increasingly belligerent, complicating and ultimately undoing attempts to negotiate North Korean disarmament. Meanwhile, in Libya the military establishment was disorganized and politically marginalized, leaving the military elite unable to effectively challenge Qadhafi’s decision to pursue rapprochement with the West; Qadhafi’s reliance on civilian institutions instead of military power ultimately granted him the freedom he needed to dramatically alter nuclear policy despite the presence of internal opposition.

Thus, the cases demonstrate the significance of regime type to nuclear proliferation; regimes that justify and support their rule via military institutions are more likely to pursue nuclear weapons development than those that rely on civilian institutions. This conclusion validates previous scholarship regarding the conflict propensity of military regimes; lacking an easily available driver of domestic legitimacy and believing that military confrontation is both an acceptable and potent tool of international statecraft, these regimes are prone to selecting a combative foreign policy that fuels a highly nationalist ideology, diverting attention from domestic problems and rallying the masses under the state. Furthermore, the cases also highlight the importance of personalism to nuclear policymaking in authoritarian states. While the structure of personalist regimes and the psychology of personalist leaders may leave them predisposed to nuclear development (see chapter 2), powerful and authoritative dictators can also
quickly reverse course, cutting through opposition in a way that less independent dictators likely cannot. This is particularly relevant for policy decisions as important as the pursuit of nuclear weapons. As evidenced by the behavior of both Kim Il-Sung and Qadhafi, personalist dictators tend to keep their nuclear cards close to their vests, maintaining tight control over both nuclear development and the negotiating process; thus, personalist dictators can rapidly reevaluate their nuclear policy and adapt to dynamic political and economic circumstances.

How can these conclusions inform future U.S. counter-proliferation policy? To start, my analysis suggests that regimes that rely on civilian institutions of governance should be more easily persuaded to give up their nuclear weapons programs than should military regimes; dictators in boss-type regimes as are less likely to be highly dependent on nuclear weapons for internal legitimacy, and are likely to be more flexible and adaptable in their approach to foreign policy. In these cases, American coercive diplomacy may find traction, especially if it is coupled with international support; targeted sanctions and international isolation can alter the dictator’s cost-benefit analysis enough to encourage a policy reevaluation. On the other hand, military regimes are likely to be very difficult to coerce. These regimes tend to sensationalize their nuclear development as a figurehead of the regime’s combative ideology, making a concession on this issue politically dangerous. In addition, the leaders of these regimes are likely to be hypersensitive to security concerns and psychologically predisposed to military solutions for foreign relations problems, making negotiations all the more difficult. Here, even exceptionally strong coercive pressure is not likely to win the day; if anything, the regime may feel increasingly threatened by American hostility and thus justified in its continued pursuit of nuclear technology.

These factors do not mean that it is impossible for American diplomacy to achieve the
desired outcome when negotiating with military regimes. Rather, it means that American diplomacy will need to be exceptionally effective along several fronts. First, we must recognize that providing trustworthy security assurances is a crucial step in negotiations with any state, but is especially so when the target is a military regime; overcoming this regime type’s natural tendency towards militant behavior will require a persistent effort to convince the target that the United States has limited aims and little interest in actual conflict. The U.S. withdrawal of tactical nuclear weapons from South Korea, which led directly to the December Accords, is clear proof of this fact. Second, the United States needs to be prepared to offer substantial political and economic inducements in return for nuclear disarmament. Given that military regimes are likely to be heavily invested in their nuclear programs as symbols of nationalism and strength, they will likely require substantial compensation to change course. Indeed, genuine cooperative energy agreements may be crucially important for military regimes looking to save face in negotiations, as evidenced by North Korea’s insistence on the provision of LWRs in the Agreed Framework and beyond; even if Kim Il-Sung was willing to give up his nuclear weapons program, the regime simply could not publically forsake its right to nuclear energy, a state of affairs that also complicates the resolution of the Iranian nuclear crisis today.

Finally, both case studies demonstrate that access to the dictator himself is a crucial component of successful negotiations. Understanding the decision making process of secretive dictatorships is often quite difficult. However, the structure of highly personalist dictatorships can simplify the task of coercive diplomacy; if one manages to convince the dictator himself of the need to change course, then one can rely on the dictator’s own political power to work out the details and bring about a policy change. This fact is evidenced by both case studies. Once Kim Il-Sung agreed to negotiations, he personally intervened in the buildup to the Agreed
Framework to smooth over bureaucratic problems and ensure that the negotiations would go as planned; similarly, once Qadhafi decided to negotiate, he guaranteed that the transition to disarmament would go smoothly by marginalizing the political opposition and installing new supporters into positions of power. Thus, the United States should not shy away from establishing high-level diplomatic contact with regime leaders; while courting brutal dictators is an unsavory political prospect, diplomatic meetings (perhaps secretive ones) offer an important way for the United States to either influence recalcitrant dictators towards disarmament, or to discern early on that they are unlikely to waver from the nuclear path.\textsuperscript{41, 42}

It is also important to note the limitations of and potential improvements to the research presented above. To begin, as mentioned previously the statistical analysis presented here is rudimentary, lacking more advanced statistical methods that might control for potential lurking variables.\textsuperscript{43} In addition, due to the limitations of the datasets from which I borrowed information, my dataset only accounts for regime years until 1990, failing to include any data points from the past two decades of nuclear development. A more robust series of statistical tests on a more comprehensive dataset would be a great improvement on my own quantitative analysis.

Furthermore, while employing Lai and Slater’s (2006) regime typology was a useful way to explore how variations in regime type impacted nuclear proliferation, the case studies demonstrate that regime typologies are ultimately oversimplifications of complex and nuanced

\textsuperscript{41} As another example, there is some evidence that personal correspondence between American President Kennedy and Egyptian President Nasser in 1962 and 1963 seriously impacted the latter’s understanding of the role of nuclear weapons in the Middle East, and ultimately contributed to Nasser’s support for the NPT (Rublee 2009, 114-115).

\textsuperscript{42} Ultimately, American efforts at coercive diplomacy depend on numerous contextual variables, and there is no one-size-fits-all model for successful coercion; counter-proliferation strategies must be hand-tailored to each specific instance of nuclear proliferation. As Alexander George (1994) puts it, “the phenomenon of coercive diplomacy is too complex, and the conditions and variables at play are too numerous, to permit formulation of such generalizations” (268).

\textsuperscript{43} For example, it could be the case that the type of regime that arises is a product of the security environment in which the state resides. So if strongman regimes are most likely to materialize in conflict-prone areas where security is a constant concern, than they would be more likely to proliferate due to their external circumstances, and not their regime type. This is just one possibility among several potential variables that could be distorting these results.
political entities. First, regimes that are coded as the same regime type can demonstrate important differences in structure. For example, Libya under Qadhafi and North Korea under Kim Jong-Il are both traditionally described as regimes that demonstrate high levels of personalism. However, it seems likely that Qadhafi was a more independent leader than was Kim Jong-Il; while Kim Jong-Il wielded ultimate authority, the North Korean leader’s decisions were strongly influenced by the wishes of powerful domestic constituencies (the military), while Qadhafi worked to ensure that he was not so encumbered. In addition, the inner structure of authoritarian regimes and the relationships among key elite actors are often difficult to discern in real time. While my research has the benefit of hindsight and detailed historical accounts, policymakers are not afforded these luxuries; this information deficiency complicates the designation of a particular regime ‘type’. Finally, even regimes that Lai and Slater (2006) classify as non-personalist can have momentous individual leaders with significant authority. Egypt is a prime example. Lai and Slater (2006) classify Egypt as a machine (low personalist, civilian) from 1955-1992. However, President Nasser is widely regarded as an iconic pan-Arab ruler with immense prestige, who likely could have pursued whichever nuclear policy he chose despite a split amongst the Egyptian elite on the issue (Rublee 2009, 113).\footnote{Indeed, one of the major puzzles of the Egyptian case is why Nasser did not use his immense power to prioritize efforts at nuclear development. Despite having adequate resources to devote to the program, and despite the potential prestige benefits that nuclear nationalism can bring, Nasser never truly got behind the nuclear program. Had he done so earlier on, Egypt likely would have progressed significantly farther down the road to nuclear development than it did prior to the 1968 signing of the NPT (Rublee 2009, 112-114).} Indeed, Nasser did abruptly alter the course of the Egyptian nuclear program, taking an unexpectedly bold line when he signed the NPT in 1968, firmly shutting the door on Egyptian nuclear development immediately after losing a war with Israel (115-116). In short, classification schemes are imperfect; significant variations exist between states with similar codings, and the codings themselves are often overly reductive labels that insufficiently describe the complex nature of
regime institutions and nuclear policymaking.

Finally, it is important to note that civilian regimes are also able to maintain militaristic ideologies and pursue belligerent foreign policies. The Libyan case demonstrates that a state with a civilian government structure can still maintain a dramatically combative foreign policy posture (even absent tangible security threats) as a tool of regime legitimacy, including nuclear development. Egypt’s foreign policy under Nasser is another stark example of a civilian regime promoting hyper-nationalism (or in this case, pan-Arabism); from the 1956 Suez War onward, Nasser became an Arab hero fighting against Western imperialism and Israeli aggression (though he did eventually abandon his nuclear program) (Rublee 2009, 102-103). These instances suggest that nuclear proliferation is more likely in states that pursue highly nationalistic foreign policies—military regimes are thus more likely to proliferate than others simply because they happen to select a nationalist strategy more frequently than do other regime types. A study seeking a correlation between nationalism and nuclear proliferation may be a promising avenue for further research, as would a study seeking conditions under which states of any regime type are likely to pursue highly nationalist foreign policies.

In conclusion, while nuclear proliferation is a topic well worn by academic research, more work needs to be done to explore the relationship between regime type and nuclear proliferation. This paper has demonstrated that, contrary to the scholastic consensus, variation in the institutional structures that support different authoritarian regime types plays an important role in a leader’s decision to pursue or abandon nuclear technology. With further quantitative analysis and detailed case studies, this correlation can be brought to light, and hopefully used to inform future efforts to curb the spread of nuclear weapons in the Middle East and beyond.
Works Cited


Geddes, Barbara; Joseph Wright, and Erica Frantz. 2012 (Unpublished Manuscript). “New Data
on Autocratic Regimes.”
Change, and Pathways to Democracy.”
Hymans, Jacques C. 2006a. The Psychology of Nuclear Proliferation: Identity, Emotions, and
Foreign Policy. Cambridge: Cambridge University Press.
Hymans, Jacques C. 2006b. “Theories of Nuclear Proliferation: The State of the Field.” The
Hymans, Jacques E. C. 2012. Achieving Nuclear Ambitions: Scientists, Politicians, and
Proliferation. Cambridge: Cambridge University Press.
Jervis, Robert. 1976. Perception and Misperception in International Politics. Princeton:
Princeton University Press.
University Press.
International Studies Perspectives 6: 114-128.
Lai, Brian and Dan Slater. 2006. “Institutions of the Offensive: Domestic Sources of Dispute
50(1): 113-126.
Lavoy, Peter R. 1993. “Nuclear Myths and the Causes of Nuclear Proliferation.” In The
Proliferation Puzzle: Why Nuclear Weapons Spread (And What Results), ed. Davis,


Way, Christopher, and Jessica Weeks. 2011 (Unpublished Manuscript). “Making it Personal: Regime Type and Nuclear Proliferation.”