The Logic of Escalation and the Benefits of Conventional Power Preponderance in the Nuclear Age

Tyler John Bowen
Yale University Graduate School of Arts and Sciences, tyler.bowen@yale.edu

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Abstract
The Logic of Escalation and the Benefits of Conventional Power Preponderance in the Nuclear Age
Tyler John Bowen
2021

What is the value of conventional military preponderance in a nuclear world? The possession of nuclear weapons by the world’s major power renders great power war obsolete, and fundamental theories of how nuclear weapons affect international politics claim that conventional capabilities matter less in a nuclear world. Yet, major powers are competing for conventional superiority and have done so throughout the nuclear age. In particular, the United States spends hundreds of billions of dollars to maintain aggregate conventional preponderance over its nearest great power rivals.

Rather than label this behavior as irrational, I develop conventional options theory examine the security benefits of conventional superiority under the shadow of nuclear weapons. Due to the high costs of using nuclear weapons, which include the risks of retaliation as well as their larger moral and strategic downsides, there are instances where nuclear threats may not be credible. This may make nuclear deterrent threats ineffective, causing states to need conventional capabilities to defend their interests. The way in which conventional capabilities bolster bargaining power in nuclear disputes is by providing options for escalation. In each dispute, each state has their own ladder of escalation with different rungs on that ladder that represent military options to which it can escalate and credibly communicate to the adversary that it could win. More rungs on the ladder of escalation equals more conventional options. The number of options is shaped by the number of troops and equipment a state has in the area where a dispute takes place.
States also have a point of resolve, or a level past which the costs of conflict outweigh the benefits of winning the dispute. If a state has few conventional options, it is more likely to be caught in a resolve-capability gap, or an area in which it has to decide between escalating past its point of resolve or backing down. States face heavy pressure to back down in this situation, especially over peripheral interests. Conventional options prevent a state from being in a resolve-capability gap and make it more likely that it will coerce its adversaries into one. Because the costs of backing down are higher in a dispute over a core interest, conventional options should have more of an effect in disputes over peripheral interests.

This security benefit of conventional options in a nuclear dispute incentivizes states to possess a variety of capabilities at the global level. States know that having more conventional options in a dispute carries a benefit. However, they are uncertain of where the next dispute will take place. To increase their chances of having a greater number of conventional options in the next dispute, states maintain a military force that is large, contains a diverse array of platforms, is rapidly deployable, and is forward-deployed into multiple regions. Thus, conventional options theory provides a rationale for the type of military force and posture adopted by the United States since WWII.

I test this argument with a quantitative overview of all crises between nuclear states from 1961-2018 along with four case studies of nuclear crises: the Cuban Missile Crisis, the Berlin Crisis of 1958-61, the Taiwan Straits Crises of 1954-55 and 1958, and the Gulf War. Taken together, these tests provide empirical support for the idea that conventional options bolster a state’s bargaining power in a nuclear dispute, that this benefit is larger in peripheral disputes, and that this means there is an incentive for states to have a wide variety of conventional capabilities in the aggregate. I end with a grand strategy recommendation derived from conventional options
theory. The United States should focus on deploying forces into the Western Pacific, but it can retreat from areas where the costs of providing superior conventional options may outweigh their benefits, such as continental Europe.
The Logic of Escalation and the Benefits of Conventional Power Preponderance in the Nuclear Age

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Presented to the Faculty of the Graduate School
of
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by
Tyler John Bowen

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Acknowledgments

I entered graduate school in 2015 fresh off of my undergraduate studies with ample ambition and passion for social science but without much discipline or a sense of how to be a scholar. I knew that I wanted to start a project that would touch on International Relations theory, current US foreign policy, and nuclear deterrence, but I had little sense of what a good research question would be or how to make an effective research design. At each step in graduate school, numerous people were there to point me on the path of being a better scholar and a more mature person. Their guidance led to much personal growth, and this dissertation would not have been possible without it. The first people to thank are the fantastic mentors on my dissertation committee: Nuno Monteiro, Alexandre Debs, and Robert Jervis. I am always amazed by Nuno’s ability to break down ideas and follow them to their logical conclusions, which leads to insightful arguments about how the world works. I aim to emulate this style of thinking in my own work. In addition, Nuno believed in me and my project even when I was struggling to find a good argument or research design, and for that I owe him an enormous gratitude. I count myself lucky to be his student. I thank Alex for his great feedback and the intense interest he takes in mentorship. My work has benefitted from his critical eye. He has been there to steer in the direction of good sense and good scholarship from the earliest days of graduate school. I am inspired by the care he takes with his advisees and seek to model that in my own career. I thank Professor Jervis for taking interest in my work and giving me confidence that what I was pursuing was a worthwhile and important question. He is a figure who has shaped the field of nuclear politics, and I am so honored that he put in time and effort to assist me in my project. It is an honor to work with him and to experience his fecund mind and critical eye. To learn from someone like him who has shaped the field of nuclear politics is invaluable.
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your own homework for paralegal school in your bedroom after work. You will be happy to know that I also work in my bed at night from time to time! You all’s dedication to working and raising me is an example to follow in my own life.

Finally, I cannot thank my partner Elizabeth DeLucia enough for her love and support. Liz, I am very lucky to always be able to talk to someone as smart, articulate, and talented as you are. You believe in me and give me the confidence I need to keep working during any rough or down times. Your perspective as a graduate student in clinical psychology always challenges my own intellectual biases, and my thinking has evolved in much better ways because of you. Your strength and kindness have helped shape me into a better person. In short, when I become a full professor, in no small part will it be because I met you.
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Introduction: The Puzzle and a Preliminary Answer

What is the value of conventional military preponderance in the nuclear age? Nuclear weapons are the most powerful tools of war ever created. Yet, countries with nuclear weapons have worried about the conventional balance and still compete with each other for conventional military superiority. One seminal theory in International Relations scholarship known as the Theory of the Nuclear Revolution (TNR) would say that this competition is misguided. Nuclear weapons are so destructive that their use hangs over any confrontation between nuclear weapons states. The shared nuclear danger makes any large war between two nuclear weapons states too risky to contemplate, which is why large-scale conventional war is now impossible between major powers.¹ Conventional superiority cannot be used to win wars, and it is not useful in a crisis situation either. Due to the impossibility of war, crises in between nuclear powers become competitions in risk-taking where the side with the greater resolve and the best brinkmanship tactics emerges victorious.² States can thwart the conventional superiority of their adversary by taking steps that raise the risk of nuclear escalation, thereby negating any conventional advantage. As Robert Jervis wrote, “being able to win a conventional war is not synonymous with the ability to keep the war conventional.”³ Conventional forces play a role in increasing the nuclear risk by acting as “tripwire” forces, and they could be useful in confrontations with non-nuclear adversaries. However, conventional superiority over another nuclear power does not


translate into a political advantage because it cannot be used to win wars or enhance bargaining power.

Yet, this received wisdom has not stopped the United States from spending over $700 billion on its military in order to maintain its hold on the conventional preponderance it has enjoyed since the end of the Cold War. It has not stopped China from increasing its defense budget by more than tenfold since 2000, with the vast majority of this spending going towards conventional capabilities.\(^4\) Russia has also devoted tens of billions of dollars to modernizing its conventional forces with NATO as the primary target.\(^5\) US leaders still worried about what the Soviets could do with their conventional superiority in Europe during the Cold War. The United States and its NATO still built up their military forces in order to close the conventional gap with the Soviets in Europe. Despite the prediction of TNR that conventional superiority does not translate into a political advantage, nuclear powers still compete with each other to gain conventional superiority.

Previous nuclear scholars have challenged TNR’s hypotheses about the benefits of conventional weapons. For instance, the advocates of the strategy of Flexible Response argued that conventional options were necessary for defending against aggression at lower levels of violence and for enhancing nuclear deterrence.\(^6\) Secretary of Defense Robert McNamara said in 1961 that “the ability to respond promptly to limited aggressions, possibly in more than one place at the same time, can serve both to deter them and to prevent them from spreading into


larger conflicts.” Furthermore, this ability to fight limited aggression would be develop via “an increase in our non-nuclear capabilities.”\(^7\) Herman Kahn stressed that reliance on threats to escalate to the highest rungs of the escalation ladder were ultimately too risky of a basis on which to base defense policy.\(^8\) These critiques show that it is possible to simultaneously recognize the deterrent power of nuclear weapons and the security benefits of conventional military power.

Figuring out which part of the debate over the benefits of conventional military superiority is correct matters for today’s policy debates. One major issue in US foreign policy today is whether and to what extent the United States should deploy forces abroad and how much it should invest in its military. Advocates of Restraint argue that the United States does not need to deploy military forces abroad to deter major challengers such as Russia and China from making aggressive moves to revise the regional status quo.\(^9\) Their case would be strengthened if extended nuclear deterrence can be used to deter limited conflicts and conventional military superiority did not carry much of a security benefit. Conversely, supporters of Deep Engagement argue that the United States receives many benefits from deploying military forces abroad.\(^10\) This argument would be strengthened if nuclear weapons played a small role in deterring aggression against allies and conventional military forces played a large role in doing so. Part of the current

\(^7\) Kaufmann, 1964, 59-60.


grand strategy therefore hinges on the question of whether conventional military superiority offers a security benefit under the nuclear umbrella.

To answer this question, I propose a new theory called *conventional options theory*. This theory refines the theory of escalation posed by TNR. It starts with the proposition that there is a risk of nuclear escalation in all confrontations between great powers, but it is not shared equally across all disputes. It is hard for a nuclear state to make another state believe that it would actually make good on its deterrent threats and use nuclear weapons due to the risk of retaliation and wanton destruction that comes with nuclear use. This credibility problem is most acute over peripheral interests. Where nuclear threats are less credible, they may also be ineffective. Therefore, there are instances in which conventional capabilities will be needed to defend a nuclear state’s interests.

The mechanism through which these conventional capabilities bolster a state’s bargaining power is by providing its decision-makers with more credible options for the use of force. Leaders want to avoid having to make the nuclear decision, especially over peripheral interests. This is why they tend to eschew the brinkmanship tactics in TNR’s theory of escalation. Having conventional options for escalation gives decision-makers military capabilities they are more likely to use in a dispute. Conventional options therefore allow a state to stay in a dispute and in so doing put the onus for escalation back on the adversary. If the adversary does not have correspondingly strong conventional options, it faces pressure to back down or escalate. In a nuclear context where escalation comes with higher risks of nuclear use, there are heavy incentives to back down. Having greater conventional options for escalation make it more likely that a state will be able to stay in a dispute and put pressure on its adversary to back out of it. The side with more conventional options for escalation therefore has a bargaining advantage in a
nuclear dispute. This constitutes a security benefit to having more conventional options for escalation in crises between nuclear adversaries.

The size of this security benefit, however, is conditional on the resolve states have in a dispute. A state could choose to escalate rather than back down when faced with the choice between the two. If a state has core interests at stake, such as survival, territorial integrity, or control over an area with vital resources, the costs of backing down may be higher than the costs of escalating the crisis and the risks of nuclear use such escalation entails. On the other hand, if a state has peripheral interests at stake, its resolve is likely to be lower, and as a result the costs of backing down will be lower than the expected costs of escalation. The benefit of conventional options is therefore greater in disputes over peripheral interests than in ones over core interests.

A state’s local military power in the area where a dispute takes place along with its ability to rapidly deploy forces to the area determines its available conventional options. States that have quantitative and qualitative superiority across a relevant portfolio of military capabilities in a dispute, or portfolio superiority, tend to have more conventional options for escalation. States recognize this, and they are uncertain about where the next crisis will erupt. To maximize their chances of having superior conventional options in the next crisis, states are incentivized to develop a variety of conventional capabilities, or forces that are large, contain a diverse range of platforms, rapidly transportable, and forward deployed. A state increases the probability that it will have more conventional options in any given dispute by having much greater conventional variety than any other state. Identifying the benefit of conventional capabilities in a nuclear dispute highlights an incentive for building the type of military force that the United States possesses today and gives a rationale for why the US would value conventional power preponderance in the nuclear age.
Yet, there is also a paradox to the benefits of conventional military superiority in a nuclear world. As noted earlier, these benefits are context-bound by the effectiveness of nuclear deterrence. Over core interests, the costs of backing down are higher, making threats of rapid nuclear escalation more credible. This increases the chance that an adversary will be deterred by nuclear threats alone, allowing nuclear deterrence to substitute for conventional defenses. Over peripheral interests, the costs of backing down are lower, which makes nuclear threats more difficult to make credible. Because of this, the bargaining advantage from possessing superior conventional options grows as the interests at stake in a dispute become less tied to core security interests. This leads to a paradox wherein countries build large conventional military forces to capture less of a security benefit than these forces could obtain in a pre-nuclear era.

An identification of the benefit of conventional military superiority in a nuclear world gives credit to both sides of the grand strategy debate. On the one hand, there is a benefit to forward-deployed military force. On the other hand, it applies most to disputes over peripheral interests, which brings into question whether the benefit is worth the costs of building the conventional forces necessary to obtain it. Which side should the United States take? The one that emphasizes benefits or the one that emphasizes cost? There should be two considerations that guide this answer. First, “peripheral” interests are still important; they are peripheral in relation to the core interests of survival, territorial integrity, and the defense of strategically vital areas. For instance, the defense of the global commons is a peripheral interest, but it is nevertheless an important US foreign policy objective. Second, US policymakers should pay attention to the opportunity costs of defense spending. If the requirements for building superior conventional options in a particular peripheral area require large increases in defense spending, then it may be better to forgo the acquisition of bargaining advantages in that area. I use these
two points to estimate that US forward-deployed forces provide a net benefit in the South China Sea, East China Sea, and the global commons, but not so in Eastern Europe or in the area immediately around Taiwan.

The rest of the dissertation is devoted to laying out and testing this argument about the benefits of conventional military superiority in the nuclear age in greater detail. In Chapter 1, I develop conventional options theory by introducing the metaphor of the escalation ladder to show how conventional options can ameliorate the problem of credibility associated with nuclear deterrence while also putting pressure on an adversary to back down. I also develop and define the necessary terms that I use in making my theory and that I will use throughout my empirical tests.

In Chapter 2, I conduct a quantitative overview of all disputes between nuclear states between 1961 and 2018. I measure conventional options in a dispute by gauging the conventional balance in the area where a dispute takes place across a portfolio of relevant conventional capabilities. This portfolio includes capabilities for war at sea, on land, and in the air. States with portfolio superiority tend to have more conventional options in a dispute. I then correlate this measure of local conventional superiority with dispute outcomes. I also interact this measure of conventional superiority with the stakes involved in a dispute. I find support for both aspects of conventional options theory. More conventional options in a dispute gives a state a greater chance of coming out ahead in a nuclear dispute and this effect is greater in disputes over peripheral interests.

Chapters 3-6 cover case studies of specific nuclear crises to show how conventional options and the stakes involved interacted to affect the crisis outcome. Chapter 3 highlights the key role of America’s superior conventional options in bringing about a successful outcome in
the Cuban Missile Crisis. Chapter 4 details how limited US conventional capabilities coupled with the core interest of protecting West Berlin allowed the US to successfully defend the status quo in the Berlin Crisis. Chapter 5 covers the Taiwan Strait Crises and how the United States’ improved conventional capabilities in the Taiwan Strait allowed it to do better in the second crisis. Chapter 6 shows how the theory applies to crises without a nuclear shadow, and it shows that the benefit of conventional preponderance for the United States lay in the ability to put superior conventional options in a peripheral theater in a short amount of time.

Finally, Chapter 7 concludes by summarizing the theory and key findings, highlighting the degree to which the quantitative overview and individual case studies supported conventional options theory. It then goes into the implications of conventional options theory for US grand strategy. It shows that the fact that the largest benefit of conventional superiority occurs in peripheral disputes means that US policymakers need to be attuned to the opportunity costs of defense spending. Using this framework, I assess that conventional capabilities provide a net benefit in the South China Sea, East China Sea, and the global commons, but they may not in Eastern Europe.
Chapter 1: A Theory of Escalation and the Benefits of Conventional Preponderance in the Nuclear Age

What is the value of conventional power preponderance in the nuclear age? The United States allocated $730 billion to the Department of Defense in fiscal year 2020. This is nearly three times more than its closest military rival, China, which spent $261 billion in 2019, and more than ten times the amount of another large adversary, Russia, which spent $65 billion in 2019. The United States is using its large defense budget to procure new tactical air platforms such as the F-35 joint-strike fighter and the F-15EX, the Arleigh Burke class of destroyers with the Aegis Weapons System, and strengthened C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance), which indicates an emphasis on the ability to fight and win conventional conflicts against peer competitors. The 2018 National Defense Strategy (NDS) stresses that the primary focus of the United States should be to build a military force that can take control of the battlespace in conflicts against great power rivals. For their part, China and Russia are also building up their conventional military strength to contest the United States. China increased its defense budget by 3 percent annually between 2008 and 2017 with the intent to build capabilities that would directly challenge US conventional military

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power in the Western Pacific through an anti-access/area denial (A2/AD) strategy. Russia has modernized its tactical combat aircraft and armor while investing in precision-strike capabilities and integrated air defense systems that could force NATO to fight a long, costly war.

All of this conventional competition is taking place in a context in which all three countries have the potential to inflict catastrophic damage on the other with their nuclear arsenals. The Theory of the Nuclear Revolution (TNR) argues that this condition of Mutually Assured Destruction (MAD) makes large-scale conventional war among great powers unthinkable. The likelihood of escalation to general nuclear war, and therefore sure destruction, is too high for nuclear states to get involved in major conventional wars with each other. Indeed, since 1945, there has been no large conventional wars between nuclear powers. This fact has been used by Kenneth Waltz to assert that the “the probability of major war among states having


nuclear weapons approaches zero”\textsuperscript{19} and by John Lewis Gaddis to argue that nuclear weapons were responsible for “the long peace” between the United States and the Soviet Union during the Cold War.\textsuperscript{20} The nuclear danger that hovers over relations among nuclear states should therefore reduce the salience of the conventional military balance. As Robert Jervis argues, “[conventional] military capability is not a good predictor of national behavior or international outcomes…”\textsuperscript{21} What matters to states in the nuclear age is the risk of nuclear escalation, and one does not need to have conventional superiority to make this risk salient.

If TNR is right, then why are China, Russia, and the United States engaging in a conventional arms race? Questions of high-level grand strategy and middle-range theories of nuclear crisis bargaining are tied together. Understanding the role of conventional capabilities in nuclear crises can give scholars insight on the incentives the United States has for maintaining its conventional military preponderance.\textsuperscript{22} To date, no study has explicitly connected these two strands of scholarship. To address this gap, I show how conventional capabilities can help states fare better in disputes with nuclear adversaries and how this incentivizes states to build large and diversified conventional military forces.

The logic of conventional superiority in the nuclear age lies in having options for escalation in instances where nuclear threats may not be effective. Nuclear use comes with the prospect of retaliation, and even when it does not, it generates significant normative and strategic costs. The costs of using nuclear weapons are so high that it is hard to justify their use. This

\textsuperscript{19} Waltz, 1990, 740.


\textsuperscript{21} Jervis, 1989, 45.

brings up a problem of credibility, especially when it comes to extended deterrence. Would, for example, the United States be willing to risk the fate of New York City to extend its nuclear protection over Tallinn in the case of a Russian attack? This is unlikely, and it shows that over certain objectives, a state may need to rely on its conventional capabilities. To show how conventional capabilities create a bargaining advantage in a nuclear dispute, I develop a theory of the utility of conventional options for escalation. This theory starts from the observation that if a nuclear state has no conventional capabilities with which to protect a given security interest, it could be faced with a choice between escalating past its level of resolve or backing down.

Conventional options for escalation close this “resolve-capability gap,” allowing a state to stay in a dispute over a given objective and forcing the onus for escalation back on its adversary. I define a conventional option for escalation as a military mission that you can credibly communicate to your adversary that you are likely to successfully execute. The number of conventional options available to a state in a dispute is shaped by the local conventional balance in the area where a dispute takes place. The state in a dispute with “portfolio superiority,” or an advantage in numbers and quality across a range of platforms, in the region tends to be able to perform more military missions. The side with more conventional options for escalation, or the ability to perform more military missions than its opponent, is more likely to be able to press its claims in a dispute through the use of force and convince its adversary to back down. The balance in the number of conventional options available to each side therefore shapes the balance of bargaining power in a nuclear dispute.

This benefit applies most to disputes over peripheral issues. Over core interests, a state is more likely to be able to credibly communicate that the costs and risks of escalating past its level of resolve, or “over-escalation,” are lower than the costs of backing down. This makes nuclear
deterrent threats more credible and therefore more effective. Over peripheral issues, nuclear threats will be more difficult to make credible and therefore may not be effective. It is here that conventional options for escalation will provide their greatest benefit to a state’s bargaining position. At the global level, the benefit of having conventional options for escalation and the requirements for building them in a particular dispute incentivizes states to build a variety of conventional capabilities. I define the variety of conventional capabilities as the number and quality of different types of conventional platforms a state possesses across all theaters. States are uncertain about where and when the next dispute will take place, and in order to meet the variety of contingencies they could face, they develop a large, diversified, technologically sophisticated, rapidly transportable, and forward-deployed conventional military in order to have conventional options in those contingencies. This creates a paradox of conventional superiority in the nuclear age. In order to capture the security benefits of having conventional options in a particular dispute, states need to spend large sums on defense in peacetime in order to be able to project power into several areas around the globe. These high levels of defense spending go to capturing bargaining advantages over peripheral security interests.

This paper proceeds in five parts. First, I review the literature over the question of the utility of conventional military power in relations among nuclear powers. Second, I use the metaphor of the ladder of escalation to demonstrate the logic of how conventional options for escalation can ameliorate the problem of credibility and provide a bargaining advantage to a state in a nuclear dispute. Third, I apply my theoretical framework to the Kargil War by way of illustration. Fourth, I discuss how the logic of the theory leads states to build a variety of conventional capabilities and how it creates a paradox of conventional military superiority in the nuclear age. I end with a brief conclusion summarizing my argument and its predictions.
Theories of Escalation and the Benefits of Conventional Superiority

Seminal works on the effect of nuclear weapons on international politics stress that conventional military superiority does not add to a state’s bargaining power in the nuclear age. Thomas Schelling, in his work on nuclear deterrence, argues that having conventional superiority plays little role in enhancing the credibility of a state’s security commitments.23 Schelling states that because nuclear weapons are so destructive, a small probability that they may be used is enough to deter conflict. States threaten to escalate a conflict to a point at which nuclear weapons might be used; they make “threats that leave something to chance.” An effective way to make these threats is to position conventional troops such that they have to be engaged by an adversary at the outset of a conflict. The mission of these troops is not to win but to act as a “plate-glass window” or “tripwire” that triggers a greater conflict. Once these troops are killed, the odds of an intense conflict where nuclear weapons could be used increase.24 Indeed, the deaths of a country’s soldiers could trigger a desire for revenge that goes beyond rational calculations, further increasing the odds that a “threat that leaves something to chance” could escalate to nuclear war.25

If conventional forces are mostly good for their “tripwire” effect, then states can manipulate the nuclear danger inherent in the use of force without conventional superiority. Scholars of the Theory of the Nuclear Revolution (TNR) use this insight to argue that

\[\text{References:}\]


conventional superiority is not of much value in the nuclear age. If the arguments about the nuclear revolution are correct,” Jervis writes, “there should be only tenuous links between the details of the military balance and political outcomes…What matters is not nuclear superiority or the exact nuclear balance, but the nuclear danger.” The United States thus does not need conventional superiority to deter the Soviet Union from attacking NATO allies despite the USSR’s “increased ability to fight a conventional war in Europe.” Kenneth Waltz provides an even more forceful take on the irrelevance of conventional capabilities in conflicts between nuclear powers: “Conventional forces have only a narrow role in any confrontation between nuclear states over vital interests, since fighting beyond the trip wire level serves no useful purpose. Enlarging conventional capabilities does nothing to strengthen deterrence.” By employing threats of brinkmanship, nuclear states can remind their adversaries of the damage they can inflict with their secure second-strike capabilities. Nuclear threats are thus useful for deterring conventional attacks, and there is little need for conventional military superiority.

TNR scholars base their argument about the irrelevance of conventional superiority on a particular theory of escalation. Escalation refers to the process through which states intensify conflicts such that they “cross thresholds considered significant by one or more of the participants.” Because states regard the nuclear threshold as salient, analysis of escalation

26 The main focus of TNR was on convincing scholars and policymakers that states did not need large strategic nuclear arsenals and counterforce strategies in order to deter an adversary. A secure second-strike capability aimed at an adversary’s cities was all that was needed to deter. The best argument for this position is Glaser, 1990.


29 Waltz, 1990, 739.

dynamics explores how the prospect of going from conventional to nuclear war affects state behavior. TNR’s theory of escalation is that the threat of nuclear catastrophe looms so large that it deters great powers from engaging in low-level conventional conflicts. Jervis writes that “the United States risks destruction in any war with the USSR, even if the United States is successful in immediate military terms.” The possibility of escalating to nuclear rungs on the escalation ladder serves as a disincentive for states to engage in conventional conflicts. In the nuclear age, the “ability to win a conventional war is not synonymous with the ability to keep the war conventional.” In a similar vein, Waltz argues that “everyone knows that anyone can quickly move to the top rung of the ladder.” The fear of rapid escalation to the nuclear level prevents great powers from initiating conventional conflicts. This strips away the utility of conventional military superiority among nuclear powers.

One could have an alternative theory of escalation in which superiority at conventional levels of escalation allow a state to better manipulate its adversary’s fear of nuclear war. Herman Kahn, in his seminal study of how states could go from pre-crisis bargaining all the way up to all-out nuclear war, provided such a theory of escalation. Kahn devised the metaphor of the “escalation ladder” in which each rung represented a more intense form of conflict than the previous one. Kahn’s ladder had 44 rungs, and over half of them included some form of nuclear use. Kahn also quoined the term “escalation dominance” to describe the ability to escalate to any level of conflict and win. While I disagree with Kahn’s argument that “escalation dominance” is

32 Jervis, 1989, 45.
33 Waltz, 1990, 740.
necessary for deterrence (a point on which I expand later), he did usefully employ the concept to show that states can use superiority in one area of the escalation ladder to prevent escalation to areas in which they are deficient. For example, a state could “make sufficiently credible threats of going higher” on the escalation ladder in order to prevent a challenge at the lower-level rungs.  

Kahn warned that the United States should not “rely on this tactic too heavily” due to the risk of nuclear escalation, and if one takes this risk, “one may be unlucky and lose the gamble.”

Instead of consistently threatening to cross the nuclear threshold, the United States should put it as high as possible, threatening and using lower-level conventional force in an attempt to win conflicts without risking nuclear conflict. Because the United States and its allies had greater aggregate economic and military strength than the Warsaw Pact, such a strategy would be to their advantage: “With only modest capabilities in being and adequate mobilization bases, we could in the long run deliver more tons of ammunition and other supplies to any spot on the earth than any possible enemy could do. If we made sufficient but reasonable preparations, we could possibly do so in the short run as well.” As evidence for this argument, Kahn pointed to President Kennedy’s use of naval power during the Cuban Missile Crisis: “The willingness to go to Rung 12 (large conventional war) may have sharply decreased the probability of a future escalation to much higher rungs.” Kahn thus supported a theory of escalation in which dominance at lower conventional levels could forestall nuclear escalation and be a source of strength to a nuclear-armed state.

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38 Kahn, 1965, 250.
These contending theories of escalation have implications for the benefits of conventional military superiority at the global level. Charles Glaser applies the theory of escalation inherent in TNR to the question of examining the benefit of unipolarity. As he points out, calculating the security benefits of unipolarity depends on assessing the value of conventional superiority in disputes between nuclear adversaries.\textsuperscript{39} Due to its favorable geography of two ocean borders and a strong nuclear arsenal, the United States can defend its territory without having conventional superiority. Conventional troops in or near the territory of major allies can play the role of “communicating the extent of the US commitment” to that ally, thus strengthening the credibility of nuclear deterrence.\textsuperscript{40} Moreover, these conventional forces need not be superior in order to signify American commitment to an ally’s defense. This leads Glaser to conclude that conventional military preponderance has little to no added value in securing a state’s interests in the nuclear age. Daniel Deudney makes a similar argument, saying “the nuclear shadow makes improbable the exercise of conventional military force to achieve potential outcomes.”\textsuperscript{41}

The benefits of conventional preponderance in the nuclear age hinges on whether Kahn’s theory of escalation or that of TNR’s is correct. Robert Powell’s recent work on brinkmanship and limited war argues that these theories of escalation are context-bound.\textsuperscript{42} Powell examines in what contexts conventional capabilities are likely to have an impact in crises among nuclear


\textsuperscript{40} Glaser, 2011, 140.

\textsuperscript{41} Deudney, 2011, 291.

states. Powell uses a brinkmanship model similar to Schelling’s, but he adds as a variable the trade-off between power and risk. In Powell’s model, the more power one brings to bear in a nuclear crisis, the greater risk of escalation to the nuclear level. The deterring state chooses how sharp this trade-off will be. If it is stark, then the challenger cannot bring more power to bear without running great risks of nuclear escalation. If it is light, then the challenger can bring a lot of power while not risking nuclear escalation. Important to Powell’s model is that while the deterring state can choose how sharply to make the trade-off, the ability for it to do so is shaped by outside factors. Variables exogenous to the model such as force posture and the interests at stake determine the range of potential risk that the deterring state can exploit.

To illustrate the concept of potential risk, Powell uses the metaphor of calm, rough, and heavy seas. In calm seas, there is little a deterring state can do to raise the risk of nuclear escalation, meaning that both states can “stand up” in the canoe and fight with little worry of capsizing. In rough seas, the deterring state can manipulate the risk of capsizing such that the challenging state cannot stand up but must “sit down” to fight. In heavy seas, the risk of capsizing is very high, and that is when confrontations come down to the balance of resolve rather than power. The utility of conventional military power is contingent on the degree of escalation inherent in the use of force. If it is low, then the risk of inadvertent nuclear escalation is low, and there is a lot of room for nuclear states to engage in conventional conflict. They can “stand up” in the canoe. Powell shows that Kahn’s approach and TNR’s approach to escalation both have merit, and the central question is in what context do each of the theories apply. The

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43 In Powell’s model, the challenger makes the first move and decides how much power to bring to bear. The amount of potential risk this first move generates is determined by contextual factors, which I get into below.

44 This metaphor is an extension of the “canoe” metaphor used by Schelling, 1966 in which two players in a canoe try to get the other to back down by rocking the boat.
fact that conventional capabilities could be useful in *some* nuclear disputes means that conventional superiority at the global level could also be beneficial.

Moreover, Powell’s analysis further points to the possibility that conventional military superiority provides a benefit by allowing a state to use its conventional capabilities across multiple contexts. In contexts where many major crises between nuclear states happen in “rough seas,” the ability to win at lower levels of conventional conflict may be more important than winning at the highest levels. However, current analyses of nuclear crises do not measure a conventional force’s ability to perform missions at different levels of conflict. For example, in his analysis of nuclear crises, Matthew Kroenig finds no benefit for having greater conventional capabilities.\(^\text{45}\) Using a dataset of crises involving nuclear-weapons states that includes only compellent threats, Todd Sechser and Matthew Fuhrmann find that conventional military power does not contribute to making successful coercive threats.\(^\text{46}\) The studies by Kroening and Sechser and Fuhrmann use CINC scores as measures of conventional capability, but this aggregate measure of economic potential and productivity obscures local variations in the balance of power that may be more important in a short-term crisis. Using a more fine-grained conception of conventional military power could lead to a different conclusion about the utility of conventional capabilities in a nuclear crisis. To explore this possibility, I turn to my theory of conventional options.

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A Theory of the Benefits of Conventional Superiority in Nuclear Crises

I start my theory by first noting that nuclear deterrence comes with a problem of credibility.47 The first use of nuclear weapons against a nuclear adversary risks heavy damage if not annihilation to the state. Aside from this, the use of nuclear weapons also carries with it the possibility of international condemnation and the erosion of a “tradition” of non-use that has served to keep relations among nuclear states stable for the past seven decades.48 The high costs of using nuclear weapons mean that it can be hard to justify the costs of nuclear use and thus make the threat to use nuclear weapons believable. The effectiveness of threats to use nuclear weapons is correlated with their credibility. In places where the problem of credibility is most acute, nuclear deterrence is least likely to be effective. Where credibility is easier to establish, nuclear deterrence is more effective.

I posit that the level of credibility of nuclear deterrence is shaped by the type of threat a state could use nuclear deterrence to thwart. To describe the range of threats states could face, I first assume that a state’s ultimate security goal is survival. Above all else, it wants to survive as an independent, sovereign entity. The core of realist IR theory assumes that states have an


“irreducible minimum” goal of survival.49 There are other goals that states aim for other than survival. States want to secure their economic well-being, the spread of their style of domestic government, and the survival of their allies, among other priorities. However, all other goals are subordinate to survival, and the achievement of those goals contribute to ensuring it. A state’s national security policy thus attempts to secure a state from threats to its survival. The national interest is the set of priorities that, if fulfilled, would achieve such security.

Survival as the ultimate goal is an as-if assumption used to highlight the nature of threats states face in the international system.50 All threats can be described in their relation to a state’s survival. Threats can either directly or indirectly impinge on survival. Those that directly affect survival are any threats that could destroy a state or a regime entirely. These include a nuclear attack by a large nuclear power or a conventional attack by a much more powerful adversary. It could also include the rise of an aggressive regional hegemon, which does not immediately threaten survival but could in the near future. The most prominent example of an indirect threat is the danger posed by the growth of Nazi Germany to the United States’ national security. In 1940-41, the fall of the United Kingdom or the Soviet Union to Nazi Germany would not have directly led to an invasion and conquest of the United States. However, such events would have created an unchecked hegemon in Europe that could have used its enormous power against the United States in the future. This fear of a currently indirect threat but future direct threat partially explains why the United States provided assistance to the UK and then was part of the reason it


later joined the war in Europe.\textsuperscript{51} Indirect threats are those that harm important foreign policy goals but do not immediately jeopardize a state’s survival. These threats could include the expansion of your adversary’s economic and political system, the de-legitimation of your style of governance around the world, or your main adversary acquiring a new weapons system. Direct and indirect threats to survival are not two strict types, but two ends of a continuum. I label threats in the half of the continuum that is closer to a direct relationship with survival “core” security threats, and threats in the other half closer to the most indirect relationship possible I label “peripheral.”

The illustration of the types of threats helps to identify where nuclear deterrence is most credible, and hence most effective. Against core threats that directly affect a state’s survival, threats to use nuclear weapons are quite believable. For peripheral threats that have only a tenuous relationship with survival, threats to use nuclear weapons are not credible and may be ineffective. This shapes the space in which conventional military capabilities are relevant. Nuclear deterrence achieves a security objective through the threat of punishment. Instead of defending a given interest by threatening to \textit{deny} the adversary the ability to achieve her objective, a state defends its interest by threatening to \textit{punish} the adversary with the use of nuclear weapons.\textsuperscript{52} If a threat to use nuclear weapons is sufficiently credible, then a state can achieve a security objective without the need for conventional forces. Nuclear deterrence can

\textsuperscript{51} This is a widely held view among many scholars, but for a dissenting view of the urgency of the threat a successful Nazi conquest of Britain would have posed and the necessity of entering the war in Europe, see Russett, Bruce. \textit{No Clear and Present Danger: A Skeptical View of the United States Entry into World War II}. Boulder, CO: Westview Press, 1997 (1972).

\textsuperscript{52} With this sentence I am not saying that deterrence by punishment can only be done by nuclear weapons or that deterrence by denial can only be done with conventional weapons. I am describing the common purposes for which these capabilities are often used. For more on the punishment versus denial distinction, see Snyder, Glenn. \textit{Deterrence by Denial and Punishment}. Princeton, NJ: Woodrow Wilson School of International and Public Affairs, Center of International Studies, Princeton University, 1959.
substitute for conventional defense.\textsuperscript{53} Over core threats, the risk of rapid escalation during a conventional conflict is high, making nuclear deterrence highly credible and conventional forces unnecessary. States are fighting in the “heavy” seas described by Powell. Against threats in the periphery, escalation can be more calculated, meaning nuclear deterrence may not be credible and states may need to use conventional forces to achieve their objectives. This is where states may be fighting in “calm” seas.

This insight is not new. The limits of nuclear deterrence and the subsequent need for conventional capabilities in “peripheral” or “limited” conflicts was the basis for the strategy of Flexible Response. What older works did not specify, however, was how conventional military forces would provide a security benefit in disputes with nuclear adversaries. Showing the mechanisms through which conventional military power affects dispute outcomes between nuclear powers helps identify exactly what the benefit of conventional military superiority is. It also shows the best way to measure the conventional balance between nuclear rivals. I will show the process of how conventional military superiority provides a security benefit by analyzing the dynamics of escalation from conventional to nuclear conflict. To do this, I will use the metaphor of the escalation ladder.\textsuperscript{54}

Figure 1.1 shows my version of the escalation ladder in the abstract. As one moves higher up the escalation ladder, the more intense conflict becomes. For the sake of simplicity, I focus

\textsuperscript{53} This was the main premise behind the doctrine of massive retaliation and Eisenhower’s “New Look” policy. The advocates of TNR used this argument to push back against forces calling for an increase in the defense budget in the 1980’s. On this, see Jervis, Robert. *The Illogic of American Nuclear Strategy*. Ithaca, NY: Cornell University Press, 1984.

\textsuperscript{54} This is notwithstanding the limitations of this metaphor. It does not capture the reality that it is often harder to deescalate a conflict than to escalate it. It also does not capture how some conflicts are apt to get out of control quickly. These problems have led some analysts to propose an “escalation vortex” as a more proper metaphor. Morgan, Forrest, et. al., 2008. Nevertheless, the escalation ladder metaphor is used here because it better illustrates the dynamics of my theory.
only on the conventional areas of the ladder, and the very top of it represents the nuclear threshold.\textsuperscript{55} Each rung on the escalation ladder represents a conventional military mission that a state can credibly communicate to its adversary that it can execute.\textsuperscript{56} An escalation ladder is unique to a particular state. Some states have several rungs on the escalation ladder and others have few. States can have a different number of conventional options for escalation. The number of conventional options is represented by the number of rungs a state possesses on the escalation ladder. The number of conventional options is relative to a particular adversary in a particular area, making it a local-level measure of the different capabilities a state has on-hand in a dispute. Having one escalation ladder represent a crisis participant rather than the crisis as a whole allows me to introduce the variable of the “number of conventional options.”\textsuperscript{57} The state that has “portfolio superiority,” or superiority across a range of weapons platforms and domains, in the dispute area will have more conventional options in the dispute. This means that the balance in conventional options can be estimated by measuring the local conventional military balance across several weapons platforms on land, in the air, and at sea. A state can bring forces from

\textsuperscript{55} An analysis of whether there can be any meaningful degrees of intensity of nuclear war – whether it can be kept limited – is beyond the scope of this paper. There may be several rungs beyond the nuclear threshold or few, and conventional conflict can continue once nuclear weapons have been used.

\textsuperscript{56} This terminology for describing conventional variety comes from Charles Glaser’s definition of “military capabilities.” This is a point which I will discuss a couple of paragraphs below. Glaser, Charles. \textit{Rational Theory of International Politics: The Logic of Competition and Cooperation}. Princeton, NJ: Princeton University Press, 2010. My notion of conventional options as being discrete military missions that states can credibly execute is drawn from Charles Glaser’s Rational Theory of International Politics. I share with Glaser a realization that assessing the ability to perform military missions against a particular adversary is separate from counting the total number of military forces that a state has built in the aggregate. In fact, Glaser puts his definition of military capabilities in opposition to traditional monadic definitions of the term. I concur with Glaser’s novel definition of military capabilities as relational, and I share the idea that the performance of military missions is the mechanism through which states bring their aggregate military power to bear.

\textsuperscript{57} This is in contrast to Kahn, who articulates one shared escalation ladder between the Soviet Union and the United States. My approach is more useful for the purposes of my theory, but Kahn’s approach could have more merit in another context where the number of feasible escalation options is not a variable of interest.
abroad into the local theater during a dispute. Below, I show how this affects the logic of the
theory and the research design.

These different military missions correspond to the different objectives for which a state
could fight and the different intensities of conflict at which they could fight over those
objectives. To achieve a certain policy goal, a country may find it useful to be able to fight a
limited air war where you establish a “no-fly zone” or a strategic air war where you need to
suppress enemy air defenses and destroy political targets. For other goals, a country may find it

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**Figure 1.1: The Ladders of Escalation**

<table>
<thead>
<tr>
<th>Ladder 1: Fewer Conventional Options</th>
<th>Ladder 2: More Conventional Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rungs</td>
<td>Rungs</td>
</tr>
<tr>
<td>Resolve</td>
<td>Resolve</td>
</tr>
<tr>
<td>Resolve-Capability Gap</td>
<td>Resolve-Capability Gap</td>
</tr>
</tbody>
</table>

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58 An example of the former is Operation Provide Comfort in Iraq to protect Kurdish refugees in the aftermath of the Gulf War, see Ricks, Thomas. “Operation Provide Comfort: A Forgotten Mission with Possible Lessons for Syria.” February 6, 2017. *Foreign Policy*. https://foreignpolicy.com/2017/02/06/operation-provide-comfort-a-forgotten-mission-with-possible-lessons-for-syria/. An example of the latter is Operation Allied Force and the ability of the use of air power alone to force concessions from Slobodan Milosevic. Lambeth, Benjamin. *NATO’s Air War for Kosovo: A Strategic and Operational Assessment*. Santa Monica, CA: RAND Corporation, 2001. However, the threat of a ground invasion was helpful in that operation, too.

59 Note: These two ladders represent individual states in a dispute with each other.
useful to fight a large ground war. In some conflicts, a state may need to open up fighting in a new domain or a new geographic area. Such “horizontal escalation” represents an increased cost of fighting and may increase the risk of nuclear use. The increased cost could come from greater destruction inflicted by forces in the new domain, more investment of resources by the state, or the psychological signal of crossing a certain geographic or domain-specific boundary that served as a “focal point” to limit conflict. Going into another domain therefore represents a step up on the escalation ladder in my theoretical framework. For example, if North Korea responded to US air strikes on its missile testing sites with a cyberattack against the American energy grid, this would constitute a step up the escalation ladder. This theory of escalation can therefore apply to questions of cross-domain deterrence that are gaining increasing attention.

I first show the abstract version of the escalation ladder to illustrate how possessing more conventional options for escalation in a dispute can confer a bargaining advantage in a nuclear dispute. States that can perform several military missions against an adversary in the area where a dispute is taking place have more rungs on their escalation ladder and less average distance between them. States that can perform fewer military missions against their adversary in a dispute have fewer rungs on their escalation ladder and greater average distance between them. In Figure 1.1, the ladder on the left represents a state with fewer conventional options, and the ladder on the right represents a state with more conventional options. Possessing more conventional options in a dispute confers a bargaining advantage because it allows a state to use force that is congruent with its level of resolve. In Figure 1.1, the red dotted line represents

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60 The Gulf War is an example of this, as I detail in a case study in Chapter 6.


“resolve” and brackets pointing out a state’s “resolve-capability gap.” I define “resolve” as the costs a state is willing to pay to win a particular conflict. The “point of resolve” is the point after which the benefits of winning the dispute outweigh the costs of fighting. In my framework, costs need not be material or immediate. It can include any domestic punishment for hawkishness, increased strain with allies, or greater risk of nuclear use. Resolve does not operate intersubjectively. The state does not need to know the adversary’s level of resolve to gauge what uses of force would lie below its own point of resolve and vice versa.

The “resolve-capability gap” is the space between the point of resolve and the first level of conventional conflict that lies below it. If an adversary escalates to a level of conventional conflict in this space, a state will have to choose between escalating to a point at which the dispute becomes too expensive or backing down. In the nuclear age, one potential disutility from “over-escalation” is the use of nuclear weapons and the destruction that entails. Thus, states caught in a resolve-capability gap have to choose between two disutilities and face heavy pressure to back down.

This is why states with more conventional options for escalation should be more successful in disputes with their nuclear adversaries. By success, I mean the ability to accomplish your primary objectives in a nuclear dispute. In each crisis, a state has primary and secondary goals. A primary goal is what the crisis actors themselves identify as the main issue they want resolved in their favor during the crisis. A secondary goal is any goal that is related to the main goal or that is brought up in the course of the dispute. A successful dispute outcome is any outcome in which the state achieves its primary goal(s). A defeat in a crisis constitutes failure to

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63 Representing resolve in this static manner is done for simplicity. As will be shown later, this theory can handle interdependent or dynamic resolve in which the level of resolve changes during a conflict. To read more on how resolve can change over the course of a conflict, see Kertzer, Joshua. “Resolve, Time, and Risk.” International Organization, Vol. 71 (Supplement 2017), pp. S109-S136.
achieve the primary goal. Achieving a secondary goal while not achieving a primary goal is akin to a “face-saving” failure. Compromising on secondary goals while achieving a primary one would be a “qualified success” as opposed a “total success” involving no compromise at all. Finally, a draw is an outcome in which both sides partially achieve their primary goal or the issues go unresolved. That the outcome of a crisis is not binary and that there are degrees of success and failure within the two ends of an outcome is recognized by the International Crisis Behavior dataset. This dataset codes states as achieving most, part, or none of its basic goals, or having the dispute go unresolved.⁶⁴

To see why a state with more conventional options is likely to be more successful in a nuclear dispute, imagine a scenario in which the two states with the escalation ladders represented in Figure 1.1 entered into a dispute. A state with a greater variety of conventional capabilities, represented by the right-hand ladder in Figure 1.1, has a smaller resolve-capability gap and thus faces less pressure to back down in a conflict. By contrast, a state with a low variety of conventional capabilities, represented by the ladder on the left-hand side of Figure 1.1, is more likely to find itself in a resolve-capability gap. There are more types of conventional conflict between its maximum level of escalation and its point of resolve. It will be more likely to need to choose between over-escalating and backing down. It will therefore be more likely to face pressure to back down in a crisis. In order to credibly commit to stay in a dispute with a nuclear adversary, a nuclear-armed state needs to make its capabilities congruent with its resolve. In disputes where the interest at stake may not justify nuclear use, this means having conventional options that can defeat the adversary’s forces in a limited conflict.

These conventional options can contribute to general nuclear deterrence over an objective. Against a state with several conventional options, the adversary knows that it cannot win in less intense forms of conventional conflict. The adversary therefore realizes that it in order to win the dispute, it cannot rely on a quick fait accompli or salami tactics. It will have to escalate to a point that may be past its resolve or to a level of conflict where nuclear use may be more credible. Thus, by forcing the adversary to consider higher rungs of escalation, conventional options lower on the escalation ladder bolster the credibility of nuclear threats. This happens because the need to escalate to higher areas of the escalation ladder make the adversary think that nuclear escalation is a more likely prospect than it would be if the use of force could stay at lower areas of the escalation ladder. I call this the “negative effect” of conventional escalation options. In some situations, successful conventional options for defense can substitute for nuclear deterrence; in others, they enhance it.

A larger number of conventional options also allows a state to exert pressure on its adversary during a crisis, contributing to immediate deterrence. When faced with a challenge from an adversary, the state with conventional options can choose to escalate to a given conventional level. Such a move may put the adversary into a resolve-capability gap, especially if the adversary has a lesser number of conventional options. In response to a provocation, greater conventional capabilities allow a state to put the onus for nuclear escalation back on the adversary. Putting the pressure to escalate on the adversary is exactly the strategy articulated by

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65 The fait accompli is a common way for territory to change hands in international politics, see Altman, Dan. “By Fait Accompli, Not Coercion: How States Wrest Territory from Their Adversaries.” International Studies Quarterly, Vol. 61 (2017): pp. 881-891. Previous work identifies one source of a fait accompli as an information problem where the challenger is unsure of the defender’s resolve or capabilities to resist the fait accompli and make it costly. See Tarar, Ahmer. “A Strategic Logic of the Military Fait Accompli.” International Studies Quarterly, Vol. 60 (2016): pp. 742-752. I am saying here that the ability to fight a low-intensity conventional conflict is important in resisting and therefore preventing a fait accompli.
Schelling’s brinkmanship theory, and my theory points out that this strategy is more effective with conventional capabilities that could plausibly defeat an adversary in limited conflict rather than merely signal commitment. I call this the “positive effect” of greater conventional options. Table 1.1 below summarizes the main logic of conventional options theory.

**Table 1.1: Overview of Conventional Options Theory**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Mechanisms</th>
<th>Dependent Variable</th>
<th>Mediating Effect</th>
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<tbody>
<tr>
<td>Conventional options – measured by the number of military missions a state’s military forces can credibly communicate that it could successfully execute in a crisis</td>
<td><strong>Negative Effect</strong> – greater conventional variety makes threats to fight more credible by closing state’s resolve-capability gap</td>
<td>Dispute outcome against nuclear adversaries – states with more conventional options are more likely to find success</td>
<td>Impact of conventional options are greater in disputes over peripheral interests</td>
</tr>
<tr>
<td></td>
<td><strong>Coercive Effect</strong> – allows a state to put adversary in a resolve-capability gap</td>
<td></td>
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</tr>
</tbody>
</table>

In the final cell of Table 1.1, I point out a logical consequence of conventional options theory: an advantage in conventional options should confer its greatest benefits on the periphery of the threat space. The threat space is defined as the set of potential disturbances that could impact interests more indirectly tied to a state’s survival. This correlates with geography, as interests in the near abroad tend to be more tied to survival than those far overseas, but this correlation is not perfect. The deterrent benefit of conventional options is the ability to not have

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66 Schelling thinks that conventional capabilities at lower levels of conflict bolster nuclear threats by forcing the adversary to consider higher escalation as well. However, he thinks that conventional capabilities can do this by acting simply as a “tripwire.” I argue that they need to do more than this.
to choose between over-escalation and backing down, and the coercive benefit lies in forcing the adversary to consider this. The costs of backing down over threats indirect to survival are not as high as conceding an issue more direct to survival. For peripheral threats, it is harder to justify running the risks of over-escalation to avoid the costs of backing down. By contrast, for threats to a core interest, or those closer to survival, the downsides of risking nuclear escalation may be less detrimental than the costs of backing down. It is therefore easier to make threats of rapid nuclear escalation more credible for threats closer to survival.

This is not a controversial point. It certainly applies to the distinction between symmetric and asymmetric escalation in nuclear deterrence. There is little doubt that a nuclear state would respond to the use of nuclear weapons by its adversary with nuclear retaliation. The problem of credibility of nuclear deterrence comes into play when an adversary makes a challenge at the conventional level over an issue a state declared that it would use nuclear weapons to defend. Herman Kahn contended that in conventional conflicts that one is losing, it may be better to take the loss now rather than use nuclear weapons in an attempt to win in the short-term. This is another way of saying that the dangers of backing down may not be worth the risks associated with escalation to nuclear conflict.

Among instances of asymmetric escalation, there is variation in the costs of backing down versus the costs of escalation. If an adversary challenges a core interest at the conventional level, then asymmetric escalation is much more credible. This is why conventionally superior

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67 In fact, any doubt comes from scenarios that include accidental, one-time use or “demonstration” strikes that are meant only to showcase the power of nuclear weapons. For more on these less likely scenarios, see Quester, George. *Nuclear First Strike: Consequences of a Broken Taboo*. Baltimore, MD: Johns Hopkins University Press, 2006.

68 Kahn, 129, 1965. Kahn used this argument in favor of making a “no first-use” declaration that would delegitimize nuclear weapons as tools of war and foreign policy. Nuclear restraint in the face of a loss would set the bar for the initiation of nuclear use very high, which is ultimately to the United States’ advantage.
states find it hard to threaten invasion against a weaker state armed with nuclear weapons. If India launched a large-scale conventional attack against Pakistan, it is almost certain that the latter would use nuclear weapons against Indian troops. But if a peripheral interest is challenged at the conventional level, nuclear use is not likely to be a credible response. This is why the use of nuclear weapons is not currently a factor in the US response to China’s provocations in the South China Sea. Any threat to use nuclear weapons first to defend a peripheral interest may not be believed, and the adversary is likely to challenge it. As I describe in more detail later, this is what arguably happened in the Second Taiwan Strait Crisis.

For threats to a state’s core interests, the costs of backing down are high, and thus the threat to run the risks of rapid nuclear escalation is more credible. The state does not need to solve the problem of credibility by possessing options for conventional escalation. For threats to peripheral interests, or those that are more indirect to survival, the problem of credibility looms larger. The state will need to bolster its defense by building conventional options for escalation. These options can help the state avoid the difficult choice between over-escalation and backing down and force the adversary to consider escalation to intolerably high levels. This leads to the second major hypothesis of the theory: the benefit of conventional options will be greatest for the achievement of peripheral interests.

The interaction between the stakes involved in the crisis and the utility of conventional options brings up an endogeneity problem with testing the effect of conventional superiority. As stated previously, states can deploy capabilities from elsewhere in the world to an area where a

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70 Heginbotham, et. al. 2015 argues that “neither side would look to use nuclear weapons at the start of hostilities,” and the US has so far not employed the threat of nuclear use should its freedom of navigation patrols be interfered with.
dispute is taking place to increase the number of conventional options available. However, this is costly to do, since it requires taking forces from an area in which the state wants to accomplish other interests. Therefore, states are more likely to deploy outside capabilities to the area of a dispute when they have higher resolve. The level of conventional options will therefore correlate positively with the level of resolve in a dispute. If high resolve states will also tend to have a high level of conventional variety, could it be possible that the balance of resolve is doing all the work in variety of capabilities theory? To illustrate the endogeneity problem, I make the causal graph below in Figure 1.2.

**Figure 1.2: Effect of Resolve within a Dispute**

![Causal Graph](image)

This graph shows that, to account for resolve, I can examine cases in which each side in the dispute has similar stakes involved. I cannot control for resolve itself since it is unobservable, but it is possible to label the stakes involved in a dispute for a state. Is it fighting over core or peripheral interests? States are likely to have lower resolve in disputes over peripheral interests than they do in disputes over core ones. There is a direct pathway from resolve to outcome and minimizing the difference in the importance of the stakes involved in a dispute should minimize the effect of this pathway. In addition, if states have similar stakes involved in a dispute, they should be willing to deploy a similar level of forces from outside the area of the dispute to the
local theater. Therefore, examining disputes in which each side has similar stakes involved is a way to address the endogeneity problem presented by the correlation of resolve and conventional options. The observed difference in capabilities deployed in these disputes should come from the difference in the deployability of their forces.\textsuperscript{71} An implication of this research strategy is that it makes the ability to transport forces from outside the local theater into a determinant of conventional options.

Figure 1.2 also highlights another way in which the variety of conventional capabilities influences dispute outcomes according to a state’s resolve. When a state has high levels of resolve, it is willing to deploy forces from other areas to win, but its ability to do so is shaped by its ability to project power abroad and the forces it has in the local area. If a state has high resolve, weak local forces, and little ability to augment those forces, it can have a hard time communicating its resolve and thus using high resolve as a bargaining advantage. In this scenario, conventional options act as the key \textit{mechanism} through which resolve leads to better dispute outcomes. Without access to that mechanism, states with high resolve may not be able to attain bargaining leverage, even against adversaries with lower resolve if those adversaries have superior conventional options.\textsuperscript{72} The implication of this is that among states with more at stake in a dispute, those with greater conventional options should see more success.

When states have low resolve, then they are not willing to deploy a lot of forces to the area, taking the deployability of their forces out of the equation. Their resolve is also unlikely to play a direct role in producing the outcome of the dispute. This means that the local balance of

\textsuperscript{71} The “deployability” of a force is a function of its airlift and sealift capabilities, and states can have varying qualities of these transport capabilities. For more, see Lesser, Ian. “The Mobility Triad: Airlift, Sealift, and Pre-Positioning in American Strategy.” \textit{The RUSI Journal}, 136, No. 1 (1986): pp. 31-35.

\textsuperscript{72} I argue, in Chapter 5, that this logic can be applied to US success in the Taiwan Strait Crisis in 1958.
military power and the options for conventional escalation these locally deployed capabilities generate operate as the main cause of the dispute outcome. Of course, it is necessary to examine cases where both sides have low resolve relative to other issues. In these cases, neither side is likely to have a lot of local capabilities deployed in the area of the dispute, which is likely to be of peripheral interest. However, in this area, the marginal superiority in conventional options for escalation could have quite a large effect on determining who wins the dispute. This is another reason for why I claim that the effect of conventional variety is more pronounced for issues on the periphery.

Given the different pathways through which conventional variety can affect a dispute outcome, am I setting up a situation where I can make every case a “just-so” story? No, because there are ways to test if the above casual graph is an accurate representation of how conventional variety affects dispute outcomes. When resolve is held constant, conventional variety should still have a positive effect on dispute outcome. States with little conventional options and high resolve should experience worse outcomes, on average, than states with lots of conventional options and high resolve. States should deploy more capabilities when they have more at stake in the crisis. When resolve is equal, states with more options should win crises because they are putting states with lesser variety into a resolve-capability gap. Finally, among the universe of states with more at stake in a crisis, those with more conventional options should be more successful in their disputes.

The Kargil War: A Concrete Application of Conventional Options Theory

To illustrate the ladder of escalation in action and how the effect of greater conventional options works, I apply my theory to the Kargil War. Figure 1.3 shows the ladder of escalation for India and Pakistan in the conflict. The first level of conflict was a limited ground incursion in
March and April of 1999 across the Line of Control (LoC) in Kashmir by Pakistan with Northern Light Infantry troops.\textsuperscript{73} These troops occupied posts in the Kargil-Dras sector overlooking a major highway, NH-1A. This constitutes the first rung on Pakistan’s ladder of escalation. The Indian military attempted to take back the posts through an assault with ground troops and supporting artillery.\textsuperscript{74} This proved ineffective, prompting Indian policymakers to decide to use the Indian Air Force for close air support of the ground troops.\textsuperscript{75} The Indian military also brought in additional artillery to support the assaults.\textsuperscript{76} This counteroffensive was conducted \textit{without} forces crossing the LoC, restricting the geographic scope of combat. This represents the first rung on India’s ladder of escalation. That the use of air power was recognized as a form of increasing the intensity of the conflict illustrates that going into a new domain represents a move up the escalation ladder.


\textsuperscript{74} Gill, 2009, 105.

\textsuperscript{75} Malik, V.P. \textit{Kargil: From Surprise to Victory}. HarperCollins India, 2006. Pp. 116-126, 244-245.

The next rung on India’s ladder of escalation shows that horizontal escalation into a new geographic area also constitutes an escalatory move. India could have chosen to conduct the same counteroffensive with air support and increased artillery but to extend the scope of combat across the LoC. India had sent reserve forces to Kashmir in the form of the 6 and 27 Mountain divisions in case the initial fighting did not go well, giving them the capability to cross the LoC. Early in the conflict Indian troops were informed that they should be prepared to cross the LoC if ordered to do so. General V.P. Malik, the head of the Indian Army during the Kargil War, affirms that “if the tactical situation had not gone well, India would have crossed the

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77 Gill, 2009, 105.

Extending the fight past the LoC constitutes the second rung on India’s ladder. The point of resolve lies somewhere above this level of conflict for both sides. Indian policymakers did not view crossing the LoC as a nuclear “red line” for Pakistan and only did not cross it in order to gain international favor for their position in the conflict. General Malik writes that there is some space for limited conventional fighting to occur between nuclear powers, and the actions of Indian leaders during the Kargil indicates that they believed combat beyond the LoC in Kashmir fell within this space.

Nevertheless, General Malik states that with nuclear weapons, “the probability of an all-out, high-intensity regular war will remain fairly low.” This means that the next rung on India’s escalation ladder, limited conventional attacks into Pakistan across the internationally recognized border, was above its point of resolve in the Kargil War. India deployed its armed forces “along the entire Indo-Pak front in a deterrent posture,” but Indian leaders saw that crossing the internationally recognized border would be too costly and carry too high a risk of a big war. Against this limited cross-border attack, Pakistan could have responded with an even larger counter-attack to rebuff the Indian incursion. This represents Pakistan’s second rung on its ladder of escalation. In response, India could have launched a major invasion of Pakistan, instigating a full-scale conventional war which held high risk of going nuclear. This is the final conventional


82 Malik, 2006, 365.

rung on India’s escalation ladder. Above this, the highest rung (not shown in Figure 1.3) would be nuclear war.

What this short application of the concept of the ladder of escalation to the Kargil War shows is that India was successful in the conflict because of its ability to win a limited counteroffensive. The ability to rebuff the intruders via a ground assault and close air support without crossing the LoC put Pakistan into a decision-making bind: either it backs down from the war or escalates to a wider conflict. The cost of going to the next rung on its escalation ladder encouraged it to seek a withdrawal. As John Gill writes:

“Their capture [Tololing Ridge and point 5203 in the Batalik sector] demonstrated that the Indian army’s combination of careful planning, determination, firepower, and tactical maneuver would slowly but surely overcome the defenders, barring significant reinforcement from north of the LoC…Moreover, the capture of Tololing and point 5203 set the context for the visit of American envoy General Anthony Zinni to Islamabad on June 25, doubtlessly increasing the pressure on the Pakistani government to find a way to arrange a withdrawal.”

Pakistan could have responded with an escalation of the conflict, but Pakistani Prime Minister Nawaz Sharif was afraid of the nuclear risks of such an action. He believed that the Kargil War “could have taken the shape of an open, full-scale war,” and by time he called President Bill Clinton on July 3 he was “desperate” and “ready to come immediately to Washington to seek [US] help.” The Indian military’s ability to conduct a limited counteroffensive to expel the NLI intruders put Pakistan’s leadership into a resolve-capability gap, and this led to Pakistan agreeing to withdraw back behind the LoC. The Kargil War illustrates how my theory of escalation can be

applied to particular case and how conventional options for escalation can provide a bargaining advantage.

Incentives for Force Posture: The Variety of Conventional Capabilities

My theory of escalation applies at the level of a dispute in a local geographic area, but it has ramifications for how states build their global force posture. States are uncertain about where the next crisis will arise, and they need to be prepared for it. Furthermore, conventional options are not only helpful in crises with nuclear adversaries. The normative costs of using nuclear weapons mean that nuclear states want to avoid nuclear use in crises with non-nuclear adversaries as well. In order to meet the variety of contingencies and threats facing them from both nuclear and non-nuclear rivals, states attempt to build a corresponding *variety of conventional capabilities.* A state with a high variety of conventional capabilities possesses a military force that: 1) has a diverse array of weapons platforms, 2) maintains qualitative and quantitative competitiveness in a wide range of weapons types, 3) can rapidly send troops into a dispute area, and 4) stations forces around the world. These four measuring sticks are diversity, strength, deployability, and dispersion, respectively.

How does a variegated force structure that scores well along these criteria help a country build a greater number of conventional options in a dispute? First, to be able to perform several missions, a country needs to have the ability to use several different weapons platforms at baseline. For instance, a state may want to win a battle for air superiority over a certain area, but it could not do that if it had no fighter aircraft. This is the easiest requirement for a state to fulfill, as all it requires is that a state devote resources to building multiple weapons platforms. Second, for a state to be able to credibly communicate that it could successfully a given missions, it needs

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87 This is similar to the logic in Ashby, W. Ross. *Design for a Brain.* New York: J. Wiley, 1954, in which variety in the regulator needs to match the variety in the external environment.
to have a certain level of strength relative to the adversary in the relevant platforms. For example, for a state to be able to make its adversary think that it could execute an armored offensive, it should have sufficient quantity of tanks, armored fighting vehicles, artillery tubes, and troops in order to make that happen. These units should also be well-trained with up-to-date technology. It is not necessary to have unquestioned qualitative and quantitative superiority in the relevant platform, merely that the state be willing and able to compete with its adversary in quality and quantity. In order to meet a variety of threats and perform the corresponding variety of missions, a state is pressured to be competitive across a range of weapon types, as any one of them could become relevant in any given contingency.

Third, a state with rapid deployability can send troops and equipment into a dispute area in a short amount of time. Such speed is crucial to keeping the conflict limited and then going on to win it. Indeed, capabilities for strategic mobility such as airlift and sealift became more important within US military strategy as the idea of being able to execute a limited conflict, or the “half-war,” gained prominence. Finally, forward-deployed forces can respond immediately to any conflict, providing resistance in the opening hours and days of a conflict. Plus, it is easier to build conventional options in an area where your forces are already operating and you have access to ports and bases. To capture the benefits of conventional military superiority in the nuclear age, states build a variety of conventional capabilities. To do that, they build a range of weapons platforms, attempt to be competitive in quantity and quality in many of these platforms, invest in strategic mobility assets, and station forces around the world.

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States that have competitive capabilities across more platforms are the ones that are the strongest militarily. To illustrate this concept of the variety of conventional capabilities, consider two worlds, one in which there are nuclear weapons and only one conventional weapon, rifles. The other world contains nuclear weapons and one hundred different conventional platforms. In each world, a state and its adversary spend an equal sum on defense. In the first world, the conventional balance is measured by which state can make the best rifles at the lowest price. In the second world, if one state put all of its investment into rifles while its adversary spread it equally across the one hundred platforms, it will be far superior in its sniper capability but be deficient in everything else, making it weaker overall despite the same level of defense expenditure.

This presents a paradox of conventional military power in the nuclear age. States compete across several domains, try to gain military superiority in several areas, and invest in power projection capabilities in order to gain a smaller benefit for conventional superiority than what existed in the pre-nuclear era. States engage in conventional competition to capture a bargaining advantage in disputes over peripheral interests. If that is the case, then why do states do this? Are they being irrational?

No, because these peripheral interests are still important. They are only peripheral in relation to the assurance of survival and territorial integrity. The defense of the global commons falls into the category of a peripheral interest, but many scholars would agree that it is important for the United States to maintain its command of the commons.89 Similarly, it would be important to achieve the US goal in the South China Sea of keeping it free and open to

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navigation, outside of Chinese dominance. This would also count as a peripheral interest. There are still important objectives that conventional superiority can achieve, which can explain why a state could value having conventional power preponderance in the nuclear age. It allows a state to put superior conventional options for escalation in almost any spot around the globe, giving it a bargaining advantage in a dispute with a nuclear-armed state in areas where that is potentially helpful. The United States enjoyed such an advantage immediately following the Cold War, and it has been eroding recently. As the 2018 National Defense Strategy put it: “For decades the United States has enjoyed uncontested or dominant superiority in every operating domain. We could generally deploy our forces when we wanted, assemble them where we wanted, and operate how we wanted. Today, every domain is contested—air, land, sea, space, and cyberspace.” A state would attempt to maintain that advantage if it was within its means, and therefore my theoretical framework can provide a rational explanation for why the United States strove to maintain conventional preponderance after the Cold War.

My theory can also explain the nature of the conventional arms buildup by China and Russia. It is not currently possible for either country to build the type of highly variegated and globally dispersed military force the United States possesses. However, they can build their conventional power to be competitive in certain geographic spaces and at lower levels of escalation. China’s A2/AD capabilities at sea can make it difficult for the United States to win a conflict within a few weeks, causing the US to fight a more intense and longer conflict than it may want to over issues such as Taiwan, the Senkaku Islands, or the Spratly Islands. Similarly,


91 In China’s case, it is not yet possible. As their economy grows and investment in defense continues it will be.

92 Heginbotham, et. al., 2015.
Russia’s capabilities for “hybrid warfare,” geographic advantages, and air defense capabilities could cause the United States and NATO to fight a long, costly conflict to defend their Baltic State allies or Ukraine.\(^\text{93}\) Such conventional armament constitutes “targeted balancing” aimed at putting the United States into a resolve-capability gap in a potential conflict over issues in China’s and Russia’s near abroad.\(^\text{94}\) Eventually and if it became within their means, I predict that these states will want to challenge the United States at all levels of the escalation ladder in several areas, which would entail building power projection capabilities to rival the United States. I therefore claim that conventional arms racing between the United States and regional challengers will continue even though the latter have nuclear weapons. This is in contradiction to the predictions of previous scholars about the dynamics of the United States’ conventional military preponderance.\(^\text{95}\)

**Conclusion**

This chapter laid out a theory of how conventional capabilities provide a security benefit in relations among nuclear powers. Conventional military options allow a state to use a level of military force congruent with its resolve in a dispute, preventing it from having to choose to back down or escalate past its level of resolve. The use of a conventional option may force an adversary with less conventional means to confront this decision, which incentivizes backing down. Because the costs of backing down are higher over core interests, the benefit of conventional options should apply more to disputes over peripheral issues that do not directly


\(^{95}\) Monteiro, 2014.
affect survival, territorial integrity, or the defense of strategically vital areas. Table 1.2 below summarizes the hypotheses of the theory that will be tested in subsequent chapters. H1 and H2 represent the hypotheses about the main effect of conventional options and its interaction with the stakes involved in a dispute. These are meant to be “hoop” tests that establish the plausibility of the theory.\textsuperscript{96} H3 and H4 can help show that conventional options have an effect on dispute outcomes independent of the role of resolve. H5 establishes that the causal process proposed by my theory operates in producing crisis outcomes in the real world.

Table 1.2: The Predictions of Conventional Options Theory

<table>
<thead>
<tr>
<th>Hypothesis 1 (H1)</th>
<th>An increase in conventional options will lead to better dispute outcomes</th>
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<tbody>
<tr>
<td>Hypothesis 2 (H2)</td>
<td>If a state is in a dispute over a peripheral interest, it will derive a greater benefit from its conventional options</td>
</tr>
<tr>
<td>Hypothesis 3 (H3)</td>
<td>If two states have similar stakes in the dispute, increasing the number of conventional options will increase the probability of a successful dispute outcome</td>
</tr>
<tr>
<td>Hypothesis 4 (H4)</td>
<td>Among states with more at stake in, increasing the number of conventional options will increase the probability of a successful dispute outcome</td>
</tr>
<tr>
<td>Hypothesis 5 (H5)</td>
<td>If a state with greater conventional options is successful in a dispute, it will due to the coercive effect of putting the adversary in a resolve-capability gap</td>
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</table>

Conventional options theory can address current questions about why the United States attempts to maintain conventional superiority over its major rivals. If one starts from the logic of escalation inherent in the argument of the nuclear revolution, then it follows that “under current conditions, unipolarity does little to enable the United States to increase its security.”\textsuperscript{97} What is the value of an attempt to gain conventional superiority when nuclear weapons already deter

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\textsuperscript{97} Glaser, 2011, 146.
major forms of conventional great power conflict? My argument is not that the nuclear revolution is wrong but that its theory of escalation overlooks instances where conventional capabilities could prove useful. In disputes over peripheral interests where the problem of credibility is most acute, it is beneficial to have conventional options for escalation below your level of resolve. Because it is difficult to know ex ante where the next dispute will arise and what types of military missions will be most relevant in it, this benefit of conventional options encourages states to build a variety of conventional capabilities. A state with a large, diversified, rapidly deployable, and dispersed force structure is able to bring to bear more conventional options for escalation in a dispute. States with conventional preponderance have the ability to put superior forces in almost any place in the world. This is the type of military force that the United States has sought to maintain in the post-Cold War era. Major challengers such as Russia and China try to develop conventional options of their own in particular geographic areas to thwart the United States. A refined theory of escalation can provide a rationale for the benefits of conventional power preponderance and current conventional arms racing in the nuclear age.

The major question is whether the United States should continue to aim for conventional power preponderance. Answering this question presents a tradeoff that gives talking points both to advocates of a grand strategy of restraint and advocates of a grand strategy of deep engagement. The security benefits of conventional power come in disputes over peripheral interests, and the growing military power of China and Russia will make it increasingly expensive for the United States to maintain conventional superiority in the areas where conventional power could be useful, such as Eastern Europe or the South China Sea. This points to a recommendation that the United States should drop its quest for conventional superiority and
spend less on its military. This would allow the United States to spend money to improve the
domestic economy, through both increased public and private investment.  

On the other hand, peripheral interests are still important; they are only peripheral in
relation to the objectives of survival and territorial integrity or goals directly related to them. The
defense of the command of the commons is a peripheral goal over which conventional
capabilities could be useful. The security benefits of a large and forward-deployed force could
therefore be substantial. Reducing the size of the US military and pulling back from the world
would come with a cost. Future research should attempt to gauge whether the costs of forgoing
bargaining advantages in peripheral disputes with China and Russia are greater than the costs of
defense spending required to gain those bargaining advantages. By identifying a security
benefit for conventional superiority in the nuclear age, my theory may not settle the grand
strategy debate but points toward a path that could address an important question at its heart.

My theory also has implications for various issues within the nuclear crisis bargaining
literature. One of these issues is the discussion around the stability-instability paradox. First
proposed by Glenn Snyder, it argues that mutually assured destruction creates stability at the

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nuclear level. However, because both sides know that nuclear war is a disaster, they know neither of them will escalate to it, and the reduced fear of escalation emboldens both sides to fight limited conventional wars.\(^\text{101}\) While not endorsing the idea, my theory highlights two under-explored aspects of the paradox. First, the “stability” half of the paradox need not be at the nuclear level. The mutual fear of a large-scale conventional war could increase a state’s confidence that it can engage in low-level conventional conflict. This could happen if a large conventional war lay above both sides’ point of resolve, as is often the case. Indeed, this can partly explain the Kargil War. Pakistan’s knowledge of the mutual fear of a conventional conflict was one reason it felt emboldened to act in Kashmir.\(^\text{102}\) Second, the theory highlights the conditionality of the paradox; it should be more operative in certain contexts. If neither state has many capabilities for fighting lower-level conventional wars, then nuclear stability will not increase conflict at all. This could also be true if both sides’ lower-level capabilities offset each other. If one state has superiority at the lower parts of the escalation ladder, then nuclear stability could embolden that state to initiate limited conflict. That is the condition under which I predict the stability-instability paradox would be most likely to operate.

Conventional options theory also adds to our understanding of brinkmanship tactics. One of Schelling’s tactics for making threats that leave something to chance is tying one’s hands. It is better to let the adversary know that you have no other option except for nuclear use should it initiate an armed challenge. Yet, my theory of conventional variety with its emphasis on the


benefits of options for escalation seems to fly in the face of that theory. In some sense it does. I argue that tying one’s hands is an unsound strategy since leaders do not like being in an all-or-nothing decision-making space and will seek to avoid being in one if they can. However, the point of tying one’s hands is to put the onus for escalation on the adversary. You make them choose to use nuclear weapons or not, since the decision is out of your hands. I hypothesize that having conventional options is a better tactic for forcing the adversary to choose between nuclear escalation and backing down. The utility of conventional variety therefore rests on producing the same end for which Schelling hypothesized tying one’s hands to be useful. In that sense, my theory builds on brinkmanship theory.

Finally, while my theory does say that there is a security benefit to “escalation dominance,” I do not maintain that it is necessary for deterrence. My theory says that escalation dominance could guarantee deterrence of an adversary in that the adversary could not hope to prevail at any level of conflict. From that perspective, escalation dominance is sufficient for deterrence. However, escalation dominance, with the exception of a very large state confronting a very small one, is an “ideal type.” The requirement of having superiority at every possible level of escalation is rarely met, and it is certainly not met in the context of major power competition between China and Russia. My theory that “more conventional options are useful” is not an argument for the necessity of escalation dominance, nor does it suggest that the United States should strive for it given its infeasibility. My theory also does not comment on the debate over whether the United States needs several “nuclear options.” In my theory, I assume

103 Though this is only the case in areas where the resolve of both sides is relatively equal.

that it is difficult to keep a nuclear war limited, but there may be instances where limited nuclear options provide a bargaining advantage. More research could identify whether the bargaining incentives I identify for building a large, variegated conventional force also encourage the construction of a large, diversified nuclear force.

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Chapter 2: Empirical Patterns in Nuclear Crises and the Balance in Conventional Options

What is the empirical relationship between the outcome of nuclear crises and the distribution of conventional options? The first look at this relationship that I present is an overview of all nuclear crises and how their outcomes were impacted by the balance in local conventional military power. My hypothesis is that states with superior military strength across the most categories of weapons platforms in a given area will have more options for conventional escalation in a crisis. A quantitative measure of local military power, while only a proxy for conventional options, should be able to test my theory. I take a statistical approach to examining the overall pattern between conventional military power and dispute outcome. I identify all disputes between states with nuclear weapons that either did escalate or could have escalated to major conflict. I code the outcomes of nuclear crises according to how successful a state was at achieving its primary and secondary goals. I pair these outcomes with my own construction of a measure for local conventional military power. My dataset also includes control variables about the actors in the crisis and characteristics of the crisis itself.

The regressions I conduct and the results I display are not intended to illustrate a definitive causal link. Rather, these quantitative analyses are meant to be an initial gauge at how well conventional options theory performs at describing reality. In broad terms, does the relationship between crisis outcomes and the local conventional balance conform to the predictions of my theory? What does this say about the utility of a variety of capabilities as a whole? If the data bear out the predictions, that would lend credence to the argument that the causal processes described in the case studies map onto a broader phenomenon. In my mixed
methods approach, this quantitative portion is intended as a preliminary and illustrative look that tests the plausibility of my theory.

I test two main hypotheses in my quantitative analysis. First, I predict that states that can bring to bear more military power at the local level will be more successful in nuclear disputes. States with local superiority should be able to make more credible threats of escalation, and their escalatory actions could coerce states with inferior capabilities into backing down. This is not an absolute prediction such that every state with superior capabilities wins a dispute, but across several crises, states with more conventional military power should have higher average outcomes. Second, I predict that the benefit of conventional options should be higher in disputes over peripheral interests. Over core issues, threats to use nuclear weapons should be more credible, and thus the need to have conventional options for escalation is attenuated.

The empirical patterns I identify lend support to both hypotheses. Across several different statistical models, better outcomes in disputes between nuclear states is associated with having a greater conventional military power at the local level. This is true even when controlling for variables such as regime type, distance of the state from the dispute, and the nuclear balance. There is also some evidence benefit of conventional military power is concentrated in disputes over peripheral interests, though these tests are underpowered. This gives support to the main logic of conventional options theory: conventional options for escalation bolster a state’s bargaining power in a nuclear dispute, and this benefit is larger in disputes over peripheral interests.

This chapter proceeds in four parts. First, I explain my methodology and the purpose of quantitative evidence in my dissertation. Second, I explain how I measure the variables in my dataset, with a focus on arguing that measuring local conventional military power is an effective
proxy for measuring conventional options. Third, I present the results of my regressions. Fourth, I discuss how these results relate to my initial predictions and lay out the questions left unanswered by the quantitative results and the role of the case studies in addressing those questions.

**Observational Data of Nuclear Crises**

Before describing the measurement of independent and dependent variables and the statistical models I will be using, I want to start by justifying the use of observational data paired with case studies. The dominant turn in social science methods is to use research designs that overcome the fundamental problem of causal inference. Any independent variable of interest can be thought of as a “treatment,” and subjects could be in a treatment or control group. The problem is that it is impossible to observe a subject’s potential outcome under both treatment and control. A researcher can overcome this problem through random assignment of the treatment, X, such that it is independent of the potential outcome, Y. There are ways to get around the fundamental problem of causal inference without random assignment. In principle, you can model the causal pathways that produce Y, and control for the variables that could confound the measurement of the effect of X on Y. This is the “back-door criterion” developed by Judea Pearl. Controlling for a “back-door” path satisfies the “conditional ignorability” assumption,

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108 Gerber and Green, 2012.

which states that bias can be accounted for if, conditional on a certain value of confounding variable, Z, assignment to treatment X is “as-if” random of the potential outcome.\textsuperscript{110}

Researchers attempt to exploit social processes that generate values of the independent variable that are “as-if” randomly assigned.\textsuperscript{111} One such process is a “natural experiment” in which political leaders implementing some policy decide to assign some value randomly. This could be conscription into military service,\textsuperscript{112} assignment to farmland,\textsuperscript{113} or election quotas for women.\textsuperscript{114} In some instances, there is a cutoff to determine who is eligible for a given “treatment,” such as social safety net assistance or political office. This gives rise to “discontinuities” in which values of Z may be independent of treatment, X.\textsuperscript{115} There could be some variable exogenous to the potential outcome that causes variation in X, and a researcher could isolate the variation in X explained by the “instrumental variable” to recover values of X independent of Y.\textsuperscript{116} Of course, an instrument is only valid if it has a significant effect on X and


it has no effect on Y other than through its effect on X.¹¹⁷ In sum, social scientists have devised a number of strategies for tackling the problem of causal inference.

The problem for IR scholars, especially those that study issues related to nuclear deterrence, the military balance, and grand strategy, is that most or all of these methods are infeasible. For my purposes, the variety of conventional capabilities is certainly not something that is randomly assigned, nor can it be. States invest in their military capabilities to develop a greater variety of conventional options that they can use in a crisis. Decision-makers do not randomly decide where to place more of their troops, and there is not “cutoff” point to determine which states would have more variety or not. The back-door path method is almost impossible to implement. Outcomes in international politics are produced via a complex interaction of myriad variables, and it is folly to assume that you know the exact relationship among all of them and that you can measure them all. Even variables that appear to be as-if randomly assigned by policymakers, such as land borders, are, at second glance, decidedly not.¹¹⁸

These limitations do not mean, however, that questions about the effects of nuclear weapons and the conventional military balance on international politics cannot be subjected to scientific inquiry. Despite the claims that causal inference is the only legitimate way to conduct science, there is no set definition or standard of what “science” is.¹¹⁹ Debates over the nature of


science continue within philosophy departments to this day.\textsuperscript{120} Plus, if IR scholars only studied issues that could be subjected to a causal inference design, that would prevent them from studying many of the most interesting questions in the field. IR scholars therefore must keep an open mind about what constitutes scientific study and take a question-drive rather than method-driven approach to their research.\textsuperscript{121} Interesting questions should then be subjected to the most rigorous research design that can feasibly be executed.

My research design seeks to leverage strong aspects of observational quantitative research and case studies in order to overcome their respective weaknesses. Observational studies can show broad patterns in data, but they are less adept at illustrating the causal process observations (CPO’s) underlying the relationship among variables.\textsuperscript{122} Case studies offer rich descriptions of a theory in action within what would be one “data point” in a quantitative data set, but one case study cannot determine whether the theory might apply to other cases.\textsuperscript{123} I will use a quantitative analysis of crises between nuclear states to provide an overview of how conventional options relate to crisis outcomes. I will use case studies to provide evidence that my theory plays a role in producing the relationship between conventional options and dispute outcome illustrated by the quantitative data. It can also offer fine details on how policymakers

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react to the conventional military balance in terms of the options for the use of conventional force.

My quantitative analysis will build on the International Crisis Behavior Dataset.124 This data and similar datasets on international disputes among states have been used by numerous scholars to test theories on the dynamics of nuclear deterrence.125 Huth, for example, uses a quantitative study to find that nuclear weapons enhance the value of extended deterrent threats as does the possession of superiority in the local balance of conventional military power.126 Beardsley and Asal use the ICB dataset to confirm the idea that nuclear weapons deter reckless escalatory behavior by showing that crises between nuclear states are less violent than ones between non-nuclear states.127 Kroenig uses the ICB dataset to address the question of whether “nuclear superiority” is a meaningful concept, and he finds that states with more nuclear weapons are more successful in interstate disputes.128 Sechser and Fuhrmann use their own dataset on military compellent threats to test the “nuclear blackmail” theory, and they illustrate that nuclear weapons do not enhance a state’s ability to make coercive threats.129 Narang shows that force posture matters in crisis bargaining, with a more ready posture of “asymmetric


128 Kroenig, 2013.

129 Sechser, 2013.
escalation” leading to more success. Bell and Miller test the stability-instability paradox, finding that asymmetric nuclear dyads – dyads in which one state has nuclear weapons and the other does not – experience more low-intensity disputes.

I point out these studies to emphasize that even with the problems of endogeneity and measurement, quantitative overviews of patterns in nuclear crisis outcomes have advanced our understanding of nuclear deterrence. However, one area that needs improvement is how the conventional balance interacts with the nuclear balance to enhance or diminish the credibility of nuclear deterrence. Huth includes a measure of the local balance of military power, but this is only a “bean count” of ground and air troops in a particular area. Kroenig and Sechser and Fuhrmann, while in vehement disagreement on many issues, both use CINC score as a measure of conventional military power. Yet there are good reasons to think that overall industrial production is not a good determinant of how much conventional power a state possesses in the area of a dispute at the time it occurs. I solve this issue by enriching the concept of the conventional balance of military power, including counts of weapons platforms in my measurement of the conventional balance, and accounting for any qualitative superiority of one state’s weapons over another’s identified by previous analysts. This measure allows me to

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explore what aspects of conventional military power matter most in a nuclear dispute. While still prone to measurement error and the fundamental problem of casual inference, my collection of data on conventional options constitutes the most rigorous test yet on how the conventional balance affects nuclear crisis outcomes.

**Methods and Measurement**

The quantitative analysis will measure conventional balance in the region where a dispute takes place and measure its impact on interstate dispute outcomes among nuclear states. I hypothesize that if my theory is true, there will be a positive relationship between the local conventional balance and dispute outcome. This can test the effect of conventional options because states with superior conventional military power in the area where a dispute takes place should have more options for conventional escalation. I use local military superiority as a proxy for conventional variety. Why do I take this approach to measuring the variety of conventional capabilities?

I start by adopting a framework for devising valid measures developed by Adcock and Collier.\(^\text{134}\) The framework provides a guide for taking a measure from a broad concept into scores for cases. For the variety of conventional capabilities, this means first describing the broad concept it captures and then operationalizing that concept into a formulation that can be used to assess individual cases. As stated in the theory chapter, the motivation for distinguishing between aggregate military capabilities and local forces-in-being comes from the simple observation that military forces are tasked with numerous missions, not just winning a large-scale conventional war. For instance, a recent RAND study comparing Chinese and US forces

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that could be deployed to a fight in the Western Pacific analyzed their relative strengths in ten
different categories of conflict. Analyses of Russian conventional forces in Eastern Europe
distinguish between their ability to conduct low- to medium-intensity operations in the opening
stages of a conflict and their ability to execute a high-intensity war of longer duration with the
United States. During the Cold War, defense analysts divided their estimates between US
ability to wage nuclear war against the Soviet Union, conventional war in Europe against the
Soviets, and so-called “brushfire wars” against third parties.

These analyses point to the fact that there are several facets of military power and types
of missions a force is asked to execute. The concept of conventional options is meant to measure
how many types of conventional conflict in which a state’s military force is proficient. Therefore,
the definition I adopt for conventional options is the number of missions a military force can
execute against a given adversary in a particular time and place. At the global level, the desire
to build conventional options for particular contingencies leads states to develop a variety of
conventional weapons platforms and train its forces for a wide range of missions. At the local
level of a dispute, the concept of greater conventional options is captured by who can do more
with their conventional forces in the area. This definition and its focus on missions combines
both horizontal and vertical aspects of escalation. The concept accounts for the ability to add
more tanks or troops to a low-intensity armored land war and the capacity to open up a conflict
for air superiority in a low-level land war.

135 Heginbotham, Eric, et. al. US-China Military Scorecard: Forces, Geography, and the Evolving Balance of

136 Shlapak and Johnson, 2016; Kofman, Michael, et. al. Lessons from Russia’s Operations in Crimea and Eastern

137 Enthoven, Alain and Smithy, K. Wayne. How Much Is Enough? Reshaping the Department of Defense, 1961-
How do I turn this definition into a measure? For my purposes, I want to evaluate which country in a dispute has more conventional options. The side that can execute more missions successfully relative to their adversary has a greater number of conventional options. This is difficult to measure in a precise manner. For example, an entire RAND book, The US-China Military Scorecard is devoted to measuring the relative advantage for the US and China across 10 different missions at 4 points in time. This 300-page study covers one dyad. Given that the scope of this study covers almost two dozen nuclear crises, I do not have enough space to conduct this type of analysis for every crisis. Instead, I develop a proxy measure for conventional options in the form of the local conventional balance across a portfolio of weapons platforms.

States that have more conventional capabilities in the area where a dispute takes place should be able to perform more military missions relative to their adversary in the dispute. For example, in the Kargil War, I calculate that India had twice as much conventional military power as Pakistan in the area close to Kashmir. This translated into an ability for the Indian military to perform more missions in the Kargil War than the Pakistani military could. The Indian military could conduct limited ground operations to retake military posts on their side of the Line of Control, and it could conduct close air support and air strikes in high altitudes against Pakistani targets. The positive relationship between local superiority and greater conventional options allows me to predict that states with greater local conventional military power should perform better in nuclear disputes. Measuring the effect of the local conventional balance on dispute outcomes should provide a test of conventional options theory.

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139 Gill, 2009.
I consider the local balance of military power to encompass the *region* in which a dispute takes place. For example, in the Berlin Crisis, I counted all forces available in continental Europe for the United States and the Soviet Union together with naval forces in the Mediterranean, Baltic, and Eastern Atlantic. For the Cuban Missile Crisis, I counted all forces in North America, the Caribbean, and the Western Atlantic. While this is a large area, it is local relative to the global balance of power. In any case, I use the terms local and regional interchangeably.

I will measure local conventional superiority in both discrete and continuous terms. I intend to determine which side has more variety and *how superior* they are in terms of local military power. The exercise of evaluating the relative proficiency of one side’s military forces against another’s is known as “net assessment.”\(^{140}\) A crude way to conduct this sort of comparison would be to take the number of troops and weapons on one side and compare them to the number of troops and weapons on the other. These “bean counts” can be misleading measures of a state’s military power. One reason why bean counts can be poor indicators is that “warfare is a dynamic process” in which communications, intelligence, reconnaissance, and willingness to take casualties play a role in determining the outcome.\(^{141}\) Another reason, and one that I am able to take into account in this study, is that bean counts make no correction for the quality of training that troops receive, the relative technological advancement of the weapons, or a military’s method of force employment.\(^{142}\)


For example, if you compared the total number of troops (including reserves) and tanks in the North Korean and American militaries, you would find that North Korea has 1.88 million troops and over 3500 main battle tanks against the United States’ 2.2 million troops and 2386 main battle tanks. Looking only at these static counts, you would conclude that North Korea has roughly similar land power to the United States, but that would be a preposterous conclusion. Its troops are not nearly as well trained as American troops, and most of its tanks were produced in the first half of the Cold War. This example illustrates the need to utilize a sophisticated framework for measuring a state’s relative military power.

Nevertheless, given the scope of my analysis to include all nuclear crises between 1961-2018, I do not have enough space to incorporate all of the “best practices” in net assessment. A detailed evaluation of the military balance at any one time requires measuring superiority across a range of military capabilities. It also requires specifying a model of how forces will be employed along the battlefield and the rate at which they will suffer attrition. To do this sort of analysis for each dispute in my dataset would be a monumental undertaking, one that is not feasible to do in the space constraints of one dissertation. Yet, it is possible to apply insights from defense analysts that have devised complex methods of measuring military power to a simpler measure of military power.

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144 They are the T-34, T-54, T-55 and T-62 models for the most part. All of these are Soviet tanks introduced in 1961 or before. The Military Balance, 2019.

145 Heginbotham, et. al., 2015 measure the military balance across ten different missions, and within each of these missions there are several balances in equipment and force employment that matter for determining who is superior. It is no wonder that their study takes up an entire book.

146 You could use the “Attrition-FEBA model,” the Lanchester method, the 3:1 rule, or a dynamic adaptive model. For more on each of these, see Epstein, 1988.
I measure the regional conventional military power a state has relative to its adversary by measuring the relative strength it has across six categories of conventional military strength: troops, main battle tanks, tactical aircraft, transport aircraft, principal surface combatants, and submarines. In five of these measures, I assess the capabilities a state possesses in the area where the dispute is taking place. For transport aircraft, I use an aggregate count as a way to inject deployability of forces into the variety measure. This is because a state can bring to bear military power from elsewhere to the area where a dispute is taking place within the timeframe of a crisis. This causes my measure of military power to be correlated with resolve, but below, I address this by examining disputes where the stakes involved for both states are similar. For each of these categories, I take the amount a state possesses and then express it as a ratio of the total number of persons or weapons that the two states have in that category combined. Any measure above 0.5 indicates superiority in the quantitative count for that category. Expressing superiority this way gives each category comparison a value between 0 and 1. This should mute the effect of a state being dominant in one category but deficient in everything else.

With the exception of troops, I introduce a qualitative superiority variable into the measure. If a particular weapons platform that is commonly used is much newer than an adversary’s most commonly used weapons platform in the same category, then I code “qualitative superiority” as a 1 due to a technological advantage. In addition, if one state has a capability that the other side does not have in that domain, I code qualitative superiority as a 1. For example, in the balance of surface combatants, if state A possessed an aircraft carrier but state B did not, I code this as qualitative superiority for state B. Otherwise, the value for both states is 0.5. While this puts subjective judgment into the measure of the regional balance, accounting for the relative quality of a weapon is necessary for devising a valid measure of
military power. Coding decisions on qualitative superiority are provided in the Appendix. All estimates for these categories come from *The Military Balance*, an annual publication by the International Institute for Strategic Studies that estimates the military power of every major country. In the earlier years of its publication, it has some missing data on deployment and counts of weapons. I supplement the estimates in these years with data from the CIA and Department of Defense, because all of them involved disputes between the Soviet Union and the United States.\(^\text{147}\)

To get the measure of local conventional military power, I then average the ratio across all six categories and the five technological superiority scores. This yields a measure for the share of local conventional military power between 0 and 1. States that have a measure above 0.5 have superior conventional power in the area where the crisis is occurring and those with less than 0.5 have inferior military power. This produces a discrete measure of who has more conventional options for escalation in a nuclear dispute. The gap between the two sides’ value for conventional superiority provides a continuous measure for conventional power. It estimates how much more local conventional power a superior side has in a dispute. This continuous operationalization of the local conventional balance is better than the discrete measure. In my theory, the number of gaps in a state’s ladder of escalation matters, and the more options you have over your adversary, the less gaps in the ladder of escalation you have and the more your adversary does. States with far more regional conventional power should have smaller gaps in their conventional escalation options than states with only modest superiority.

The universe of cases that I apply this measure to is any dispute between two nuclear-armed states from 1961 to 2018. I start in 1961 because that is the first year for which I have data from *The Military Balance*. I confine the analysis to disputes among nuclear states, or nuclear disputes, due to the scope conditions of my theory. This is because I only make explicit predictions about the value of conventional power in the shadow of nuclear deterrence. Nevertheless, I pointed out in my theory chapter that the dynamics of escalation and the utility of conventional variety could apply to asymmetric and non-nuclear dyads as well. My dataset includes 21 disputes between nuclear states. It is organized at the country level, yielding an N of 42. All the crises are listed below in the appendix in the Summary of Cases section. It includes information on the year, the actors, the military balance, the interests at stake, how the crisis unfolded, and the outcome.

The other main independent variable in my theory is the stakes involved in the crisis. I hypothesize that for a crisis on the periphery of a country’s threat space, nuclear threats will be less credible and therefore conventional military power will be more useful. This begs the question: what puts a particular area in a state’s “periphery” or “core?” I adapt Timothy Crawford’s definition of a core interest, which he defines as ensuring survival, territorial integrity, or the defense of “strategically vital areas” through which a threat to the first two objectives might arise.\(^{148}\) I use that requirement to define a dispute over a core interest as any dispute in which a country’s existence or territorial integrity is in jeopardy. I also include disputes where the control of a strategically vital area is at stake. For example, a dispute with the United States where control of Western Europe is at stake would constitute a core dispute, even though it is far from the US homeland. The definition of a “strategically vital area” is subjective,

but for each case, I considered whether a complete loss over the issue in dispute could lead to a threat to survival or territorial integrity. I then used this assessment to label a dispute as being related to a core interest or not. The rationale for these coding decisions is presented in my Crisis Summaries in the Appendix, and each case study has a detailed analysis of whether the issue at stake is core or peripheral.

To define territorial integrity, I distinguish between the “main” part of a state’s territory and its fringe territories. Of course, this distinction is a matter of judgment, but policymakers often treat certain territories as peripheral and others as more significant.¹⁴⁹ Not all threats to territory are equal. A threat to Hawaii, though severe, is qualitatively less dire than a threat to California or Washington, D.C. This is where the political process by which threats become core or peripheral enters into the quantified measure of the stakes involved in a dispute. There are geographic constraints to this process. However, in terms of choosing which home territories lie in the core, policymakers have discretion in labelling core and periphery.¹⁵⁰ This leads to some judgment on the part of researchers as to which pieces of land belonging to the state lie in the core and which in the periphery. I provide a summary of cases where I explain how I judged whether a certain threat to territory was a threat to a “peripheral” or “core” piece of territory.

I use these metrics to make a core-periphery distinction. Any dispute where the issue at stake involves a state’s survival, a major piece of a state’s territory, or the defense of a key geographic area outside its territory, I count as “core.” Disputes where the issue at stake does not fall in any of these categories is labeled as “periphery.” This is a restrictive definition of what


¹⁵⁰ Crucially, I do not think that deciding which territory is central to a state’s territorial integrity is not determined by policymakers due to the conventional forces available there.
counts as a core interest, but I think this is necessary to give meaning to the concept. Including too much in the measure of what counts a core interest would dilute the term and lump together disputes where survival is at stake with disputes where a small piece of territory is at stake. This restrictive definition is important to note because it means that, in the nuclear age, disputes over core interests should be less common than peripheral disputes. Adversaries have a good idea what issues are most important to a state, and they will be unlikely to challenge those interests if a state possesses nuclear weapons. A potential adversary will need high resolve to challenge a nuclear state’s core interest. I test this hypothesis in the summary statistics below.

The dependent variable in my theory is the outcome of a dispute between nuclear states. To measure dispute success, I use the same approach as the OUTCOM variable in the ICB dataset. I assess how well a state achieved its goals in the crisis. In this assessment, I distinguish between primary and secondary goals. A primary goal is what leaders in the state themselves declare to be the main issue in dispute or what historians analyze as the main objective during the crisis. There can be multiple primary goals. For example, during the Berlin Crisis, Khrushchev held as main issues during the crisis the removal of Western troops from West Berlin and the halting of the refugee flow from East to West Germany through Berlin. Secondary goals are any objectives that are brought up during the dispute or related to the main goal but still would not settle the main issue at hand. Secondary goals are therefore defined in relation to the primary goal. For example, during the Cuban Missile Crisis, the main issue at hand for the Soviet Union was keeping its missiles in Cuba. The presences of the Jupiter missiles in Turkey were a secondary matter. Or in the Berlin Crisis, the question of setting the boundary of East Germany at the Oder-Neisse Line was a secondary issue to the more important ones of whether the US would recognize East Germany and remove its troops from West Berlin. Finally, in any given
crisis there may be no secondary goals because the crisis actors did not link minor issues to the main items in dispute. I code primary and secondary goals for each actor in each crisis in my Crisis Summaries in the Appendix.

I judge the outcomes of each dispute based on the achievement of primary goals. If a state achieved most or all of its primary goals, then this is a successful dispute outcome, which I code as a 2 in my dataset. If it had to compromise on secondary goals to do this, that would be a “qualified success” but a 2 in my dataset, nonetheless. In my case study of the Cuban Missile Crisis, I use the example of the non-invasion pledge and the removal of the Jupiter missiles as an example of this type of outcome. The United States achieved its main objective of removing the Soviet missiles from Cuba while compromising on secondary issues. If a state failed to achieve its primary goals, then this coded as a failed dispute outcome, or a 0 in my dataset. If the state accomplished some secondary goals along the way, then it “saved face” but it still counts a 0 in my dataset. For example, in the Scarborough Shoal Incident in 2012, the United States was able to accomplish its secondary goal of keeping the South China Sea an open waterway. This salvaged a failure to achieve the primary goal of preventing China from extending its authority deeper into the South China Sea. I code this a dispute failure for the United States. Finally, if both sides failed to achieve their primary goals, partially achieved them, or left the issue unresolved, I code this as a draw, or a 1 in my dataset. For example, in India and Pakistan’s dispute over Kashmir in 1990, they both achieved their main goal of keeping the current Line of Control in place. However, they left the issue of Pakistani support for insurgents in Indian-controlled Kashmir unresolved.

I choose my control variables to focus on the most relevant and serious confounders to a correlation between conventional variety and dispute outcome. The most important control
variable is the balance of nuclear military power. Kroenig shows that states with superiority in the number of nuclear weapons are more successful in nuclear crises.\textsuperscript{151} States that are able to build and deploy variegated conventional forces are also likely to have more nuclear weapons than their adversaries. Thus, my results could be due entirely to correlation to the more important nuclear balance. Kroenig’s theory relies on policymakers differentiating between disastrous outcomes. The state with nuclear superiority thinks that a nuclear war would be catastrophic, but it would not suffer as much as its adversary and therefore gains a bargaining advantage. The empirical support for policymakers having this logic is tenuous, but other theories of how to measure nuclear military power could also confound my results. If second-strike capability is the ultimate level of nuclear power, then countries with second-strike capabilities are more likely to win crises than countries without it. Just like nuclear superiority, the countries that can build strong conventional forces are also more likely to have a second-strike nuclear capability. I therefore control for both nuclear superiority and second-strike capacity to test the robustness of the relationship between conventional variety and dispute outcome.

I also control for three other variables that are believed to be relevant to crisis outcomes. The audience cost literature has shown that more politically open regimes are better able to signal their resolve during a crisis.\textsuperscript{152} Making public threats in a democratic society is a way for policymakers to constrain their ability to back down for fear of facing costs for looking irresolute.\textsuperscript{153} Democracies could therefore gain better dispute outcomes than autocracies. In my


dataset, the United States appears frequently, and it often has greater conventional options than its adversary. If the United States achieves more favorable outcomes than its adversaries, it could be due to regime type mechanisms, and thus political openness confounds my finding. I therefore include the polity score from the Polity IV dataset as a measure for political openness in my analysis.

I include two further variables from the ICB dataset. One is the level of violence reached in the dispute. Unlike other control variables, the way this variable affects the outcome happens at the dispute level rather than the actor level. The successful outcomes for states with superior variety could be concentrated in the disputes where the most force was used. While this would not be detrimental to my theory, it would raise doubts that possessing capabilities along the entire escalation ladder carries a security benefit. It may point to the possibility that traditional aggregate measures of conventional power are adequate. As a result, I control for the level of violence reached in a dispute by including the Intensity of Violence (SEVVIO) variable from the ICB dataset. I also condition on distance from the dispute in models where I do not include the stakes variable. There are many reasons to believe that states care more about disputes that happen closer to their borders and thus gain better outcomes in those disputes. Many states are also likely to station most of their military strength within their borders. The distance of the dispute is probably correlated with conventional options, and the differences in dispute outcome could be due to that relationship. I therefore use the Distance of Crisis Actor from Location of Crisis (CRACTLOC) variable to control for distance from the dispute in my analysis.

I will estimate the effects of the variety of conventional capabilities, the stakes involved in a dispute, and the control variables on dispute outcome via a multinomial logistic regression. The fully specified model will be:
\[ Y_i = B1(Power_i) + B2(Stakes_i) + B3(Stakes_i \times Power_i) + B4(X_i) + e_i \]

X represents the vector of control variables that I may or may not include depending on the particular test. This type of regression model is appropriate for my three-tiered outcome variable of win, draw, or loss. Logistic regressions measure the change in the log-odds of an outcome due to the change in one unit of a variable. \(^{154}\) The log-odds is a difficult quantity to visualize. For this reason, I will not focus on the size of the coefficients and instead point to their direction and statistical significance. I will formulate my hypotheses in terms of effect direction rather than effect sizes to reflect this emphasis.

Another thing to consider when estimating the relationship between conventional options and dispute outcome is that results within dyads over time are correlated with each other due to unobserved factors. I address this issue by using a “within-dyads” estimator. To account for correlation in the error term for the dispute outcomes of a dyad, I use clustered robust standard errors at the dyad level.

**Hypotheses**

My main hypothesis is that nuclear states that possess more conventional options will be more successful in disputes with their nuclear adversaries. The reason is that the side with more conventional options is *more likely* to put its adversary into a resolve-capability gap in which the adversary faces heavy incentives to back down. To test this hypothesis, I will measure the regional balance of conventional military power as a proxy measure for conventional options. My first look will be whether an indicator of local conventional superiority correlates with nuclear dispute outcomes. To get the military superiority indicator, I use the index I compiled and label every state with a value below 0.5 as “inferior” and all those above 0.5 as “superior.”

\(^{154}\) Wooldridge 2013, 587-588.
This turns the ratio variable into an indicator of greater or lesser options available. While this is a proxy for conventional options, it corresponds to my theory’s prediction that having more rungs on your escalation ladder than your adversary confers greater bargaining power. This main hypothesis would be strengthened if I found that superiority in the local military balance is correlated with more successful outcomes in disputes on average. This hypothesis and the method of testing it is summarized below:

| H1: States with greater conventional options will have better outcomes in nuclear crises. |
| Test: Indicator variable of local conventional military superiority on nuclear crisis outcome. |

The indicator variable of superiority makes it easier to interpret the interaction effect with the stakes involved in a dispute. My hypothesis here is that the effect of superiority in the conventional variety balance will be higher in peripheral disputes than in core disputes. Conventional options should confer benefits in both spaces, but their effect on strengthening the credibility of threats to fight over a certain interest is larger when that interest is peripheral. I will measure the stakes variable as a strict indicator of peripheral or core. I will use core disputes as the baseline, so they will be coded as 0. Being in the periphery is the “treatment” in this case, and it is coded as a 1. This hypothesis will be true if the interaction effect is positive and significant. The hypothesis and test are summarized below:

| H2: The effect of superiority in conventional options will be larger in nuclear disputes over peripheral interests. |
| Test: Interaction between the balance in local conventional power and the stakes involved in a dispute. |
Results

Summary Statistics

Before delving into the main results, I will show the summary statistics for local conventional superiority and the stakes involved in a crisis. Which countries tend to have greater military power in the area where a dispute takes place? What are their characteristics? How many disputes are over core interests and how many involve peripheral ones? Table 2.1 answers the first two questions. It shows that a country’s average value for the regional conventional balance is influenced by its most common adversary. For example, India is at the top of the list because it only faces Pakistan, a rival over whom it has conventional superiority. Russia/Soviet Union has the second-highest average defense expenditure, but its average in the regional balance is below 0.5 because it consistently faces the United States in areas outside Europe. China has a large economy, but it only appears in the dataset three times, once against the Soviet Union and once against the United States in areas where both stationed a lot of military power.

Nevertheless, there are a couple patterns to discern here. First, states that spend more on their military forces overall tend to have more conventional power on-hand in the area of a dispute. This makes sense. It takes a lot of money to build power projection capability and deploy troops overseas. If a dispute takes place on the two disputants’ border, the regional balance will mirror the overall balance. Second, states with bigger economies tend to have more conventional power in the region where a dispute takes place. Again, this is because it takes a lot of resources to station troops overseas and build large military forces.
Table 2.1: Summary Stats of Local Military Power

<table>
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<th>Country</th>
<th>Power Average</th>
<th>Military Expenditure (thousands of US $)</th>
<th>GDP (billions of US $)</th>
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<td>12939000</td>
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<td>90749175</td>
<td>3069.543</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.3399006</td>
<td>3226500</td>
<td>467.250</td>
</tr>
<tr>
<td>China</td>
<td>0.3155704</td>
<td>51957307</td>
<td>6403.000</td>
</tr>
<tr>
<td>North Korea</td>
<td>0.2356328</td>
<td>824400</td>
<td>43.000</td>
</tr>
</tbody>
</table>

The next set of summary statistics break down the stakes involved in disputes. Figure 2.1 shows the number of core disputes and peripheral disputes. As expected for nuclear crises, disputes over peripheral interests are more common than disputes over core one. There are 29 times where a state was defending a peripheral interest in a dispute and 13 times when it was trying to achieve a core interest. These are odd numbers due to the breakdown of disputes with dissimilar and similar stakes involved. There are 5 disputes where both sides have core interests at stake, 13 disputes where both sides have peripheral interests at stake, and 3 where they have dissimilar stakes involved. This corresponds to 10 observations in the “double core,” 26 in the “double periphery,” and 6 in asymmetric disputes. In any case, the greater number of peripheral
disputes lends credence to the idea that states are reluctant to challenge the core objectives of a state with nuclear weapons.

**Figure 2.1: Distribution of State Interests in Nuclear Disputes**

![Graph showing distribution of state interests in nuclear disputes]

**Main Tests**

Do these hypotheses correctly predict the relationship between conventional options and dispute success? To answer this, I first conduct a simple regression of the local conventional balance on dispute outcomes. This regression favors the first hypothesis that superiority in conventional variety leads to better crisis outcomes among nuclear states. To illustrate this
finding, I plot the outcome of dispute success by conventional balance in Figure 2.2. Clearly, superior states gain better dispute outcomes on average, and this difference is statistically significant. The results of the regression, including effect size, standard error, and p-value are shown in the caption.

**Figure 2.2: Local Conventional Superiority and Dispute Outcomes**

![Nuclear Dispute Outcomes by Military Balance](image)

**DIM: 0.761905 (s.e. = 0.100420, p-value < 0.01)**

This result establishes some baseline plausibility for the first hypothesis. To do the same for the second hypothesis, I analyze how the indicator of regional conventional superiority interacts with the stakes involved. The results shown in Figure 2.3 indicate that in core disputes there is very little positive effect for having greater local conventional capabilities. However, in disputes over peripheral interests, there is a large positive effect for local conventional superiority. The difference-in-differences (DID) estimator is positive and statistically significant.

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155 This is the “pooled” estimate. In Table A1, I present the “within-dyad” estimator for the bivariate regression, hence the difference between the two estimates.
This gives support to the idea that states with less conventional capabilities can substitute conventional options with threats of nuclear escalation to achieve core objectives. Over peripheral disputes, the benefit of having more conventional capabilities in the region where a dispute takes place is quite large. This lends support to the idea that nuclear deterrence may not be effective in peripheral disputes and a state will need to rely on its ability to credibly communicate that it can win a limited conventional conflict.

These analyses show that local conventional military superiority has a positive relationship with nuclear dispute outcomes and that this positive relationship is conditional on the dispute occurring over a peripheral interest. This raises a question: does the overall positive effect of local superiority run through higher resolve for states with more capabilities? While the finding of the effects of the regional conventional balance being concentrated in peripheral disputes implies that this is not the case, it does not directly answer this question. To do so, I break down how states with lesser and greater local conventional power fared in disputes according to their level of resolve relative to the adversary.

As mentioned in the theory chapter, resolve is private information and therefore unobservable. However, it should correlate with the stakes involved in a dispute. A state that is fighting over a core interest is likely to have more resolve in that conflict than if it were defending a peripheral interest. I can therefore gauge whether the positive effect of local superiority is purely driven by the effect of superior resolve by examining disputes in which both states have similar stakes involved in the crisis. If a state was contesting a core interest but its adversary a peripheral one, I labeled this as a state having “more at stake” the crisis. For the those disputing a peripheral interest while its adversary was fighting over a core one, I labeled the state as having “less at stake.” If both sides were disputing a core or peripheral interest, I
labeled the states has having “equivalent stakes” in the crisis. The results of this analysis are shown in Figure 2.4.

**Figure 2.3: Core, Periphery, and the Effect of Local Superiority**

![Graph showing results by stakes involved.

**DID:** 0.91346 (s.e. = 0.33510, p-value = 0.0096447)
DIM for Similar Stakes Crisis: 0.77778 (s.e. = 0.18371, p = 0.0001649)

The first notable takeaway from this figure is that states tend to get into disputes where they think the stakes involved are close to even. This makes sense, as the importance of the objectives at stake in the crisis is a variable that should be factored in before a state initiates a dispute.\(^{156}\) Second, in those disputes where similar interests are at stake, states with greater local military power tend to obtain better dispute outcomes. This lends support to the hypothesis that

more conventional options for escalation in a crisis increases a state’s bargaining power and therefore leads to a better crisis outcome. Finally, the result that states with greater military power but peripheral interests at stake perform better than a draw should be taken with caution. There are only three disputes with an imbalance in interests, and that result is driven by US success in the Third Taiwan Strait Crisis in 1995-96 where the US had less resolve over Taiwan than China.

The results of better performance for states with greater local military power when the stakes involved in a dispute are held equal should be concentrated in disputes where both sides are disputing peripheral interests. Meanwhile, when both states are pursuing core objectives, conventional military power should not have an effect on dispute outcome. To test for this, I split up the disputes with similar stakes involved into the “double core” and “double periphery” and examine the effect of the local balance in each. The results are shown in Figure 2.5. When both sides are disputing a peripheral interest, local conventional superiority has a large, positive relationship with nuclear dispute outcomes. This effect does not happen when two nuclear states are disputing a core interest. For the 5 disputes in the “double core,” there is no difference in the average outcome for states with greater conventional options compared to states with fewer options.
Figure 2.5: Results in the Double Periphery vs. the Double Core

**DIM in Double Periphery:** 1.07692 (s.e. = 0.24451, p = 0.0001889)

For a further test of both hypotheses, I use regressions with the continuous measure for local conventional superiority. This takes the gap between the two values of regional conventional military power for each state in a dispute. The larger this gap, the more local conventional power the superior side possessed in the crisis. This is a better estimate of the regional balance than the indicator variable because it does not treat states with only a small degree of superiority the same as those with far more options for escalation than its adversary. Because it is a better estimate than the indicator variable, using the gap variable should also
reduce measurement error. Measurement error in the independent variable tends to bias the estimated effect of that variable towards zero, effectively lowering the power of my analysis.\textsuperscript{157} As such, if there is a relationship between conventional military power and dispute outcome, it should appear more robust when measured as the equipment ratio compared to the indicator. I only used the indicator variable to be able to make a simple illustration as a first cut analysis. I report results with the ratio gap measure in Table 2.2. The results show that, on average, the more superior a state is in the local conventional balance, the better dispute outcome it achieves. This provides further support for the first hypothesis that more conventional options lead to better crisis outcomes. The main result is similar when the indicator variable is used in the regression model, as I show in Appendix Table A1.

To test the second hypothesis, I examine the interaction effect between the gap in regional military power and the stakes involved in a dispute. The results are displayed under Model 2 in Table 2.2. I find a small negative, yet null, effect for the interaction between the stakes involved in a crisis and the balance in conventional capabilities. In further models with control variables, I find a small, positive effect for the interaction between the stakes in dispute and conventional military power. This may constitute evidence that dispute outcomes get better for states with local conventional superiority when disputing a peripheral interest. This effect is not statistically significant, however, limiting the inferences one can draw from it. The null finding could be due to the fact that I do not have enough power to pick up an interaction effect.

Interaction effects are difficult to detect, as the sample size needed to detect an interaction effect is four times that of the sample size needed to detect a main effect of the same magnitude.\textsuperscript{158}

**Table 2.2: Regression Results with Continuous Balance Variable**

<table>
<thead>
<tr>
<th>Determinants of Crisis Outcome</th>
<th>Nuclear Dispute Outcome</th>
</tr>
</thead>
</table>
| **Dependent variable:** & **Nuclear Dispute Outcome** &
| Local Balance & 1.494*** & 1.665*** & 0.651*** & 0.422 & 0.604*** & 0.373 &
| & (0.110) & (0.394) & (0.186) & (0.465) & (0.182) & (0.482) &
| Periphery & 0.119 & 0.139 & 0.113 &
| & (0.453) & (0.295) & (0.394) &
| Interaction & -0.229 & 0.267 & 0.275 &
| & (0.485) & (0.436) & (0.448) &
| Nuclear Ratio & 3.153*** & 3.235*** & 2.888*** & 2.986*** &
| & (0.278) & (0.351) & (0.416) & (0.508) &
| Violence & 0.021 & -0.608 &
| & (0.170) & (0.204) &
| Regime & 0.041*** & 0.039** &
| & (0.014) & (0.018) &
| 2ndstrike & 0.198 & 0.237 &
| & (0.361) & (0.505) &

21 disputes and 42 states are likely not enough observations to detect an interaction between local superiority and the stakes involved in a regression model. In Appendix Table A1, I use the indicator variable of local superiority in the regression models. I find that the interaction effect is significant at the 10 percent level when no controls are added, but when I include control variables, I find the same relationship as the gap in superiority measure. There is a small, positive interaction effect between peripheral disputes and the effect of conventional superiority.

but it is statistically insignificant, possibly due to a low $N$. Nonetheless, the coefficients for the main variables indicate that conventional superiority helps, and it may help even more for peripheral disputes.

I first examine the robustness of these findings to the inclusion of relevant control variables by adding the nuclear balance into the regression model. Model 3 shows the regression with the regional conventional balance and the quantitative nuclear balance as the only variables in the regression. The nuclear balance is measured as an indicator of which side has more nuclear weapons. That result provides further support to Hypothesis 1. Superiority in local conventional capabilities leads to better dispute outcomes even when controlling for the effect of the nuclear balance. This is evidence that conventional options confer their own benefit apart from that provided by a state’s nuclear arsenal. Model 4 adds the interaction effect. This result shows a positive but statistically insignificant main effect with a positive and also insignificant interaction effect. This lends weak support to Hypotheses 1 and 2. More local conventional military leads to better dispute outcome, and there is a small but statistically insignificant interaction effect with the stakes involved in the dispute. Again, this insignificance in the interaction effects models could be due to low statistical power.

I then include the three other relevant control variables that each could have a strong, independent effect on dispute outcome and be confounded with the balance of conventional variety. Model 5 shows these control variables without the interaction effect. It also supports the first hypothesis with the effect of local conventional superiority being positive and significant. Model 6 includes the interaction effect. This model provides weak support to Hypotheses 1 and 2. There is some positive effect for conventional superiority in core disputes, and the effect increases to some degree in peripheral disputes. However, this interaction is again not
statistically significant. I run these same models using the indicator measure of the conventional variety balance and post the results in Table A1 in the appendix, finding similar results.

*Other tests and robustness checks*

Conventional variety influences dispute outcomes, but are there any particular kinds of conventional military power that matter more than others? To answer this, I divide the measures of the conventional military power index by domain, providing a measure of the local balance in land components, air components, and naval components. I use the balance in troops and main battle tanks for the balance on land, the balance in tactical aircraft and transport aircraft for the balance in the air, and the balance in surface combatants and submarines for the balance at sea. I then run the same regression that I used to produce Table 1 with the local balance in each domain as the measure for the degree of superiority in conventional variety. For instance, in Table A2, the balance in power on land substitutes for the overall variety balance. The balance in the air is used in Table A3, and the naval balance is used in Table A4. The balance in land power is positively correlated when not including an interaction effect. However, the interaction effect is much stronger than in the overall local balance measure, so much so that the effect of land power in core disputes is slightly negative. The balance in air power provides similar results as the overall local balance. The balance in sea power is positive in the bivariate model and in Model 2 where the interaction effect as the only other variable. It has a weak effect in every other model. Overall, the results when only measuring one aspect of conventional military power are not as strong as the correlation between the overall local balance and dispute outcomes. This is good for the theory, as each component of conventional power, and hence, each domain where conventional options are available, seems to matter. However, its effect is magnified by a country being strong in other domains of warfare alongside it. The F-test for joint significance
indicates that they all jointly predict dispute outcome, providing further support for the hypothesis that all components of conventional military power work together to influence crisis behavior.

Another question is whether my results could be reproduced using standard measures of aggregate power. Perhaps I am showing the mechanism through which countries with more overall power get their way in nuclear disputes. This possibility is only strengthened by the fact that larger states tend to have more conventional options for escalation in any given dispute. To test this, I run the regressions used in Table 1 using GDP, GDP per capita, and superiority in CINC score as measures for conventional variety. The results are reported in the appendix in Tables A5-A7. In Tables A5 and A6, I show that GDP and GDP per capita have no relationship to dispute outcome, respectively. In Table A7, I use the superiority in CINC score to indicate who has more conventional military power. I refrain from using the “gap” variable in this analysis because CINC score is not a dyadic measure. It is referenced to the degree of material power relative to all other countries in the world. Using the indicator, I find that superiority in overall material power does not correlate positively with outcomes in the bivariate model. In the models with control variables and an interaction effect, a higher CINC score appears to have a negative effect in core disputes and positive one in peripheral disputes. This is a stronger interaction effect than the one found with the models featuring the local conventional balance as the independent variable of interest. Taken together, these results are more inconsistent and less robust than the one produced by the regional conventional balance. This indicates that the conventional options available in a dispute can be separated from aggregate material power and has a stronger correlation with dispute outcomes.
I test the robustness of my results with reference to three decisions I made in the main analysis. First, I test whether the results are robust to providing a smaller correction for technological superiority. Second, I examine whether the coding the outcome of the Berlin Crisis as the ICB codes the outcome significantly changes the results. Third, I use clustered standard errors at the country level to see if that significantly changes the results. If the results hold up to these tests, then that suggests the findings of my main analysis are not due to my specific decisions on how to handle the data.

The first robustness check changes the technological superiority coding from 1 for the side employing newer or qualitatively superior weapons platforms to 0.75. It changes the side with inferior or older weapons platforms from a coding of 0 to a coding of 0.25. I then recalculate the variety balance with these new technological superiority corrections. The results with this new measure of conventional military power are reported in Table A8. The relationship remains positive and statistically significant in models without the interaction effect. Models with the interaction effect point in the right direction, with little effect for local military power in core disputes and a greater effect in peripheral ones. This is similar to the results with the larger correction for technological superiority, suggesting that my results are robust to an alternative coding of the correction for qualitative superiority.

The second set of robustness checks is done by changing the outcome of the Berlin Crisis to a Soviet victory. This is how the crisis is coded in the ICB dataset, but I code this as an American victory in my dataset. I find that this re-coding makes the results even better for the first hypothesis. The relationship between conventional military power and dispute outcome is stronger. However, the interaction effect fails to show much substantive or statistical significance. These results are in Table A9.
The final set of robustness checks involves another way of specifying standard errors and fixed effects. In Table A10, I cluster standard errors at the country level rather than the dyad level. I also use a “within-country” estimator rather than a “within-dyads” estimator. The results show a weaker interaction effect and stronger main effect.

**Discussion**

The results of the quantitative analysis support the predictions of the first hypothesis. Having greater conventional military power in the region where a dispute is taking place is correlated with better dispute outcomes. This supports the idea that having more conventional options for escalation aids a state in a nuclear dispute. The analysis also showed that nuclear superiority and possessing a more open political regime could also affect outcomes in nuclear disputes. As noted earlier, these two variables may be correlated with the number of conventional options available to a state. In addition, there is a “selection problem” when it comes to measuring nuclear crises. The processes that produce the disputes we observe may be related to the balance in conventional power. Those two factors combined with the fundamental problem of causal inference mean that no causal claim can be made from the positive results of this analysis for the first hypothesis. Even if that were the case, you could not argue that superiority in the number of conventional options was the *sole* cause of better dispute outcomes in the data. Nevertheless, the overall empirical pattern sketched in the quantitative analysis suggests that having more conventional options bolsters a state’s bargaining power in a nuclear dispute.

The second hypothesis that the effect of conventional options is greater for disputes over peripheral issues is somewhat supported. There is an interaction effect between the stakes involved in the dispute and the effect size of conventional superiority. When only including
those variables, there is no effect for local conventional superiority in core disputes and a large
effect in peripheral disputes. This follows the logic of conventional options theory. In the
regression models with control variables, a weak positive interaction effect is found. This
weakness could be due to the sample size of 42 states being too small. The overall results lend
support to the idea that in disputes over peripheral interests, which represent the majority of
nuclear disputes, conventional options have a large effect on dispute outcome.

Looking beyond the testing of hypotheses, the empirical patterns found by the
quantitative analysis leave some questions unanswered. One unresolved issue is that there are no
causal process observations in the analysis. This is another source of doubt as to whether the
correlation between greater conventional options and better dispute success is due to a causal
relationship. In nuclear crises, do states with greater options force their adversaries into
disadvantageous bargaining positions because of the use of conventional force? And do their
adversaries back down because of this? I will seek to answer this question through my case
studies.

Another unanswered question is whether a state can have *enough* conventional options or
if it is always the case that more is better. We think of nuclear military strength in terms of
whether a state has enough of it to impose the danger of nuclear catastrophe upon its adversaries.
Anything beyond this capability is unnecessary or does not translate into tangible benefits.
Conventional military power could work in the same way. After a certain point, it may be the
case that the extra costs of adding another rung to the escalation ladder is not worth the benefits
that doing so would confer. This issue comes up in debates over military spending when defense
analysts and lawmakers ask whether a weapons program is “necessary.” It is thus worth
examining whether there is a level of conventional power after which further adding further options is not useful and it would be productive to speculate on where that level is.
Chapter 3: The Cuban Missile Crisis and Conventional Options Theory

On October 16, 1962, President John F. Kennedy learned of Soviet missile installations of medium-range and intermediate-range ballistic missiles (MRBM’s and IRBM’s) in Cuba. This kicked off the most intense 13 days of the Cold War. After close to a week of deliberation, President Kennedy announced in an address to the American public on October 22 that the US would blockade Cuba, preventing any further offensive weapons from reaching the island. He also demanded that Soviet Premier Nikita Khrushchev withdraw the missiles from Cuba.

Khrushchev was at first resolved to keep Soviet missiles on the island, but as fears of a war between the two sides grew, he decided to seek ways to end the crisis. He sent a “soft” letter to Kennedy on October 26 proposing that the United States pledge not to invade Cuba in exchange for the Soviets withdrawing their missiles. One day letter, Khrushchev sent a second, “hard” letter demanding a non-invasion pledge plus the removal of US nuclear missiles in Turkey in return for a Soviet withdrawal from Cuba. The Kennedy administration decided to publicly respond to the first letter while telling Soviet officials in private that the missiles in Turkey would be removed. The Soviets accepted this deal and the crisis ended on October 28, 1962.

The Cuban Missile Crisis is the first case in which I will test conventional options theory. To review, conventional options theory argues that states with more options for escalation at the conventional level are more likely to achieve success in nuclear crises. This is because the ability to carry out a conflict at a particular conventional level puts the onus for further escalation back on the adversary. The next level to which the adversary would have to raise the conflict may be too costly and/or run too high a risk of general nuclear war. Successful conventional escalation by a state puts pressure on an adversary to deescalate. Because the United States had conventional preponderance in the Caribbean during the Cuban Missile Crisis, it had multiple
conventional options. My theory would predict that these conventional options were the principal source of bargaining leverage for the United States. The Soviet Union backed down because it could not respond to US moves at the conventional level, making the maintenance of missiles in Cuba too costly for them.

However, conventional options theory also predicts that nuclear threats would be credible in this instance because Cuba lies close to the core of the American threat spectrum. In addition, Cuba was in the Soviets’ geographic periphery, perhaps giving the Soviet Union less resolve in the crisis. This gave the United States room to use conventional force in a major crisis but also opens up the possibility that US nuclear threats alone could have persuaded the Soviet Union to compromise in the absence of conventional escalation by the United States. As a result, the Cuban Missile Crisis should be regarded as an illustrative case. Because the US possessed many conventional options, it should grant the opportunity to analyze how conventional options for escalation can build leverage over an adversary. This case study on its own cannot, however, rule out a purely resolve-based theory of nuclear crisis outcomes.159

Summary of Argument

What role did the conventional balance of power play in the Cuban Missile Crisis? I argue that the United States’ local preponderance in conventional military power allowed it to

159 Examples of theories that are based on the manipulation of risk and resolve in nuclear crisis include: Robert Jervis, in articulating the Theory of the Nuclear Revolution (TNR) argues how capabilities matter less than the risk of nuclear escalation a state is willing to run, which is shaped by resolve. This argument builds on the one made by Thomas Schelling, who crafted the seminal theory of nuclear deterrence via brinkmanship. Kenneth Waltz goes even farther, arguing that conventional capabilities play no role in disputes between states with nuclear weapons. For all these arguments about the primary role of resolve and risk-taking, see Jervis, Robert. The Meaning of the Nuclear Revolution. Ithaca, NY: Cornell University Press, 1989; Schelling, Thomas. Arms and Influence. New Haven, CT: Yale University Press, 2008 (1966); and Waltz, Kenneth. “Nuclear Myths and Political Realities.” American Political Science Review, Vol. 84, No. 3, (Sep. 1990), pp. 730-745. These arguments can be contrasted with models of dispute success that emphasize an equal role for capabilities and resolve, such as the one in Huth, Paul and Russett, Bruce. “What Makes Deterrence Work? Cases from 1900 to 1980.” World Politics, 36, No. 4 (July 1984): pp. 496-526.
build coercive leverage over the Soviet Union during the Cuban Missile Crisis. The US did this by escalating, or threatening to escalate, to conventional options against which the USSR had no response except to use tactical nuclear weapons. The lack of a proportionate response to the US blockade or a potential US invasion of Cuba motivated Soviet Premier Nikita Khrushchev to back down. US President John Kennedy offered Khrushchev concessions on secondary issues – a non-invasion pledge towards Cuba and the removal of the Jupiter missiles from Turkey – that would allow Khrushchev to save face while doing so. The Cuban Missile Crisis shows the benefits of having a *multiple conventional options* for enhancing a state’s bargaining power in a nuclear crisis. Without options for conventional escalation, the Soviet Union faced a choice between withdrawing its missiles or accepting an invasion that would cause it to initiate the use of tactical nuclear weapons. The Soviet Union, not wanting to risk nuclear war over Cuba, chose the former. The United States, on the other hand, was able to draw on several conventional options, and this permitted it to escalate to a point at which the Soviets had to choose between nuclear use and surrender. The United States successfully coerced the Soviet Union through a strategy of conventional compellence during the crisis.

This case study, by itself, however, cannot establish the general validity of the benefits of conventional options. While there are several causal process observations that accord with the theory, the outcome of the Cuban Missile Crisis could also have been shaped by US resolve and nuclear threats. American policymakers intensified the alert posture of the country’s strategic nuclear forces during the crisis, and the United States had high resolve over Cuba, a country which had carried strategic significance for over a century. Cuba was on the Soviets’ geographic periphery. In his letters to President John F. Kennedy, Soviet Premier Nikita Khrushchev cited the mutual fear of nuclear escalation several times as a reason to seek compromise. Thus, in the
absence of a counterfactual Cuban crisis in which the US did not possess conventional preponderance, it is hard to know whether the United States could have had a successful coercion strategy through nuclear threats alone. This case study is illustrative of the use of conventional power, but it cannot be used to dismiss theories of nuclear crisis outcomes primarily based on the nuclear balance and resolve.

My interpretation of the Cuban Missile Crisis provides clarity to debates about the crisis in international security studies. In particular, it illuminates how debates on the relative merits of US nuclear threats persist. A recent debate in IR scholarship centers around the role of American nuclear superiority in shaping either a win or a draw for the United States in the Cuban Missile Crisis. On one side, Matthew Kroenig argues that the US was victorious in the crisis, and this was due to its strategic nuclear superiority. Todd Sechser and Matthew Fuhrmann disagree on both fronts, arguing that the US and the Soviet Union came to an even compromise and that the Soviet Union was not cowed by US nuclear superiority. This debate mirrors the one among policymakers during the crisis over the meaning of US nuclear superiority. Missing from this debate on nuclear superiority is attention on the role that the much larger US superiority in conventional military capabilities in the Caribbean played in the crisis. Marc Trachtenberg

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explicitly compares the role of conventional and nuclear weapons in the crisis, and he concludes that Soviets were more afraid of strategic inferiority than conventional inferiority. However, Aleksandr Fursenko and Timothy Naftali, two historians with access to Soviet archives, highlight the pressures the fear of an American invasion of Cuba put on Khrushchev. These pressures ultimately caused him to deescalate, and the decision to retreat from Cuba was a major setback to Khrushchev’s foreign policy. The most recent sources released and scholarship on the crisis points to how the lack of conventional military options put the Soviets in a disadvantageous bargaining position in the crisis.

The chapter will proceed in five parts. First, I will outline the nuclear and conventional military balance between the Soviet Union and the United States, with special attention paid to the local balance in the Caribbean and North Atlantic. Second, I will describe the context and background of the crisis and use it to explain the objectives each side pursued during the crisis. Thirdly, I will describe the outcome of the crisis and argue why it is a victory for the United States. The fourth part will trace the development of the Cuban Missile Crisis, showing how the military balance shaped the actions of decision-makers. This part will also assess the relative importance of the conventional and nuclear balance in motivating these actions. Fifth, I will conclude the case study by reflecting on its ramifications for conventional options theory.

**Structural Bipolarity, Regional Unipolarity: The Military Balance**

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What was the military balance in October 1962 on the eve of the Cuban Missile Crisis?

At the global level, the balance was bipolar, with both countries possessing extensive conventional capabilities and nuclear arsenals that could destroy the other side. In the Caribbean and Western Atlantic, however, the United States maintained unquestioned conventional preponderance. American conventional power made it difficult for the Soviet Union to project military power into the Atlantic Ocean. The mismatch between the global and regional balances of power in the Cuban Missile Crisis makes the case an opportunity to analyze the importance of local forces and power projection capabilities to the possession of conventional options during a crisis.

*The Nuclear Balance*

In the period from 1958 to 1961, the United States maintained a far larger and more diversified nuclear arsenal than the Soviet Union. While US policymakers felt that this gave them nuclear superiority, they did not think that this gave them a first-strike advantage capable of escaping unacceptable damage in a nuclear war. The result of the nuclear balance in this time frame is that neither side wanted a general war, even though the Soviet Union would likely experience greater destruction than the United States should one occur.

The Soviet Union made strides in improving its nuclear arsenal from 1958 to 1961, but it remained limited in its long-range strike capability. The Soviet Union deployed its first-generation ICBM, the R-7, in July 1959.\(^\text{166}\) This worried US intelligence analysts, whose analyses *projected* the Soviet Union to have 500 operational ICBM’s by 1962.\(^\text{167}\) This sparked


fear that the United States would not keep pace and thus suffer from a missile gap with the Soviet Union. However, the Soviet Union deemphasized production of its first-generation ICBM, and by 1961 the Soviet Union only had 50 operational ICBM’s.\textsuperscript{168} In addition, General Maxwell Taylor, first a senior military aide and then Chairman of the Joint Chiefs of Staff under President John Kennedy, explained in a military briefing to West German leaders that the Soviet ICBM’s in 1961 were deployed on “soft and easily destroyed launching complexes with cumbersome liquid-fueled missiles, and an inadequate defense against bomber attack.”\textsuperscript{169} The Soviets lacked long-range bomber capacity as well. They possessed around 150 long-range heavy bombers in both 1958 and 1961 of the jet \textit{Bison} and turboprop \textit{Bear} class.\textsuperscript{170} The downside of these bombers was that many of them were vulnerable to being shot down by American air defenses should the United States receive sufficient advance warning of a Soviet nuclear strike.\textsuperscript{171} During the crisis, the Soviet Union had a limited long-range strike capability that was vulnerable to an American first strike or air defenses.

Some analysts look at the vulnerability of the Soviet arsenal during 1958-1961 and claim that it lacked a second-strike capability during this time. This assessment rests on undue optimism about the outcome of a US first strike during a crisis, however.\textsuperscript{172} There was little


\textsuperscript{170} NIE 11-4-58; NIE 11-4-61; \textit{The Military Balance, 1961}.


guarantee that the United States would knock out a sufficient number of Soviet targets in a first strike to keep damage to the homeland below 10 million casualties. Plus, the Soviet Union could supplement its long-range arsenal with attacks from its medium-range and short-range platforms. For instance, the Soviet Union had around 1,000 medium bombers of the Badger class with a range of 3500 miles. These medium bombers constituted the bulk of Soviet nuclear forces during the Berlin Crises.\textsuperscript{173} If the Soviets stationed these bombers in the Arctic and sent their pilots on one-way missions, then the medium bomber force could also strike targets in the United States.\textsuperscript{174} Such use was considered unlikely – not least because the crews of medium bombers were not trained for Arctic operations – but possible.\textsuperscript{175} In addition, the Soviet Union placed short-range ballistic missiles on submarines in the Atlantic. The US military knew that the Soviets had around 30 of these submarines armed with a total of around 100 missiles in the range of 150-350 nautical miles.\textsuperscript{176} It is not clear if American ASW capability was good enough in the early 1960’s to locate and destroy every Soviet submarine in the Atlantic before they could fire their nuclear weapons. While not as large as the American arsenal, US military and civilian leaders alike believed that the Soviet Union possessed enough nuclear weapons on a sufficient number of platforms such that “some portion of the Soviet forces would survive to strike back.”\textsuperscript{177} Plus, even if a retrospective look could prove beyond a reasonable doubt that the Soviet Union lacked the ability to inflict unacceptable damage to the United States, American

\textsuperscript{173} NIE 11-4-61 counts around 1000 and argues that medium bombers will be deemphasized as the Soviets develop their long-range bomber and ICBM forces. This figure is corroborated in \textit{The Military Balance, 1961}.

\textsuperscript{174} NIE 11-4-58.

\textsuperscript{175} NIE 11-4-61.

\textsuperscript{176} NIE, 11-4-61.

\textsuperscript{177} “Briefing on the Military Balance.” November 20, 1961.
policymakers at the time believed that they were vulnerable to Soviet retaliation.\textsuperscript{178} Thus, the Soviets’ ability to use one-way missions for their medium-range bombers and short-range missiles fired from submarines in the Atlantic in addition to their limited intercontinental capability gave them the capacity to inflict grave damage on the United States.

Whatever damage the United States experienced, it was clear that the Soviet nuclear hammer stroke would fall hardest on Western Europe. A National Intelligence Estimate estimated that the Soviet Union had several different types of medium-range ballistic missiles (MRBM’s) that could fly between 700 and 1100 nautical miles (about 800-1250 miles).\textsuperscript{179} Western military analysts between 1958 and 1961 counted around 200 MRBM’s stationed near the USSR’s western border, putting much of Western Europe at risk of a nuclear strike.\textsuperscript{180} The medium bomber force could also strike targets in Western Europe. US military strategists assessed that in a nuclear war, Western Europe would experience a level of catastrophe “perhaps so great as to threaten the fabrics of the nations.”\textsuperscript{181} Given the potential level of destruction the Soviets could cause, US policymakers could not have been optimistic about the outcome of a nuclear first strike.

Both American and Soviet policymakers were certain that the United States would inflict a catastrophic level of damage on the Soviet Union. In long-range bomber capability, the United

\textsuperscript{178} Betts, 1987, 161-172.
\textsuperscript{180} NIE 11-4-58 said that there were probably “several hundred” ballistic missiles that could travel 700 n.m. and a few that could go 1100 n.m., though with more of those in development. The Military Balance, 1961 gives the 200 figure as being “quoted in the West.”
States had a huge advantage with 1000 B-47’s and close to 600 B-52’s that could hit targets in the Soviet Union (the former with in-flight refueling). By late 1961, the United States also had missile superiority, with 54 Atlas and 9 Titan intercontinental missiles that could strike the Soviet Union. The US also had 96 intermediate range ballistic missiles (IRBM’s) placed on Polaris submarines that could be deployed within range of the Soviet Union. This level of nuclear superiority is what led Deputy Secretary of Defense Roswell Gilpatrick to proclaim that “we [the United States] have a second strike capability which is at least as extensive as what the Soviets can deliver by striking first.” The United States had nuclear superiority, but this superiority was not enough to make them invulnerable to Soviet retaliation.

Global Conventional Balance

The global conventional balance was one of rough parity with the Soviet Union and its allies possessing an advantage in Europe. The Soviet Union had a total of 3 million troops under arms; the United States had over 2.8 million. The US deployed 229,000 troops to Western Europe and the Soviets deployed over 231,000 troops to Eastern Europe. The Soviets also had over 500,000 troops in the European portion of their country at this point. Those troop

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185 This assessment of how the two superpowers reacted to the nuclear balance in the late 1950’s and early 1960’s is similar to Trachtenberg’s argument about nuclear superiority not affecting American policymakers’ behavior in the Cuban Missile Crisis. However, his other hypothesis is that nuclear inferiority caused the Soviets to be more cautious, something that I address in my previous chapter on the Cuban Missile Crisis. Trachtenberg, 1985.

186 NIE 11-4-61. US estimate from The Military Balance, 1962. The latter cites 3.6 million as the number of Soviet troops, but this likely counts “official” strength according to the government rather than actual estimated strength of Soviet divisions.

numbers represent only the forces in ground combat units. The Soviets’ Warsaw Pact allies have a total of 865,000 ground forces, with 460,000 coming from East Germany, Poland, and Czechoslovakia, the closest countries to West Germany. There were over a million ground forces among US NATO allies in Europe, with over 300,000 deployed in Germany. In terms of overall manpower, the United States and the Soviet Union were roughly equal, and this assessment changes to a slight Soviet advantage when including allies and looking only at the European theater.

The Soviet Union and its allies possessed a greater quantity of military equipment than the United States and its allies. For instance, the Soviet Union had over 28,000 tanks in 1962 compared to around 7,000 for the United States. In Europe, this discrepancy is more muted, with the Soviets deploying 5,500 tanks and the Americans 2,500. The Soviet Union had around 11,750 combat aircraft, and the United States had over 3,500. The balance in Europe is slightly better, with 1475 tactical aircraft for the Soviets and 960 for the Americans. In terms

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188 NIE 11-4-61.


190 Soviet estimate comes from an estimate of the average number of tanks in a tank division (345) and a mechanized rifle division (219) cited in The Military Balance, 1962. I then calculated an estimated number of tanks by multiplying each number by the number of tank divisions and mechanized rifle divisions respectively. The number of each of those divisions comes NIE 11-4-61. The US estimate comes the figure of 2500 main battle tanks among the 5 US Army divisions in Europe. There are 14 Army divisions total, so 2500 for 5 divisions extrapolates out to 7000. These are both rough estimates. They are not meant to show any determination of a conflict, just to illustrate the rough balance in tank strength at the time.


192 Soviet estimate from NIE 11-4-61; American estimate from “Appraisal.” May 12, 1961.

193 Ibid.
of transport aircraft, the US had over 700 aircraft and the USSR over 1700.\textsuperscript{194} The Soviet Union also possessed more submarines, 359 to 114.\textsuperscript{195} The United States, however, did possess a much larger surface fleet, with 817 surface combatants to 193 for the Soviet Union.\textsuperscript{196}

What the United States and its allies lacked in quantity of weapons they made up for in quality. With the exception of battle tanks, the US and its allies tended to have higher quality weapons with better technology. Tanks were the main focus of the Soviet land forces, and its T54/55 tank was on par with the M48 tank deployed among US forces in Europe at the time.\textsuperscript{197} The most common planes in the US tactical air fleet (F-100 Sabre, F-104 Starfighter, and F-105 Thunderchief) were faster, had greater range, and had a higher payload than the most common planes in the Soviet tactical air fleet (MiG-17, -19, and -21).\textsuperscript{198} Most of the Soviet Union’s transport aircraft were “light” cargo aircraft (Il-12 and Il-14) and the United States’ aircraft were mostly of the “medium” (C-118) or “heavy” (C-124) variety.\textsuperscript{199} The Soviet Union’s submarine fleet featured a lower percentage of long-range subs than did the United States, and it had less nuclear-powered subs than the US at the time (7 vs. 16).\textsuperscript{200} Overall, the Soviet Union and its allies possessed more troops and equipment, most importantly in Europe, than did the United States and its allies. The latter side compensated for their quantitative deficiency by producing

\textsuperscript{194} NIE 11-4-61 for Soviet estimate and The Military Balance, 1962 for American estimate.

\textsuperscript{195} NIE 11-4-61 and The Military Balance, 1962.

\textsuperscript{196} “Appraisal.” May 12, 1961 for the US estimate and NIE 11-4-61 for the Soviet estimate.

\textsuperscript{197} Enthoven, Alain and Smith, K. Wayne. How Much Is Enough? Santa Monica, CA: RAND Corporation, 1971. The tank quality comparison is an estimate based on the knowledge that the two tanks were produced and introduced at similar points. That comes from The Military Balance, 1962.


\textsuperscript{199} NIE 11-4-61 and The Military Balance, 1962.

\textsuperscript{200} Ibid.
weapons of better quality. This contributed to a state of rough structural parity in the conventional military balance in the early 1960’s.

*Local Conventional Balance in the Caribbean*

Underneath the global structure of military power lies several regional balances of power. The balance of power in a particular region may not reflect the structural balance. This was the case in the Caribbean during the Cuban Missile Crisis. In 1961, the US military combined the Tactical Air Command and the Army divisions stationed in the continental United States into a single Strike Command, or STRAC.\(^{201}\) By 1962, STRAC was composed of 2 airborne, 2 armored, and 4 infantry divisions, with one armored and one infantry division being composed of National Guard troops.\(^{202}\) If you use the approximation of 40,000 troops per Army division, then there were about 240,000 non-National Guard Army troops within STRAC alone. STRAC also had 10 tactical fighter squadrons, 1 reconnaissance squadron, and 3 troop carrier squadrons for a total of 756 combat aircraft.\(^{203}\) In the Atlantic Ocean, the US Second Fleet featured 4 attack carriers, 5 ASW carriers, 5 cruisers, 116 destroyers, and 69 submarines for a total of close to 200 surface and subsurface combatants.\(^{204}\)

Arrayed against this concentration of US conventional military power was the Soviet deployment of troops, weapons, and equipment to Cuba. The Soviets transportation of its men and materiel to Cuba was known as Operation Anadyr. In addition to the 60 MRBM’s and IRBM’s deployed to the island, the operation also sent four motorized rifle regiments with a total

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\(^{201}\) “Appraisal.” May 12, 1961.


\(^{204}\) Ibid.
of 14,000 troops. The Soviets sent 42 Il-28 light bombers, 40 MiG-21 fighter planes (at the time the best fighter in the Soviet air forces), and 72 V-75 launchers for air defense. It deployed 80 FKR-1 cruise missiles, 32 S-2 “Sopka” cruise missiles, and 12 Komar patrol boats for coastal defense.\footnote{205} It planned to send in a naval force that included 11 submarines, two cruisers, and four destroyers (two missile-firing and two regular), but they were ultimately not deployed.\footnote{206} This meant that at the time of the Cuban Missile Crisis, the Soviet Union had around 42,000 troops deployed to Cuba.

It is likely that Khrushchev viewed the nuclear missiles as the principal component of the Soviet Union’s deployment. Before the Cuban Missile Crisis, Khrushchev and his military advisers did not think that conventional military strength – and naval strength in particular – would play a role in deciding superpower contests. Khrushchev cut funds to conventional military programs in the late 1950’s and early 1960’s in order to put more money into the Soviet ICBM program. One area that was targeted for cuts was the surface naval fleet, and this was done in the belief of the obsolescence of surface strength. As one Soviet defense official put it, “Ships! They’ll be food for the fishes!”\footnote{207} If Khrushchev had not held this view and invested in greater naval and power projection capabilities, he may have deployed greater conventional capabilities to Cuba, which then could have helped the Soviets keep their nuclear missiles on the island.

\footnote{205} All of these estimates are from Munton, Don and Welch, David. \textit{The Cuban Missile Crisis: A Concise History.} Oxford, UK: Oxford University Press, 2012. Pp. 35-38.

\footnote{206} Ibid, 37-38.

That the Soviet Union was able to transfer this many troops and equipment to Cuba should be considered an operational achievement of the highest order. To do it, the Soviet Union had to traverse thousands of miles of ocean in which they had almost no military presence, and if caught, a ship transporting nuclear missiles would likely have been forced to stop. This is why the Soviets conducted the operation in strict secrecy. The missiles and nuclear warheads were transported in a commercial cargo ship, *Indigirka*, unaccompanied by any other ship.\(^{208}\) The Il-28’s and MiG-21’s were disassembled and shipped in wooden crates. Military personnel made the journey across the Atlantic in closed holds. Soviet troops and equipment were dropped off at 11 different ports around Cuba.\(^{209}\) Sergo Mikoyan, son of former Soviet official Anastas Mikoyan, points to the secrecy of the operation outside of the Soviet top brass while the transportation was ongoing and assesses that it “was organized brilliantly from the very beginning.”\(^{210}\)

The Soviet Union used secrecy to establish some military strength in the Caribbean, but this deployment was no match for the amount of forces the US controlled in the region. As will become clear later in the case study, this meant that the Soviet Union had little to no conventional options for escalation during the Cuban Missile Crisis. The Soviet leadership knew this ahead of time, which is why they also transported 36 Luna short-range rockets with 12 2-kiloton nuclear warheads in September 1962 to augment the rest of the forces in Operation Anadyr.\(^{211}\) In contrast, regional conventional power preponderance gave the United States a wide

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\(^{209}\) Ibid, 105-106.

\(^{210}\) Ibid, 105.

\(^{211}\) Munton and Welch, 2012, 36.
range of conventional options for escalation during the crisis. The goal of the rest of the case study is to judge to what extent those increased options for escalation played a role in decision-making and benefitted the United States. To do that, I will first explain the background to the crisis and the objectives each side was trying to accomplish during it.

**US and Soviet Policy towards Castro’s Cuba**

The United States’ main objective with regards to Cuba was to prevent it from becoming a base from which Communist powers could project military and political influence in the Western Hemisphere. This translated into an immediate objective of convincing the Soviets to withdraw their nuclear missiles and military forces from Cuba. The Soviet Union wanted to use an alliance with Cuba as a way to project power in the Americas and to protect Cuban leader Fidel Castro from a US-imposed regime change. During the crisis, this meant that the Soviet Union wanted above all to keep its missiles and forces in Cuba and only after that to ensure the survival of Cuba’s communist government.

Since the 19th century, control over Cuba was eyed as an important objective for US foreign and domestic policy. Then Secretary of State John Quincy Adams declared that Cuba has “an importance in the sum of our national interests with which no foreign Territory can be compared.”212 Southerners in the United States viewed the island as a potential slave state. John C. Calhoun said of Cuba that “as the pear, when ripe, falls by the law of gravity into the lap of the husbandman, so will Cuba eventually drop into the lap of the Union.”213 With this aim in mind, President James K. Polk attempted to buy Cuba from Spain, but his agent was rebuffed by

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the Spanish government. In 1898, newspaper editors such as William Randolph Hearst and Joseph Pulitzer were able to use sensationalist press to stir a war for the “liberation” of Cuba from Spanish rule. Afterwards, the US occupied Cuba for three years and inserted the Platt Amendment into the Cuban constitution. This amendment allowed the United States to intervene at any time to “protect Cuban independence.”\textsuperscript{214} In 1903, the United States also leased the strategically important Guantanamo Bay from Cuba in order to establish a naval base.\textsuperscript{215}

The United States would use the Platt Amendment as a pretext to send troops to Cuba on and off again until 1934, when both sides abrogated the agreement.\textsuperscript{216} After the Platt Amendment, the United States still continued to wield influence over Cuba’s economy and society. US investors poured billions of dollars into the Cuban economy in the first half of the 20\textsuperscript{th} century, and US companies controlled most of Cuba’s main industries: sugar, mining, and transportation.\textsuperscript{217} While many in Cuba chafed at US influence, by the middle of the 20\textsuperscript{th} century the Cuban professional classes had developed a taste for American goods and culture.\textsuperscript{218} Before Fidel Castro’s revolution, Cuba was “an American-dominated state.”\textsuperscript{219}

The United States thus held deep economic and strategic interests in Cuba, and when the Cold War began, it was determined to not let the country fall to Communism. One part of this can be seen in America’s larger policy towards Latin America in the late 1940’s and 1950’s. In

\begin{itemize}
\item \textsuperscript{214} Kaplan, Amy. “Where is Guantanamo?” \textit{American Quarterly}, 57, No. 3 (Sep. 2005): pp. 831-858.
\item \textsuperscript{215} Ibid.
\item \textsuperscript{216} Ibid. This was due to a change in US policy to the “Good Neighbor Policy” instituted by President Franklin Roosevelt. This policy pledged non-intervention by the US into the domestic affairs of Latin American countries.
\item \textsuperscript{218} Fursenko and Naftali, 1997, 8-9.
\item \textsuperscript{219} O’Brien, 1993.
\end{itemize}
1954, the United States convinced the Organization of American States (OAS) – an organization founded on the basis of non-intervention into the domestic affairs of other American countries – to adopt the Caracas Resolution. This resolution stated that countries within OAS can intervene in other countries in order to prevent the development of a “communist beachhead” in the Western Hemisphere.\textsuperscript{220} This resolution legitimated the CIA-backed coup of Jacobo Arbenz in Guatemala in 1954. Consistent with a larger foreign policy of containment, the United States resisted any attempts to establish Communist rule over any Latin American country.

With regards to Cuba in particular, the United States’ anti-communist foreign policy can be seen in its support for the Fulgencio Batista regime and its initial ambivalence about Fidel Castro. Similar to all previous Cuban leaders, Batista received generous American patronage, and in return the Batista regime was a reliable partner in America’s anti-communist agenda in Latin America.\textsuperscript{221} When Fidel Castro overthrew Batista, the Eisenhower administration took a “wait-and-see” approach with the new Cuban leader. During Castro’s trip to the United States in April 1959, he portrayed himself and the July 26 movement which he led as supporters of noncommunist economic and social reform.\textsuperscript{222} This led Castro to have some sympathy among the American left, and he initially had great popularity in the United States. In 1959, US officials thought Castro was an enigma, and Eisenhower was unsure of the correct policy to take towards him.\textsuperscript{223}

\textsuperscript{220} Fursenko and Naftali, 1997, 9.

\textsuperscript{221} Munton and Welch, 2012, 12-16.

\textsuperscript{222} This trip was regarded as a public relations success in the American press, but privately top US officials were not buying Castro’s noncommunist pitch. They were suspicious of Castro’s intentions and the power of known communists in the July 26 movement. For more, see McPherson, Alan. “The Limits of Populist Diplomacy: Fidel Castro’s April 1959 Trip to North America.” \textit{Diplomacy and Statecraft}, 18, No. 1 (2007): pp. 237-268.

\textsuperscript{223} Fursenko and Naftali, 1997, 18-19.

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Nevertheless, by the spring of 1960, it was clear that Castro was moving himself farther to the left in order to co-opt the communist elements of the July 26 movement and gain more political power. Over the course of 1960, the Soviet Union deepened its ties to Cuba, giving Castro strength he needed to institute a full socialist reform of the Cuban economy.\textsuperscript{224} In November 1960, Castro declared himself to be a Marxist-Leninist from his earliest days.\textsuperscript{225} On May 1, 1961, Castro officially declared that his revolution was a communist revolution, and in April 1962, the Soviet newspaper \textit{Pravda} began referring to Castro as “comrade.”\textsuperscript{226} Cuba, located 90 miles from US shores, was a communist state entrenched in the Soviet orbit.

This turned Cuba into another node of confrontation in the Cold War. The Eisenhower administration developed a policy of economic strangulation, diplomatic isolation, and covert action to pressure Castro into either reversing his move to communism or undermining his rule altogether. By the time of John Kennedy’s inauguration, it was clear that the only way to prevent communist rule in Cuba was to overthrow Castro. The way to remove him was through covert operations aimed at fomenting unrest inside Cuba. As Eisenhower explained to the incoming president, “We cannot let the present government there go on.’ Then Kennedy asked: ‘Should we support guerilla operations in Cuba?’ Eisenhower’s response was unequivocal: ‘To the utmost.’\textsuperscript{227} The limitations of this policy were revealed by the Bay of Pigs fiasco, but that debacle never changed the basic US policy towards Cuba. The use of covert means to remove Castro would be continued by the “Special Group – Augmented,” headed by the president’s

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\textsuperscript{224} Ibid, 35-55. \\
\textsuperscript{225} Ibid, 1997, 71. \\
\textsuperscript{226} Dobbs, 2008, 149. \\
\textsuperscript{227} Fursenko and Naftali, 1997, 78.
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brother Robert Kennedy, rather than the CIA. It planned activities under the guise of Operation Mongoose.\textsuperscript{228} This operation was still ongoing when the Cuban Missile Crisis began. The failure of the Bay of Pigs also highlighted the need for overt military means to overthrow Cuba, and this the Pentagon provided with OPLAN 312 and OPLAN 314.\textsuperscript{229} Even though these airstrike and invasion plans were developed, it is not clear if the use of military force against Cuba by US forces was ever an official policy or simply contingency plans in case a situation arose in which the US could overthrow Castro.

Due to Cuba’s size and proximity to its shores, the United States regarded Cuba as strategically and economically important. It thus became crucial, as was the case with other Latin American countries, to not see it fall to communist rule. When Castro overthrew Batista, the United States attempted at first to persuade Castro to continue friendly relations with the US As Castro moved further into the Soviet orbit, the United States adjusted its policy to one of economic strangulation and the use covert means to foment unrest. US policymakers wanted to see Castro removed from power. At a minimum, they did not want Cuba to be a base from which the Soviet Union could project military power and political influence in the Western Hemisphere.

That last minimum objective is exactly what the Soviet Union wished to do when it decided to send nuclear missiles to Cuba. The Soviets were just as wary as the Americans of Fidel Castro in the early days of his regime. In February 1960, Alexei Adzubei, Khrushchev’s son-in-law and editor-in-chief of the Soviet newspaper \textit{Izvestiya}, warned a delegation to Cuba headed by Anastas Mikoyan on the eve of its visit: “Most likely you will see a typical Latin

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\textsuperscript{228} Dobbs, 2008, 8-10.
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\textsuperscript{229} Munton and Welch, 2012, 20.
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American dictator...He’s already been to the United States and is under its influence. Don’t get any illusions about Castro.”

Mikoyan’s ten-day visit, however, changed Soviet perceptions of Cuba, and it started a program of Soviet military and economic assistance to Cuba. After Mikoyan’s visit, the Soviet Union agreed to give Cuba $100 million in economic aid and buy Cuban sugar. The visit also alerted the Soviet Union to the possibility of having a “dependable ally right under the Americans’ nose…90 miles from the southern tip of Florida.”

Nikita Khrushchev decided to supply Cubans with whatever arms they wished. In a note to Castro on March 15, 1960, Khrushchev wrote that “with regard to supplies of weapons, the Soviet government is prepared to render any assistance in the supply and delivery of them from the Czechs…and, if necessary, then directly from the Soviet Union.”

Khrushchev cemented the Soviet Union’s ties to Cuba with a nuclear guarantee in July 1960.

Although ties between the Soviet Union and Cuba deepened between 1960 and 1962, it is not clear what Soviet intentions in this alliance were. Sergo Mikoyan argues that the motivations behind Khrushchev’s Cuba policy were largely defensive; he wanted to protect Cuba from a US invasion. Mikoyan argues that “Khrushchev was not a cynic, but a romantic. That is why it was important for him to rescue Cuba, and it was his main objective.” The Soviet leaders, most of them middle-aged or older, were captivated by the young Cuban revolutionaries, who brought

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231 Ibid, 70.
232 Ibid, 83.
233 Fursenko and Naftali, 1997, 45.
234 Fursenko and Naftali, 1997, 52.
235 Mikoyan, 2012, 100.
them back to the memories of their younger days. They wanted to protect this nascent socialist
movement in Latin America from US aggression. While the defense of Cuba was important to
Khrushchev and other policymakers in the Kremlin, it is unlikely that this was their sole
motivation in building ever closer ties to the island.

Aleksandr Fursenko and Timothy and Naftali point out that Cuba was promised a
delivery of SA-2 air defense missiles and Soviet tanks in September 1960, but by December 1961, these missiles and tanks had never arrived, much to Castro’s consternation. Only events in Cuba and in the arms race would make Cuba a priority. In April 1962, Castro thwarted a challenge to his authority from Anibal Escalante, the head of an umbrella organization of leftist parties known as Integrated Revolutionary Organizations (ORI). Escalante had deep ties to the Soviet Union and the KGB. Escalante’s downfall strained Soviet-Cuban relations, and Khrushchev needed to do something to restore them lest he “lose” Cuba to the Chinese orbit or a neutral Titoist path. Khrushchev also learned that the Soviet Union would not be able to catch up in the arms race as quickly as he hoped. Throughout the winter of 1961-1962, news on the R-16 and the R-9, the Soviet programs for second-generation ICBM’s, was consistently dour. The liquid-fueled R-16’s were no match for a strike from the Americans’ solid-fueled Minuteman missiles, and the R-9 missile was encountering serious flaws during its test flights. Gloomy economic reports in the spring of 1962 meant that the Soviet economy was in no shape to undertake a crash program to produce the ICBM’s rapidly. By April 1962, Khrushchev was looking for ways to enhance Soviet nuclear power vis-à-vis the United States. It was in this

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236 Fursenko and Naftali, 1997, 146.
238 Fursenko and Naftali, 2006.
context that Khrushchev first queried his defense minister, Rodion Malinovsky: “what about putting one of our hedgehogs down the Americans’ trousers?”239

Khrushchev wanted to “save Cuba,” but he primarily wanted it to become a base from which the Soviet Union could project military power against the United States. The United States, after all, was projecting power from Turkey, Italy, and other places in Europe with medium-range missiles. Why could the Soviets not do it? Indeed, doing so would even the balance of terror between the Soviet Union and the United States, giving the former more bargaining leverage in future negotiations. This motivation is clear from Khrushchev’s private statements. In Bulgaria in May 1962, among his advisors, Khrushchev said of the Cuban missile idea, “now they [the US] would learn just what it feels like to have enemy missiles pointing at you; we’d be doing nothing more than giving them a little of their own medicine”240 (italics mine). Just before the delegation that was to convince Castro to accept the missiles assigned to Cuba, Khrushchev told them at a party: “The missiles have one purpose, to scare them, to restrain them…to give them back some of their own medicine.”241 The planned conventional deployment to Cuba also spoke of larger strategic motivations. The Soviet Union would send Il-28 bombers, MiG-21’s, nuclear-armed FKR cruise missiles for coastal defense, the newest Soviet tank, the T-55, nuclear and diesel-powered submarines, and a naval flotilla of two cruisers, four destroyers, and 12 patrol boats. The Soviets also intended to build a submarine base on the island. In all, over 50,000 Soviet troops would be stationed on the island.242 This

239 Ibid, 431.
240 Ibid, 434.
241 Ibid, 436.
package was much more than the 10,000 troops and SA-2 air defense system that the Cubans thought necessary for their defense and approved before Operation Anadyr in April 1962. The pattern and timing of the missile deployment suggest that it was about far more than only the protection of Cuba. If Khrushchev wanted to prevent an invasion, he could have stopped with the approval of the air defense missiles, Sopka cruise missiles for coastal defense, and other conventional weapons on April 12. The Cubans recognized that the deployment under Operation Anadyr was different than this original deployment. When the Cubans accepted the offer for stationing the missiles, they insisted on dividing between “defensive” weapons for defending the island and “offensive” weapons that would be used for Soviet purposes. He also could have made the alliance between Cuba and the Soviet Union agreed to in late August public. The air defense and cruise missile deployment plus a public security guarantee could have protected Cuba without deploying nuclear missiles to the island.

The real purpose of the missile deployment was to use Cuba as a base from which to project military power, which would improve the global balance of forces in the Cold War. By 1962, Khrushchev was stuck on negotiations regarding Berlin and a nuclear test ban treaty. Khrushchev believed these negotiations were stalling because the United States did not respect Soviet military power. If he could secretly move nuclear missiles, troops, and a host of conventional weapons’ platforms to Cuba, then the United States would have much greater fear of Soviet military power. This would allow Khrushchev to conclude an agreement on Berlin that

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243 Fursenko and Naftali, 1997, 179.

244 Ibid, 170.

245 Fursenko and Naftali, 2006, 444.

246 Mikoyan, 2012, 110.
featured the removal of NATO troops from West Berlin. Khrushchev would then offer the test
ban treaty as a face-saving measure to help Kennedy cope with the retreat. 247

The future balance of military power in the Cold War was a core interest for both sides in
the dispute. However, the US arguably had an edge in resolve because Cuba was in its
geographic core, and it was in the Soviet Union’s geographic periphery. As I show later, when
compared to an area that was in the geographic core for both countries, Berlin, this allowed for
more room for the United States to use conventional military power. Conventional options
should be more consequential to the outcome of and events in the Cuban Missile Crisis.
However, it also raises the possibility that the United States could have used nuclear threats
alone to achieve a successful outcome in the crisis. The Cuban Missile Crisis is illustrative of the
benefits of conventional options for escalation but should be taken with caution until paired with
other cases.

The Outcome of the Crisis: Draw or US “Victory?”

The background to the crisis reveals the objectives each side had during the Cuban
Missile Crisis. The United States’ minimum priority was to prevent the Soviet Union from using
Cuba as base from which to project military power into North America. Allowing the Soviet
Union to keep troops and missiles in Cuba would have harmed a core US foreign policy goal that
dated to well before the rise of Castro: to prevent foreign powers from establishing bases of
military power in the Americas. The United States also wanted to remove Castro from power,
but this was a secondary goal. As will be pointed out later, the Jupiter missiles in Turkey are not
important in this picture. They irked Khrushchev and Soviet defense officials, but the Americans
did not view them as an integral component of Cold War policy before the crisis began.

Khrushchev believed that projecting military power from Cuba was the type of pressure that could get the US to change its attitude towards the larger outstanding issues in the Cold War. By 1962, Khrushchev’s attempted coercion over West Berlin had failed, and negotiations over a nuclear test ban treaty had stalled. Khrushchev believed his coercion failed and that the test ban negotiations were at a standstill because the United States did not respect Soviet military power. If he could secretly move nuclear missiles, troops, and a host of conventional weapons’ platforms to Cuba, then the United States would have much greater fear of Soviet military power. This would allow Khrushchev to conclude an agreement on Berlin that featured the removal of NATO troops from West Berlin. Khrushchev would then offer the test ban treaty as a face-saving measure to help Kennedy cope with the retreat. To accomplish these larger goals, Khrushchev first needed to keep Soviet ballistic missiles in Cuba. Therefore, the main issue in the Cuban Missile Crisis was whether or not the missiles would stay in Cuba. This is not to say that defense of the Castro regime was unimportant to Khrushchev. It certainly was, but the fate of the MRBM’s and IRBM’s was the central issue of dispute in the crisis.

Indeed, the desire to project nuclear military power from Cuba against the United States was about much more than the protection of Cuba from an American invasion. The Presidium summary from the meeting in which the missile plan was proposed states that “this will be an offensive policy.” Khrushchev likely considered the missile deployment to be part of his “meniscus strategy.” While the Soviet Union was behind in the nuclear arms race, Khrushchev announced in a speech to the Presidium on January 8, 1962 that the Soviets should put pressure

on the weak points of the United States in the world in order to “not let the enemy live peacefully.” The goal of this pressure was not to start conflict, hence the metaphor of the “meniscus, which according to the laws of surface tension in liquid, is generated in order that the liquid doesn’t pour out past the rim.” Rather, the aggressive strategy was meant to contain the United States and prevent it from taking advantage of the Soviet Union. The goal of the missile deployment must be seen in a global perspective, which is the way Khrushchev saw it.

It is in this global context that the outcome of the crisis should be measured. The Soviet Union agreed to withdraw its missiles and all “offensive” military equipment from Cuba (this included MiG’s and Il-28 bombers) in return for a non-invasion pledge from the US and private assurance that the Jupiter missiles would be removed from Turkey. At first, this may seem like an even bargain. Indeed, that assessment is shared by scholars, most notably Richard Ned Lebow and Graham Allison, who claim that the outcome of the crisis “ended in a compromise, not a one-sided American victory.” Thomas Blanton argues that “both sides blinked” in that both sides made concessions to de-escalate the crisis and resolve the dispute over the missiles.

While this assessment has some truth in that both the United States and the Soviet Union made concessions, it ignores the fact that the latter “blinked harder” than the former. The non-invasion pledge was important to Khrushchev, but the Jupiter withdrawal affected secondary

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251 Ibid, 414.


goals for the Soviets during the crisis. In order to get these concessions, he had to withdraw nuclear missiles from Cuba, which caused him to abandon hopes for fresh negotiations on a range of larger issues in the Cold War. In short, the most important sticking point in the crisis for both sides was whether the missiles would remain in Cuba, and the Soviet Union backed down on this point.

This was a major blow to Khrushchev’s hopes of pressuring the US to compromise on foreign policy issues in other areas around the world. Soviet leaders perceived the outcome of the crisis to be a setback for their country at the time. General Nikolai Detinov, deputy head of the air defense section of the Communist Party’s Military-Industrial Sector, recalled that the crisis “was like a cold shower for the government, which realized that weaknesses had to be overcome.”

This sentiment indicates that the political settlement that ended the crisis favored the United States. This interpretation of the crisis’ outcome is similar to the ICB dataset’s coding as well as recent studies of nuclear crises.

From the US perspective, it is better to think of the non-invasion pledge and the Jupiter withdrawal as face-saving concessions, something that allowed Khrushchev to back off his main goal with some dignity. In the heat of the crisis, when Khrushchev sent the second, “hard” letter to Kennedy outlining the missile swap idea, former Ambassador to the Soviet Union Llewellyn Thompson told Kennedy that “the important thing it seems to me to Khrushchev is to be able to say ‘I saved Cuba. I stopped an invasion.’” With the missiles out of Cuba, they could not be...

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used to pressure the United States on other Cold War issues. Meanwhile, Khrushchev could say, as he did to General Secretary of the Czechoslovak Communist Party Antonin Novotny, “they helped us to wrench out of the imperialists the statement that they would not attack Cuba, and they thus served their main purpose.”\(^{257}\) One could take this as evidence that the Soviet Union viewed the protection of Cuba as an important goal, but as mentioned previously, if the protection of Cuba was the only goal in the crisis, the Soviets could have done far less than send nuclear missiles to the island. The non-invasion pledge allowed Khrushchev to publicly present the outcome as a success while privately knowing that withdrawing the missiles was a costly concession.

The non-invasion pledge was also not a major one for the US to make. While there were military plans for an invasion of Cuba, Kennedy planned to use them only to support a successful counterrevolutionary effort. After the Bay of Pigs, the CIA confirmed that “external support will be essential to their [counterrevolutionaries’] survival. The United States must be ready with sufficient military assistance to guarantee the success of any uprising.”\(^{258}\) An overt military invasion not preceded by a strong rebellion would have turned international public opinion, especially in Latin America, against the United States.\(^{259}\) Covert operations to oust Castro, codenamed Operation Mongoose, were ended shortly after the Cuban Missile Crisis, but the life expectancy of those efforts in the fall of 1962 were low to begin with. Mongoose accomplished nothing other than further antagonizing Fidel Castro and striking fear into Khrushchev about the


\(^{259}\) Munton and Welch, 2012, 18-19.
likelihood of an American invasion of Cuba.\footnote{Dobbs, 2008, 13-14.} Such an ineffective program was unlikely to stick around.

Khrushchev could know in private that the United States agreed to withdraw the Jupiter missiles from Turkey. However, this was also not a major concession for the United States nor a great win for the Soviets. Kennedy complained that he did not want the Jupiters in Turkey even before the crisis,\footnote{Kennedy had requested the Pentagon look into removing the Jupiter missiles in August 1962. Dobbs, 2008, 270.} and they would go on to be replaced by much less vulnerable Polaris submarines in the Eastern Mediterranean. Khrushchev wanted to place the nuclear missiles in Cuba in order to level the nuclear balance in the Cold War. He would then be in a better position to negotiate over Berlin, a nuclear test ban treaty, and other issues that may arise in the future. The United States removing their Jupiter missiles from Turkey did nothing to change the nuclear balance.

Against this argument is the contention that some decision-makers in Washington considered the Jupiter withdrawal to be a sticking point in negotiations to end the crisis. Kennedy believed that withdrawing the Jupiters in exchange for the Soviets taking out the missiles from Cuba was a favorable deal, but the Excomm did not share Kennedy’s assessment that the Jupiter withdrawal was a wise concession.\footnote{With the exception of former Ambassador to the Soviet Union Llewellyn Thompson, who thought that saying yes to this proposal would embolden the Soviets to ask for more concessions on more important matters. May, Ernest and Zelikow, Philip, eds. The Kennedy Tapes: Inside the White House during the Cuban Missile Crisis. Cambridge, MA: Belknap Press of Harvard University Press, 1997. P. 593.} When Khrushchev’s second letter arrived outlining the new demand to withdraw the Jupiter missiles, Paul Nitze and McGeorge Bundy wanted Kennedy to ignore the demand. Nitze argued in a 10:00 AM meeting on Saturday, October 27 that “I would suggest that what you do is to say that we’re prepared only to discuss Cuba at this time.
After the Cuban thing is settled we can thereafter be prepared to discuss anything.” Speaking for most of the Excomm, McGeorge Bundy advised President Kennedy that if the United States publicly accepted the Jupiter-Cuba missile trade, “to our NATO people and to all the people who are tied to us by alliance, we are in real trouble.” American officials feared that a public acceptance of Khrushchev’s offer to return the missiles from Cuba in exchange for dismantling the Jupiters in Turkey would harm the US’ reputation as an ally.

Yet, this concession did not generate many hard consequences for the United States. Much of this was due to the American insistence and Soviet cooperation to keep the Jupiter withdrawal private. Secretary of State Dean Rusk first proposed a private assurance to the Soviets that the Kennedy wanted the Jupiters out and would remove them after the crisis. As Bundy, a previous skeptic of the Jupiter withdrawal recalls, this “proposal was quickly supported by the rest of us and approved by the president.” Because it was given in the form of an oral private message, it did not strain US relations with its NATO allies. That the Soviet Union agreed to keep the Jupiter withdrawal private suggests that they felt they had little leverage with which to press this point. Indeed, as I say later, Khrushchev likely decided to withdraw his missiles from Cuba before he heard about the American offer to withdraw their missiles from Turkey. It may have been unnecessary to make this concession to end the crisis. Plus, the Jupiter withdrawal did not diminish the US nuclear deterrent, as Polaris submarines were put in

263 May and Zelikow, 1997, 497.


the Mediterranean in 1963 to cover the targets for which the Jupiter missiles were responsible. Because it could be kept private and would not diminish the nuclear deterrent, the Jupiter concession wound up being a minor concession for the United States to make.

Meanwhile, the removal of the Cuban missiles represents a failure to attain the main goal of strengthening the Soviet Union’s nuclear military power, and it led to the surrender of its pursuit to attain even more ambitious goals to change the status quo in Europe.267 Even though the Soviet Union was able to achieve two secondary goals in the crisis, this should not be mistaken for a successful political settlement with the United States. As Arnold Horelick pointed out shortly after the crisis, “to regard the outcome of the Cuban missile crisis (sic) as coinciding in any substantial way with Soviet intentions or interests is to mistake the skillful salvage of a shipwreck for brilliant navigation.”268

In sum, the United States achieved its core goal during the crisis – preventing the Soviet Union from using Cuba as a military base from which it could enhance its nuclear military power. On the other hand, the Soviet Union had to remove the missiles from Cuba, thus surrendering an ability to project nuclear military power onto America’s doorstep. This led the Soviets to give up on a subsequently planned endeavor aimed at achieving core foreign policy goals – settling the Berlin, test ban, and other larger Cold War issues on favorable terms. The Soviet Union did achieve an important goal in protecting Cuba and a secondary goal in securing the removal of Jupiter missiles from Turkey, but it paid a steep price to do so. The United States got more out of the deal that ended the crisis than the Soviets did. The mismatch in the outcome

267 Khrushchev’s plans for an assertive foreign policy push in 1963 after his successful Cuban gambit are described by Cohen, 2017, 98-112.

of the crisis is reflected in the attitudes of the actors in the aftermath. US officials did not want to appear too elated in the outcome for fear of provoking the Soviets into rekindling it. Soviet officials used the outcome to attack Khrushchev in their successful attempt to oust him from power in 1964.

The Role of the Conventional Military Balance

As mentioned previously, before the Cuban Missile Crisis, Khrushchev and his military advisers did not think that conventional military strength would play a role in deciding nuclear crises. This view was ultimately mistaken. American naval superiority in the Caribbean during the Cuban Missile Crisis meant that the Soviet Union had no effective response to the blockade of Cuba. The blockade thus prevented Soviet IRBM’s from ever reaching Cuba. American air and land superiority meant that the Soviet Union could only respond to a US invasion of Cuba with tactical nuclear weapons, a decision that would likely spark general thermonuclear war. Conventional superiority gave the US graduated options for escalation. In turn, these options built coercive leverage over the Soviet Union. The US did enact an SAC airborne alert of its bomber forces during the crisis,²⁶⁹ but this played less of a role in convincing Khrushchev to back down than the threat of an American invasion of Cuba. The fear of the use of further conventional force and the lack of a proportionate response convinced Khrushchev to withdraw his MRBM’s and IRBM’s from Cuba.

Blockade and Negotiate: The Decision to Quarantine Cuba

President Kennedy learned of the deployment of nuclear-capable medium-range ballistic missiles (MRBM’s) to Cuba on the morning of October 16. That same day, he convened the first meeting of the Executive Committee of the National Security Council (Excomm). Regional conventional preponderance gave US decision-makers a variety of options for the use of force. Kennedy focused on four scenarios: 1) a surgical air strike against just the missiles, 2) a general air strike against the missiles plus Soviet MiG-21’s, 3) an invasion of Cuba, and 4) a blockade of Cuba to prevent other Soviet military equipment from entering the island.270 In the October 16 meeting, the initial reaction of Kennedy and the Excomm was to execute an airstrike against the missile sites. As Kennedy concluded the meeting, he said “We’re certainly going to do number one. We’re going to take out these missiles.”271 Debate within the Excomm was not over whether to use military force, but how to do so, and in what sequence.

The debate over military force was complicated by new intelligence and analysis on October 17 and 18. In the Excomm meeting on the morning of October 18, the discovery of new missile sites that could host intermediate-range ballistic missiles (IRBM’s) expanded the range of targets needed to be destroyed by an air strike.272 One day prior, the Joint Chiefs of Staff met and agreed that a strike limited to the missile sites was too risky. “This is a point target, Mr. President. You’re never sure of having, absolutely getting everything down there.”273 These findings meant that US leaders “would consider nothing short of a full invasion as a military

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270 Fursenko and Naftali, 1997, 224.
271 May and Zelikow, 1997, 71.
action.”274 The need for a large-scale operation to remove the missiles by force removed the limited air strike as an option.

This split the Excomm into two camps: those who favored a full invasion and those who favored a blockade. Military leaders like General Maxwell Taylor favored an invasion: “We can’t prevent these constructions going ahead by any threat,” Taylor declared in the October 18 meeting.275 Civilian advisors, particularly Robert McNamara and Llewellyn Thompson, favored the blockade approach. The blockade was seen as a moderate option that projected military force but also carried a low risk of escalation. Indeed, supporters of the blockade wanted it to be conducted in such a way as to reduce the probability of a quick escalation. A memo to General Taylor from Captain William Houser advised that “we want to use minimum force to prevent entry of these vessels to Cuba.”276

Nevertheless, supporters of the blockade never viewed it as an alternative to military force. Rather, it was a way to explore diplomatic alternatives while also building up to a potential invasion. As Llewellyn Thompson put it:

“I think we should be under no illusions, this is probably in the end going to lead to the same thing. But we do it in an entirely different posture and background and much less danger of getting up into the big war.”277

Towards the end of the meeting Secretary of Defense Robert McNamara underscored that point, summarizing the debate between the blockade and an air strike this way:

274 May and Zelikow, 1997, 131.

275 May and Zelikow, 1997, 135.


277 May and Zelikow, 1997, 137.
“But one is a minimum military action, a blockade approach, with a buildup to subsequent action. The other is a very forceful military action with a series of variances as to how you enter it.”

In a meeting at the Oval Office on Saturday, October 20, Secretary of State Dean Rusk, a supporter of the blockade strategy, “referred to an airstrike as chapter two,” with the blockade being chapter one. President Kennedy took the decision to go with the blockade but also “to take actions necessary to put [the US] in a position to undertake an air strike on the missiles and missile sites by Monday or Tuesday.” The President’s brother, Robert Kennedy, agreed with him, saying that the US needed to be prepared “for an air strike to be launched later if we so decided.”

The decision for the blockade was a *blockade and negotiate* strategy with the threat of further military action to be used as the leverage in the negotiations. Because the United States possessed conventional preponderance in the Caribbean, it could credibly threaten an invasion of Cuba as a follow-up military action it would take should the Soviets refuse to remove their missiles. The United States could use the prospect of further military force to convince Khrushchev to remove the missiles via negotiation rather than through force. As one document outlining the blockade option put it, “The advantages of the plan are that it contemplates a *series of ascending political and military steps*, at each stage of which Khrushchev and Castro can find an ‘out’ if they desired” (italics mine). The blockade was thus chosen as the first stage in a strategy of conventional compellence against the Soviet Union.

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278 May and Zelikow, 1997, 162.


281 Ibid.

Why was the blockade and negotiate strategy successful? One reason was that the Soviet Union had no means to respond to the blockade. As mentioned previously, Khrushchev originally planned to deploy four destroyers, two cruisers, twelve patrol boats, seven Golf submarines, and four Foxtrot submarines. However, the close scrutiny of NATO reconnaissance on Cuban convoys made Khrushchev afraid that such a large naval deployment would arouse Western suspicion. Khrushchev halted the naval deployment except for the four Foxtrot submarines. The Foxtrot submarines were diesel-powered, and they needed to come to the surface, or “snorkel,” in order to recharge their batteries. These submarines were also noisy, making them detectable to the US Navy’s Orion planes throughout the Atlantic and submarine detection stations across the Caribbean. There was little possibility the Foxtrots would be able to run the blockade.

US ASW ships and aircraft would be able to swarm each of the four submarines. The only way for the commanders of the Foxtrot to defeat the enemy would be to use the nuclear-tipped torpedo deployed on the submarine before heading to Cuba. This put submarine commanders in a position where they had to choose between surfacing to show themselves to US naval forces or using a nuclear weapon to escape them. The result of the Foxtrot deployment was a close call with nuclear war unknown to high-level policymakers at the time. One Foxtrot, the B-59, was detected by US ASW forces, and they started dropping practice depth charges on the submarine. The commander of the sub, Valentin Savitsky, thought that these charges were the start of a wartime confrontation, so he asked for the nuclear torpedo to be prepared. The commander of the Foxtrot flotilla, Vasily Arkhopov, voted to not use the torpedo, and eventually

283 Fursenko and Naftali, 2006, 461-462.
284 Fursenko and Naftali, 2006, 478.
persuaded Savitsky to surface. Soviet naval forces had no conventional response to the blockade, forcing Soviet commanders to choose between initiating nuclear use or surrendering to the enemy. The same choice would be presented to Khrushchev in a different form.

The second reason the blockade was so effective was that the Soviet Union had no conventional military response to a US invasion of Cuba. The 42,000 Soviet troops, MiG-21’s, and Il-28’s would not have bolstered Cuban defenses to the point where a full US invasion could be thwarted. As Anastas Mikoyan assessed:

“It is well-known that we had almost 42,000 soldiers stationed on the island to provide a smokescreen for the missiles and building teams, but our air force presence was insufficient. The Il-28 bombers were inadequate for repelling a strike insofar as they were extremely vulnerable to enemy fighter jets. The MiG-21s were also there, but they were not of a caliber to so much as challenge US air supremacy…We had surface-to-air missiles (SAMs), but their presence on the island was well known to the Americans…And so, by scrambling their available local forces, the Americans would have enjoyed clear and overwhelming superiority in the air…they would have been able to bear down on Cuba with all their military might.”

Soviet forces on Cuba could only thwart a US invasion by using tactical nuclear weapons. FKR cruise missiles with nuclear warheads for coastal defense were part of the original deployment. On September 7, worried about a US invasion, Khrushchev decided to deploy Luna missiles that would be fitted with 2-kiloton nuclear warheads for use by the Soviet ground forces. Any US invasion would prompt Soviet forces to initiate the use of nuclear weapons. Lieutenant General Nikolai Beloborodov, commander of the Soviet nuclear forces deployed to


286 Mikoyan, 2012, 149.

287 Munton and Welch, 2012, 36.

Cuba, described this military predicament: “It was clear that in the conditions of the existing balance of forces in conventional arms, which was ten to one against us, there was only one way we could repel a massive assault—by using tactical nuclear weapons against the invaders.”

This caused Khrushchev much consternation during the crisis, as evidenced by his reversal of the original instructions about the use of the tactical nuclear weapons sent to the local commander of Soviet forces in Cuba, General Issa Pliyev. Instead of authorizing the use of tactical nuclear weapons when Pliyev thought it was wise, Khrushchev forbade him from using those weapons in response to a US invasion. “Use all means except those controlled by Statsenko [Major General Igor D. Statsenko, the commander of the rocket units] and Beloborodov [Nikolai K. Beloborodov, of above].” The blockade was effective because the next threatened use of military force, an invasion to remove the missiles by force, would prompt Khrushchev to choose between surrendering or initiating the use of nuclear weapons. This was a decision Khrushchev wanted to avoid.

*The Fear of an Invasion and the Decision to Withdraw the Missiles*

The Soviet Union had no recourse to respond to a US invasion with conventional means, but was an invasion a real possibility? And did it seem real to Soviet decision-makers? On the first question, President Kennedy told his friend Dave Powers on October 28, as the most intense stage of the crisis wound down, “Do you realize we had an air strike all arranged for Tuesday? Thank God it’s all over.”

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290 Fursenko and Naftali, 2006, 473.

order to strike on Tuesday, October 30, but we do know that preparations for an invasion were afoot. By October 26, Ernest May and Philip Zelikow note that “the largest concentration of US armed forces since the Korean War” had amassed in the southeastern United States. The Joint Chiefs of Staff were arguing that any delay in the use of military force “is to the benefit of the Soviet Union,” and therefore “CINCLANT OPLAN 312 [should] be executed no later than Monday morning, October 29.” In line with this, at the Excomm meeting at 4 PM on October 27, General Taylor recommended to President Kennedy to plan for the invasion of Cuba on October 29.

President Kennedy favored keeping American forces ready to use military force at a moment’s notice during the crisis. In a meeting on October 21 with Generals Taylor and Sweeney, Kennedy “directed that we be prepared to carry out the air strike Monday morning [October 22] or any time thereafter during the remainder of the week.” On October 22, in a meeting with the Senate leadership, Kennedy remarked that “we are taking all military preparations for either an air strike or an invasion.” In the Excomm meeting on Saturday afternoon, it appears that Kennedy operated under the assumption that a Soviet refusal of an


294 May and Zelikow, 1997, 563.


American offer in reply to Khrushchev’s telegram would lead to escalation. When deciding to address Khrushchev’s remarks on the missiles in Turkey, Kennedy says that ignoring those demands “is not going to be successful…Otherwise, he’s going to announce that we’ve rejected his proposal. And then where are we?” The answer was an invasion of Cuba to remove the missiles.

The US was going to negotiate to remove the missiles or do so via military force. As Kennedy said to McNamara, “the situation is moving there fast, Mac. And if we don’t [accept it] – if for the next 24 or 48 hours – this trade has appeal. Now, if we reject it out of hand, and then have to take military action against Cuba.” On the night of October 27, after Robert Kennedy delivered the US offer for withdrawing the missiles to the Soviet Ambassador Anatoly Dobrynin, President Kennedy approved an order by McNamara to call up 24 troop-carrier squadrons from the Air Force Reserve. Of course, the invasion may never have happened if the Soviets had rejected the offer presented by Robert Kennedy. President Kennedy said on October 27 that “I’m not convinced yet of an invasion, because I think that’s a bit much.” Kennedy also tried to use former UN official Andrew Cordier to send a message to UN Secretary-General U Thant to convince the latter to call for a Cuba-Turkey swap. Nevertheless, preparations for an airstrike then invasion of Cuba went apace. Kennedy faced pressure from the Pentagon and some of his

297 May and Zelikow, 1997, 523-524.
298 Ibid, 530.
299 Ibid, 613.
300 Ibid, 566.
301 Dobbs, 2008, 312.
civilian advisors to start the operation as soon as possible. The US threat to invade Cuba should the Soviet Union refuse to remove the missiles was therefore highly credible.

The threat of a successful US invasion of Cuba scared Khrushchev, and it dictated his behavior throughout the crisis. Three days after Kennedy’s quarantine speech, on October 25, Khrushchev and the rest of the Presidium decided to shift strategy in response to American military pressure. They outlined a plan to offer the removal of the missiles in exchange for a US non-invasion pledge towards Cuba.\(^\text{302}\) The Presidium decided to wait and see if the US kept up pressure for a few more days, and if so, they would send this compromise message. However, one day later, intelligence from the United States about its military preparation suggested that an invasion of Cuba was imminent. In response, Khrushchev decided to send the non-invasion offer immediately.\(^\text{303}\) When no invasion came over the next 24 hours, Khrushchev became calmer and decided to push for the Cuba-Turkey missile swap. Khrushchev stated his renewed belief in American restraint during the afternoon of October 27: “Can they attack us now? I think that they won’t venture to do this.”\(^\text{304}\) It was in this mood of restored optimism about Operation Anadyr that Khrushchev dictated the second letter to Washington including the demand to remove the Jupiter missiles from Turkey.

When Khrushchev received Kennedy’s official response to his letters which did not contain a reference to the Jupiter missiles, he decided to accept it. One reason was that Oleg Troyanovsky, one of Khrushchev’s assistants, relayed the results of Dobrynin’s meeting with Robert Kennedy and informed Khrushchev along with the rest of the Presidium that the US

\(^{302}\) Fursenko and Naftali, 1997, 259.

\(^{303}\) Ibid, 262-263.

\(^{304}\) Ibid, 274.
“didn’t see any insurmountable difficulties” in removing the Jupiters. The more important reason for accepting the letter was renewed fear of a US invasion. Fursenko and Naftali show that Khrushchev was ready to accept just an American non-invasion pledge and end the crisis before hearing about Robert Kennedy’s statement on the removal of the Jupiter missiles. Moreover, Soviet military intelligence picked up a rumor that Kennedy was to give a nationally-televised speech on the night of October 28, perhaps to announce the start of the invasion of Cuba. In addition, Dobrynin’s report said that Kennedy was under intense pressure from the Pentagon to act, and he needed a response to his offer on Sunday. As Troyanovsky later recalled: “I began to read my notes on Dobrynin’s report. They [Khrushchev and the others] asked me to read the notes again. It goes without saying that the contents of the dispatch increased the nervousness in the hall by some degrees.”

Both Soviet and American officials’ statements about how the crisis ended show the logic of conventional options theory in action. For instance, Sergo Mikoyan, drawing on his father’s recollection of the crisis, argues that “the sword of Damocles that took the form of a threatened air strike followed by an invasion gave the United States the ability exert pressure in any talks. It was precisely this sword that in the end played the deciding role in accelerating Khrushchev’s proposal for a compromise.” Anastas Mikoyan himself said that the American military threat made it “more and more clear that we would have to give in.”

310 Mikoyan, 2012, 149.
US analysts close to the crisis also calculated that Khrushchev’s decision to “crate and return” the missiles from Cuba was due to US threats of conventional escalation. A CIA memo summarizing the implications of Khrushchev’s pledge to withdraw the missiles stated that Khrushchev’s decision was “motivated almost entirely by fear that US military action against Cuba and the Soviet bases there was imminent.” Daniel Ellsberg, in his autobiographical account of his time in the Defense Department during the Cuban Missile Crisis, also credits US conventional superiority in the Caribbean with putting pressure on Khrushchev. He writes:

“I was thinking all week – from Wednesday on, when the Soviets didn’t choose to challenge the blockade – that Khrushchev had [sic] to back down without any real concession on our part. He was looking down the barrel of US invasion forces that were fully primed to go on the following Monday or Tuesday, if not earlier. We had him outgunned at every level in the Caribbean: in the air, at sea, on the ground, in conventional weapons. And none of us, that I knew of, imagined that to redress that conventional imbalance, Khrushchev would allow any combat use of the nuclear missiles he was deploying.”

The Department of Defense came to a similar conclusion at the time of the missile crisis. Certainly, the consensus within DoD went, the nuclear forces of both sides meant that the use of military force could lead to a nuclear war. Nuclear deterrence thus operated on both Kennedy and Khrushchev. However, the United States’ conventional preponderance in the Caribbean allowed it to exert more military pressure on the Soviet Union. The potential of an American invasion was credible enough, and disastrous enough, to force the Soviet Union to find a way out of the crisis and to concede more while doing so. As a summary of the crisis in March 1963 from the Department of Defense explained:

“The umbrella, or shield, was our nuclear power; the sword was our conventional power. Undoubtedly, the most important factor which kept this crisis from growing, which kept the Soviets from making a counter-move elsewhere in the world, was the danger that any US-USSR confrontation carries within it


the seeds of a possible nuclear exchange. But what enabled us to produce this confrontation was our non-nuclear power, which we were not only able to apply but to make clear what we would apply in an ascending escalation of violence to a point where the Soviets would clearly find it excessively dangerous to pursue the game. Our unmistakable conventional superiority in the Caribbean, and our unmistakable intent to use it, placed on the Soviet leadership the clear choice of either backing down on their aggressive move, or expanding the crisis beyond the Caribbean theater, with the consequent danger that it would eventually lead to the destruction of the Soviet homeland.”\textsuperscript{313} (italics mine)

Scholars writing in the aftermath of the crisis shared the Defense Department’s assessment.

Albert and Roberta Wohlstetter, for example, wrote in their analysis of the Cuban Missile Crisis:

“The United States also had an immense local superiority in conventional forces. The Soviet Union clearly would have lost the non-nuclear exchange. Chairman Khrushchev stepped down to avoid a clash of conventional forces in which he would have lost. To avoid this level of loss he would have had irresponsibly to risk very much higher levels.”\textsuperscript{314}

All of these statements point to a process of the crisis that reflects the mechanisms of conventional options theory. Khrushchev could not counter Kennedy’s blockade of Cuba or a threatened airstrike and invasion with a conventional military response. He had to threaten to use tactical nuclear weapons to thwart any American use of conventional force. This threat was both not credible and paralyzed Moscow’s own decision-making. Quickly realizing the downsides of relying on a nuclear threat alone, Khrushchev searched for a way out of the crisis. He found one by proposing the non-invasion pledge from the US as a face-saving measure. He added the Jupiter concession to his second letter when he thought that the US was not going to invade after all. However, he became ready to forget about the Jupiter demand once a US invasion again appeared likely. By putting pressure on Khrushchev to choose between escalating very high up


the escalation ladder or backing down, the inability of the Soviet Union to counter the
Americans’ conventional actions shaped the outcome of the crisis in favor of the United States.

*Other Factors: Nuclear Threats, Luck, and Resolve*

This account is not to suggest that US superiority in conventional options was the *only*
factor shaping the outcome of the Cuban Missile Crisis. The nuclear balance could have played a
role in producing a favorable outcome for the United States. The United States possessed a much
greater number of strategic nuclear weapons than the Soviet Union had. During the crisis, the US
put its nuclear forces into DEFCON 2, one warning condition below nuclear war, while the
Soviets did not put their forces on alert at all. Marc Trachtenberg writes that “their [the Soviets’]
strategic ‘inferiority’ appears to have had a profound effect on their behavior in the crisis.”315
Matthew Kroenig agrees with this assessment and goes one step further to argue that it was
American strategic superiority that caused the US to achieve a desirable outcome: “Policymakers
in the nuclear superior state, the United States, were cognizant of their nuclear advantage,
referred to their nuclear advantage in the heat of the crisis, and pointed to the advantage as a
reason for a forward-leaning US approach.”316 American nuclear superiority likely played some
role in convincing the Soviets to withdraw their missiles from Cuba, but I argue that the nuclear
balance only played a role because the Soviets lacked any options for using force conventionally.
Because of this, they had to contemplate immediate escalation to the nuclear level, at which
point the grim outcome of a nuclear contest with a nuclear-superior United States could have
given the Soviets extra motivation to back down.

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315 Trachtenberg, 1985, 161.

316 Kroenig, 2018, 90.
There was also an element of luck involved in the outcome in that the US may have went ahead so stridently in their preparations for an invasion because US leaders were not aware of Soviet tactical nuclear weapons in Cuba or ignored their significance. This does not take away from the impact that US conventional capabilities had on the Soviet decision-making but could raise some doubts about how easily a state could use tactical nuclear weapons to substitute for conventional inferiority in other cases.

In addition, it is hard to overlook the fact that the US had conventional inferiority in Berlin, and it is odd given my theory of why the Soviets did not exploit that during the crisis. One element of my theory is the stakes involved in a dispute, and the Soviet Union was disputing the fate of missiles in their geographic periphery. West Berlin was tied to the fate of the United States’ alliances in a core region of Western Europe. The room the US had for using conventional force in the Caribbean without running too high a risk of triggering a Soviet nuclear response was likely greater than the room the Soviets had for using force in West Berlin. Indeed, Khrushchev may have learned from the Berlin Crisis that the US was willing to use nuclear weapons to defend West Berlin. This could have caused Khrushchev to view a blockade or seizure of West Berlin in the missile crisis as a form of “horizontal conventional escalation” that was beyond his level of resolve. A comment by Mikoyan is instructive in this regard: “Certainly, we would have tried to limit our actions only with the Berlin operation and the use of conventional weapons…Despite all the efforts of both the USSR’s and the United States’ governments, there could have been the danger of a nuclear war – in other words, a total

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317 I say “ignore” because Kennedy knew about the nuclear-capable free rocket over ground (FROG) missile launchers the Soviets had in Cuba. This means he either did not realize their significance or did and chose to ignore them. Sherwin, Martin. *Gambling with Armageddon: Nuclear Roulette from Hiroshima to the Cuban Missile Crisis.* New York: Knopf, 2020. P. 400.
Thus, the different effects of conventional superiority in Cuba and Berlin could be evidence of my second hypothesis that the effects of conventional options are greater in the periphery.

With that argument, it is also important to point out that the Cuban Missile Crisis represents an illustration my theory of conventional options. Because the US had high resolve, it may have been able to use nuclear threats alone to get its way in the crisis. Indeed, they also played a role in influencing the crisis’ outcome. Nonetheless, the Cuban Missile Crisis provides a strong foundation for the plausibility of conventional options theory. In a situation where conventional options could play a role in shaping the crisis outcome, they did. The state with more conventional options, the United States, was successful because of my hypothesized mechanism of putting the inferior state, the Soviet Union, into a resolve-capability gap. This shows that the effect of conventional options on bargaining power exists and exerted influence on policymakers in one of the most important episodes of the nuclear age. The number of conventional options therefore merits serious attention as a variable to measure in determining the outcome of nuclear disputes.

**Conclusion: The Implications of the Cuban Case**

The Cuban Missile Crisis represents a clear illustration of conventional options theory’s mechanisms. The United States possessed conventional preponderance over the Soviet Union in the Caribbean, but it was afraid of the consequences of escalation to the use of nuclear weapons. In this context, the United States was able to enact a strategy of conventional coercion in order to convince the Soviet Union to remove its missiles from Cuba. The conventional coercion strategy was effective because the Americans could threaten the Soviets with escalation to multiple levels.
of conventional conflict. The Soviets had no recourse to respond in kind. Instead, it would have had to initiate the use of nuclear weapons in order to break through an American blockade or halt an American invasion of Cuba. American escalation to the blockade and the threatened escalation to an air strike plus invasion presented Khrushchev with the choice between removing the missiles or starting nuclear conflict. Khrushchev chose the former. If the Soviet Union had had more conventional forces in the area, they could have deterred the US from implementing a blockade or contested one if it was implemented. More Soviet forces could have lowered the probability of success of an American invasion, making the American threat of an invasion of Cuba less credible. In sum, American conventional preponderance in the Caribbean made US threats to use military force during the Cuban Missile Crisis more credible. Soviet conventional inferiority encouraged the Soviet Union to find a way out of the crisis as soon as it could.

In addition to illustrating the mechanism behind my first hypothesis that greater variety leads to better crisis outcomes, the case also it provides some informative value for testing my hypothesis about the value of resolve in shaping the benefit of conventional variety. Cuba lay in a region of peripheral interest to the Soviet Union, and it would be expected that possessing superior conventional variety would matter a lot for their ability to achieve their security goals. It appears that it did. With inferior conventional variety, the Soviet Union was forced to back out of its Cuban strategy within a few months of launching it.

On the other hand, the United States viewed Cuba as an important security interest, and it lay close to the US homeland. The resolve to remove Soviet-installed nuclear weapons from Cuba was thus high. This means that nuclear threats alone from the United States may have been enough to persuade Khrushchev to withdraw the missiles. Plus, the United States did send its strategic nuclear forces into an alert posture during the crisis, raising the possibility that may be
used. One could say that theories based solely on resolve work just as well to explain the outcome of the crisis. That counterargument ignores evidence of the mechanisms of my theory – superior conventional options forcing an adversary into a space for exploitation – at work in the crisis. Nevertheless, the possibility that higher American resolve in the crisis could have made nuclear threats alone sufficient to coerce Khrushchev into removing the missiles means that the Cuban Missile Crisis is not a “smoking gun” case for conventional options theory. It will be important to examine a case where the United States made nuclear threats over a peripheral objective.

The next two studies are devoted to examining whether or not these dynamics shaped outcomes in other important nuclear crises during the Cold War. The first case will be the Berlin Crises in 1958 and 1961 done as a single case study. This is a case where the United States faced a threat to an interest near its core, but it had a fewer conventional options than the Soviet Union. My theory predicts that US leaders will have to run high risks of nuclear escalation to defend their interests, but they should be able to do so because their level of resolve will be high. The second case will be the Taiwan Straits Crises in 1954-55 and 1958. This case is “hard” because the offshore islands were seen as “indefensible” conventionally, and the crisis was used as a motivating example in the construction of brinkmanship theory (mostly by Thomas Schelling). Plus, the offshore islands over which the crisis occurred were peripheral to US interests. However, I point out that the US had deployed extensive naval power to the area before both disputes. This gave them some conventional options for escalation, and it was these conventional options that stopped the Chinese challenge to the offshore islands, not nuclear threats. This will be an informative case in that it will show how conventional options theory better predicts the
process by which the United States defended the offshore islands better than theories based on resolve and brinkmanship.

In sum, the Cuban Missile Crisis was arguably the most important episode during the Cold War. My theory highlights how the United States’ conventional military superiority in the Caribbean gave it a variety of conventional options to which it could escalate. This gave it a bargaining advantage during the crisis which helped it to secure a favorable outcome. I hope to show that this dynamic is not particular to the Cuban case in the next two case studies on the Cold War.
Chapter 4: The Berlin Crisis and Conventional Options Theory

On November 10, 1958 and June 4, 1961, Soviet Premier Nikita Khrushchev issued ultimatums to the United States along with its NATO allies stating that they had six months to withdraw their military forces from West Berlin, which would then be turned into a “free city.” At the end of that time, whether the Western powers had withdrawn their forces or not, the Soviet Union would sign a peace treaty with East Germany (GDR), handing over formal control of the inter-German border to East Germany and forcing the Western powers to officially recognize the East German regime. This would give formal recognition to the division of Germany. With these ultimatums, Khrushchev hoped to detach West Berlin from the rest of Western Europe and, by coercing official recognition of East Germany, cause the Western powers to renounce any hope of German reunification. Either of these actions could have prompted West Germany to leave NATO and thereby undermine the cohesion of the entire transatlantic alliance. None of these uninviting outcomes came to pass. The United States and its allies preserved the status of West Berlin despite Khrushchev’s threats, and the Soviets never signed a peace treaty with East Germany. The United States was able to accomplish its main goals in the crisis. Can conventional options theory explain this successful outcome for the United States?

policymakers were frustrated by the lack of conventional military strength with which to combat the Soviet challenge against West Berlin. President Dwight Eisenhower, soon after the first ultimatum, told his Secretary of State, John Foster Dulles, that the US military position in West Berlin was “basically untenable.” The US Ambassador to the Soviet Union, Llewellyn Thompson, told President John F. Kennedy that Khrushchev has “always felt that he had us over a barrel in Berlin.” Kennedy responded with a laugh: “Yeah. I think he does.” The United States was inferior in the conventional balance in Europe, yet it was able to get its way in the Berlin Crisis. This seems to contradict the idea that more conventional options give a state more bargaining power in a nuclear crisis.

Indeed, traditional explanations of the Berlin Crisis by IR scholars point to the utility of nuclear deterrence and brinkmanship tactics. The “tripwire theory of escalation” predicts that the United States should see success in the Berlin Crisis due to the high nuclear danger surrounding any attempts to change the status quo. Thomas Schelling argues that the United States, by placing troops in West Berlin and putting tactical nuclear weapons in Europe, made a “threat that leaves something to chance.” The United States was successful because it bid up the risk of


nuclear war erupting suddenly and inadvertently. This risk was too high for the Soviet Union to use its conventional superiority to take West Berlin via force or to use their conventional superiority as a tool of coercion.

I argue that conventional options theory can add to this explanation by pointing out that NATO’s conventional capabilities made the risk of nuclear war more salient. They did so by being able to escalate to a limited conventional war in Germany in response to a quick attempt to seize West Berlin via a fait accompli. NATO could force a stalemate in this limited war, which would force the Soviet Union to escalate to a large-scale conventional conflict in order to bring its conventional superiority to bear upon the United States and its allies. In such a high-intensity conflict, the risk of nuclear use would be so high as to be intolerable to Soviet leaders. In addition, the defense of West Berlin was a core interest for the United States during the Cold War, making any threat to use nuclear weapons in a conflict over the city highly credible. The importance of West Berlin and NATO conventional strength combined to make the chances of nuclear escalation quite large in any war over the city. This caused Soviet leaders to realize that they could not use their conventional superiority in Europe to generate coercive leverage over the Americans. After realizing this for good in 1961, Khrushchev decided to abandon his aggressive strategy for changing the status quo in Berlin, much to the Americans’ benefit.

There are two pillars to this explanation of the Berlin Crisis. The first is the claim that the United States and its European allies could hold their own in a limited conventional war in Europe. While this point goes against International Relations orthodoxy, there is good evidence to support it. A careful comparison of NATO and Warsaw Pact strengths indicate that the former was inferior in the conventional balance but not far behind. Appraisals of conventional forces in Europe from the early 1960’s show some cautious optimism about how a limited conflict would
unfold. My assessment is not based on new information unavailable to policymakers. Rather, I take the information available and reach a conclusion similar to McNamara’s analysts in the Office of Systems Analysis, or the “Whiz Kids,” that NATO was not far inferior to the Warsaw Pact in Europe. The image of a dominant Soviet Union in terms of the conventional balance is based on an inflated assessment of Soviet capabilities as well as a pessimistic assumption that the Soviets would not hesitate to escalate to a full-scale conventional war in Europe at the outset of a conflict. In such a conflict, the United States and its European allies would indeed be at a great disadvantage.

The second pillar is that maintaining the status of West Berlin was a core interest for the United States. How is this the case for an enclave of three million people deep inside communist territory? In Chapter 2, I defined a core interest as any objective which included “the defense of strategically vital areas” where “threats to a state’s own territorial integrity might materialize through those lands.” The status of West Berlin, while small, was tied to whether West Germany would remain in NATO or go neutral, thereby undermining the defense of Western Europe. If the United States retreated out of West Berlin, it would make the West Germans feel as if they could not rely on the US for their security. They would be tempted to chart a “neutral” course in which they would be tied to neither NATO nor the Soviet bloc. Similarly, if the United States officially recognized East Germany as a way to keep access to West Berlin after the Soviets signed a separate peace treaty, that would constitute an admission that the United States had stopped pushing for German reunification. Again, this would cause the West Germans to believe that the path for reunification lay through working with the Soviets to create a neutral, but unified, Germany. Either of these actions would lead to West Germany leaving NATO,

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which could have caused the entire transatlantic alliance to crumble. It was therefore paramount to the maintenance of the transatlantic alliance system for US leaders to preserve the status of West Berlin as a part of West Germany and to prevent official recognition of East Germany.

The Soviets’ main advantage in conventional options came in being able to win a large-scale conventional war. The importance of West Berlin increased the risks of nuclear escalation in any conflict, especially a high-intensity one. As a result, conventional options theory would predict that the Soviet Union would not be able to use its advantage in conventional options to coerce the United States. The status of West Berlin should remain unchanged, which would constitute a success for the United States. Traditional explanations of the Berlin Crisis highlight the inability of the Soviets to use their conventional superiority in West Berlin due to high American resolve. Conventional options theory says that high American resolve to defend West Berlin plus US conventional capabilities in Europe worked in tandem to neutralize the threat from Soviet conventional capabilities. If the Soviets really did have overwhelming conventional superiority, they may have been able to seize West Berlin via fait accompli.

This case study proceeds in six parts. First, I detail the conventional balance in Europe between 1958 and 1961. This section shows that the US and NATO possessed less conventional options in Europe than the Soviet Union, but the former were not at an overwhelming disadvantage. Second, I explain that both sides were disputing core interests, despite West Berlin being a small piece of territory. Third, I go through the predictions of the outcome and the process by which that outcome should occur according to conventional options theory. Fourth, I trace the development of the First Berlin Crisis, noting how Eisenhower’s behavior and Khrushchev’s reasoning for dropping the first ultimatum do not follow the logic of conventional options theory. Fifth, I trace the development of the Second Berlin Crisis in 1961 and argue that
the conventional preparations by the Kennedy administration played a role in convincing Khrushchev to back off his second ultimatum. I conclude by summarizing the case study, explaining what conventional options theory adds to our understanding of the Berlin Crises, and discussing the crisis in light of the Cuban Missile Crisis.

The Military Balance in Europe

The Soviet Union and its Warsaw Pact allies held a conventional military advantage over the United States and NATO. This advantage was not dominant, as is sometimes assumed, meaning that the United States and its European allies could have been able to force a stalemate in a limited war confined to Central Europe. Nevertheless, NATO conventional inferiority did mean that the United States could not rely solely on its conventional capabilities to defend West Germany and Western Europe. In a large-scale conventional war involving more than 300,000 troops, the United States would have had to make the decision to back down or use nuclear weapons first. This raised the question: would the threat of nuclear escalation in such a high-intensity conventional conflict be credible?

I base my assessment of the balance in conventional options via a broad overview of the number of troops, tanks, tactical aircraft, transport aircraft, surface combatants, and submarines in both blocs in 1958 and 1961. According to National Intelligence Estimate Number 11-4-58 (NIE 11-4-58), in 1958, the Soviet Union deployed a total of 78 divisions in Eastern Europe and the Western Military District (MD), 22 in the former and 56 in the latter.\(^{324}\) The NIE assessed that the divisions in Eastern Europe are half tank and half motorized rifle, which represented the most armored type of divisions in the Soviet Army. NIE 11-4-58 does not give the composition

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of the Western USSR line divisions, but in National Intelligence Estimate 11-4-61 (NIE 11-4-61), there are 8 tank divisions in the Western USSR and 75% of the Soviet Union’s motorized rifle divisions were deployed in Eastern Europe and the Western MD. With 27 motorized divisions total in NIE 11-4-58, that would make approximately 21 motorized divisions in Eastern Europe and the Western USSR in 1958. Since NIE 11-4-58 already cites 11 motorized rifle divisions in Eastern Europe, this translates to 10 motorized rifle divisions in the Western part of the Soviet Union in 1958. This accounts for 18 of the line divisions in the western USSR, and the other 38 western USSR line divisions would be rifle or mechanized. Assuming that the ratio of rifle to mechanized divisions was the same in the Western MD as in other parts of the Soviet Union, this would yield 16 rifle and 22 mechanized divisions.

In a large-scale war with NATO, the Soviet Union would augment these forces by mobilizing troops from its Northwestern and Southwestern military districts (MD’s) in the USSR. NIE 11-4-58 reports nine line divisions in the Northwest MD and 20 in the Southwest MD. NIE 11-4-58 does not give a breakdown of the types of divisions in these districts, so I used the breakdowns of these divisions in NIE 11-4-61 to provide an estimate. This estimate yields 3 motorized rifle, 2 airborne, and 3 rifle divisions along with one 1 tank division in the Northwest. There would 13 motorized rifle and 7 rifle divisions in the Southwest. This yields a total of 107 line divisions facing NATO. The Soviet Union could also count on the divisions in its Warsaw Pact allies in Central Europe. According to NIE 11-4-58, East Germany had 5 motorized rifle and 2 tank divisions, Poland possessed 5 rifle, 7 mechanized, and 2 tank divisions, and Czechoslovakia could contribute 8 rifle, 4 mechanized, and 2 tank divisions.\textsuperscript{325} Using the estimate of the “actual” troops per division within the Soviet and Warsaw Pact units rather than

\textsuperscript{325} The data for Warsaw Pact countries also comes from NIE 11-4-58, p. 64.
the “table of organization and equipment (TOE)” estimate of troops per division, this breakdown of divisions yields an estimate of 1,222,700 troops that the Soviets and their allies could use in a war in Germany.

This number looks imposing, and it appeared so to American policymakers, too. NIE 11-4-58 flatly states that “Soviet ground forces are capable of conducting large-scale operations on several fronts into peripheral areas, separately or concurrently.”326 When compared to the 20 and two-thirds divisions possessed by NATO for war in Germany, the total of 107 Soviet divisions facing Europe “was so huge that any significant NATO resistance without nuclear weapons did indeed seem impossible.”327 In terms of total troops, NATO was closer to the conventional strength in Central Europe than a comparison of division numbers would suggest, but they were nonetheless inferior. The United States deployed the Seventh Army to Germany, which was complete with 5 divisions and 3 armored brigades.328 The United States deployment was the same in 1961.329 In fact, the main source of improvement in the number of troops and equipment in Europe between 1958 and 1961 came in the form of the growth of West German military power. In 1958, they contributed 5 and two-thirds divisions to SACEUR’s command.330 By 1961, this was up to 8 divisions with a ninth forming.331 If we assume that all other countries

326 NIE 11-4-58, p. 45.
330 OSD History, 502.
331 The Military 1961, 10.
besides West Germany contributed the same number of divisions in 1958 as in 1961, France
would have 2 divisions, the UK would have 3, and Belgium and the Netherlands would have two
each.\textsuperscript{332} This would yield a total of 20 and two-thirds divisions in 1958. There are 229,000 troops
in the US divisions in Germany,\textsuperscript{333} and using an estimate of the number of troops per division in
other NATO countries derived from \textit{The Military Balance}, there would be 663,760 troops in
SACEUR’s command facing the Warsaw Pact forces.

While this indicates superiority for the Soviet Union, this is less than a 2:1 advantage in
troops, which is not overwhelming. However, the Soviet advantage in the number of main battle
tanks was larger, and this is another metric that made American policymakers wary of engaging
in a conventional conflict in Europe. In the NIE’s, there is no estimate of tanks per armored
division or tanks per mechanized rifle division in the Soviet Army. \textit{The Military Balance, 1961}
estimates that there are 400 tanks per tank division and 250 tanks per mechanized rifle division
in the Soviet units in East Germany.\textsuperscript{334} Applying this estimate to all tank and mechanized rifle
division in the 107 line divisions facing NATO and adjusting for the smaller size of similar
divisions in Warsaw Pact allies,\textsuperscript{335} this yields a total estimate of 20,080 tanks available for war in
Europe.

The US forces in Europe contained 2 armored divisions and 3 armored brigades. West
German forces had 3 armored infantry divisions and 1 armored division. To round out the armor,
France had 1 armored division, the UK had 3, and the Belgian and Dutch divisions were

\begin{footnotesize}
\textsuperscript{332} Ibid, 10.
\textsuperscript{333} “Appraisal.” May 12, 1961, p. 3.
\textsuperscript{334} \textit{The Military Balance 1961}, 4.
\textsuperscript{335} Size of the divisions of Warsaw Pact allies comes from NIE 11-4-58, 64.
\end{footnotesize}
equipped with tanks. There is no reliable estimate of tanks per armored and armored infantry division in the US or any other NATO ally at the time. To compensate, I assume a lower “teeth-to-tail” ratio for NATO divisions than for Warsaw Pact divisions and then adjust for their larger size. This would come out to around 350 tanks per armored division in NATO and 200 per armored infantry. Taking the 3 American brigades as one division for counting purposes, counting the Belgian and Dutch divisions as armored infantry, this yields 2800 tanks across 8 fully armored divisions and 1400 tanks in the 7 armored infantry divisions for an estimate of 4200 tanks. This is about 5 times less tanks than the Soviet Union, without much compensation for relative quality or technological advancement. Thus, when it comes to armor, the Soviets did have a clear and recognizable advantage.

The Soviets also had a quantitative advantage in terms of air power, though to a lesser degree than they had in armor. In Eastern Europe, the Soviets had deployed 810 day fighters, 145 all-weather fighters, 90 ground attack fighters, and 230 light bombers for a total of 1275 aircraft. In the Western and Northwestern parts of the USSR, the Soviets stationed a total of 5525 combat aircraft (3250 day fighters, 680 all-weather fighters, 75 ground attack, and 1520 light bombers). Warsaw Pact allies contributed 3070 more aircraft for a total of 9870 combat aircraft. Against this array of combat aircraft, the United States had 1054 tactical combat aircraft either stationed in Europe or assigned to NATO. The other NATO allies had close to 1700 tactical aircraft at the time. This yields a total of 2754 aircraft.

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337 NIE 11-4-58, 65.
338 OSD History, 505.
339 Ibid, if saying that a little less than half of their aircraft squadrons were tactical.
In transport aircraft, the Soviets held a quantitative advantage, with 1960 to the United States’ 709. But the United States held a qualitative advantage in this area, with over 50 percent of its transport force consisting of “heavy” or “medium” transporters such as the C-124 and the C-130. The US also had more tanker aircraft for in-flight refueling in the form of over 200 KC-135 to around 100 heavy Bison bombers that the Soviets could use as tankers. Of the 1860 transport aircraft in the Soviet military, 1670 were light and only 190 were medium. In terms of tactical air power, the Soviets held superiority, though not to an overwhelming degree, and in terms of tanker/transport aircraft for deploying force over long distances, the countervailing quantitative and qualitative advantages meant that the balance was close to even.

In terms of surface naval power, the United States held an advantage. There were 133 surface combatants in the 2nd (Atlantic) and 6th (Mediterranean) fleets in 1958 compared to 120 in the Baltic, Northern, and Black Sea fleets in the Soviet Navy. In addition, the United States included aircraft carriers in its fleets while the Soviet Union’s did not, giving the US an extra capability that the Soviets did not possess. The undersea balance was close to even. The Soviet Union held a large quantitative edge, possessing 293 submarines to the United States’ 73. However, more of the American submarines were nuclear-powered than the Soviet submarines, and they tended to be quieter than Soviet submarines. This “passive acoustic advantage” gave the US better anti-submarine warfare capability (ASW) than the USSR. This suggests that the

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340 For the Soviet estimate, see NIE 11-4-58, 65.


342 NIE 11-4-58, 73.

343 NIE 11-4-58, 73-74 and the US estimate is the same one as the 1961 count in Appraisal.

Soviet advantage in undersea naval power is smaller than the gap in submarine number would indicate.

Overall, in 1958, the Soviet Union possessed a conventional advantage in Central Europe, but this advantage was not overwhelming. This is seen in the values of the US for conventional variety in 1958. Counting only equipment, the USSR would have a value of 0.7366. With a small correction for better American quality in surface combatants and transport aircraft, that value falls to 0.5835, and large correction for improved quality yields a variety index of 0.5381. The degree of superiority for the Soviet Union was probably larger than these values indicate. To soothe West German fears about the consequences of a war with the Soviet Union, NATO committed to a conventional defense “as far forward as possible.” This forward defense strategy may not have been feasible with existing NATO forces in 1958. Alliance politics therefore constrained the conventional defense options that could be implemented during the Berlin Crisis. I explain how this affected the overall balance in conventional options below. Overall, this conventional variety balance indicates, in a vacuum, that the Soviet Union is more likely to prevail in the First Berlin Crisis in 1958-59. As I explain later in the case, that may have been a reason why Khrushchev felt his ultimatum strategy would be successful and could explain the onset of the Berlin Crises.

American intelligence estimates indicate that the Soviets still held an advantage in conventional variety in 1961, though it decreased somewhat from 1958 levels. This estimate was

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345 In the quantitative chapter, I labeled a “small” correction for better quality as one where the “quality score” is coded as 0.75 for the superior side and 0.25 for the inferior side. A “large” correction is 1 for the superior side and 0 for the inferior side.


due to a combination of a reduction in Soviet defense spending in 1959 and 1960, better measurement of actual Soviet military strength, and the growth of West German conventional military power within NATO. On December 8, 1959, Khrushchev announced to the Presidium that the Soviet Union “should now undertake a further reduction of armaments in our country,” and “that one could cut by perhaps a million or a million and a half [troops].”\textsuperscript{348} The CC Plenum approved this recommendation for reduction in the armed forces on December 26.\textsuperscript{349} The \textit{Military Balance, 1961} reports that the planned reduction was to go from 3.62 million soldiers in the Soviet military to 2.42 million. By the middle of 1961, when the suspension of this reduction policy was announced due to renewed tension over Berlin, around 600,000 troops had been demobilized such that the Soviet military force numbered close to 3 million soldiers.\textsuperscript{350} NIE 11-4-61 documented the subsequent reduction in the total number of line divisions from 175 in 1958 to 147 in 1961.\textsuperscript{351}

The estimated gap between Soviet and American military power in Europe decreased between 1958 and 1961 partly due to better measurement of Soviet military strength. American intelligence experts knew that Soviet divisions were maintained at three different degrees of readiness, with full-strength, medium-strength, and so-called “cadre” or “ghost” divisions.\textsuperscript{352}

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{348} “Khrushchev Memorandum to the CC CPSU Presidium,” December 08, 1959. History and Public Policy Program Digital Archive, Center for the Storage of Contemporary Documentation (TsKhSD), f. 2, op. 1, d. 416, ll. 1-11; translation by Vladislav M. Zubok. “Nikita Khrushchev Collection.” Wilson Center Digital Archive. \texttt{http://digitalarchive.wilsoncenter.org/document/117083}
  \item \textsuperscript{350} \textit{The Military Balance 1961}, 2.
  \item \textsuperscript{351} NIE 11-4-61, 28.
  \item \textsuperscript{352} Enthoven and Smith, 2005, 136.
\end{itemize}
\end{footnotesize}
first two were considered “combat-ready,” with an average of 70-80% of its official strength in manpower and equipment, and the last type considered “low-strength,” with only about 30% of its official strength. NIE 11-4-61 differentiated between these categories and found that 90 Soviet divisions were combat-ready and 57 were low-strength.\footnote{\textsuperscript{353} NIE 11-4-61, 28.} This presented a picture of a less imposing force than the one that was depicted in 1958. In the Western USSR, the number of divisions was reduced from 56 to 49, and 21 of those were low strength. With this reduction in troops and accounting for cadre divisions, US intelligence estimated 967,900 Soviet and Warsaw Pact troops ready for war in Central Europe, a 20 percent decrease in manpower.\footnote{\textsuperscript{354} Estimates of Soviet forces in Eastern Europe and satellite forces for Czechoslovakia, Poland, Hungary, and East Germany are found in NIE 11-4-61, 21, 29.}

NATO conventional military strength increased between 1958 and 1961 due to the growth of the West German armed forces. In 1958, West Germany contributed 5 and two-thirds divisions to SACEUR. By 1961, they contributed 8, with a ninth coming soon.\footnote{\textsuperscript{355} The Military Balance 1961, 10.} This growth included one more armored infantry and one more armored division, representing a total increase of 65,240 troops and 550 tanks to NATO’s strength in Central Europe.\footnote{\textsuperscript{356} Using estimates of average West German troops per division at 28,000 and 350 tanks per NATO armored division and 200 per NATO armored infantry division.} For a war in Germany, NATO possessed an estimated 729,000 troops and 4750 main battle tanks. In terms of troops, NATO now had 75% of the strength of the Warsaw Pact, compared to 54% three years earlier.

The improvement in tank numbers for NATO did not, however, translate into a more favorable armor balance in 1961. This was because the Soviet Union put more tank divisions into Eastern Europe between 1958 and 1961 as part of its reorganization of its armed forces. The Soviet Union had 14 tank divisions in Eastern Europe, all at full strength. It maintained 8 tank
divisions in the Western USSR, also at full strength, and it had one tank division in the
Northwest MD at low strength.\textsuperscript{357} The Soviets did not make any reductions to its armor and
made all of it available for a war in Central Europe in 1961. Coupled with the number of tanks in
the military forces of its Eastern European allies, NATO would have had to face approximately
22,258 main battle tanks. The Soviet advantage in tanks remained stable over the three years of
the crisis.

Soviet reductions also hit tactical air forces, transport air, and surface combatants.
Tactical combat aircraft in the Warsaw Pact decreased from 9870 in 1958 to 8020 in 1961. The
Soviet Union had 1805 transport aircraft in 1958 compared to 1960 in 1958.\textsuperscript{358} The biggest cut
came in surface ships, with only 93 in 1961 across the Baltic, Northern, and Black Sea fleets
compared to 120 three years earlier.\textsuperscript{359} Soviet submarine forces remained about the same, with
274 subs in 1961.\textsuperscript{360} At the same time, NATO’s tactical air forces improved slightly to around
3000.\textsuperscript{361} The transport air stayed about the same at 700.\textsuperscript{362} American surface naval strength
increased slightly to 148 surface combatants, and submarines stayed the same at 73.\textsuperscript{363} In terms
of tactical air forces, transport air, and surface naval strength, the United States and its allies
improved in relative terms vis-à-vis the Soviet Union and its allies, while the submarine balance
remained stable.

\textsuperscript{357} NIE 11-4-61, 21.
\textsuperscript{358} Ibid, 32 for transport air and Ibid, 33 for tactical air forces and their deployment.
\textsuperscript{359} Ibid, 38.
\textsuperscript{360} Ibid, 39.
\textsuperscript{361} The Military Balance 1961, 10.
\textsuperscript{362} Ibid, 20.
\textsuperscript{363} “Appraisal.” May 12, 1961, 19.
Overall, the Soviet Union and its allies held an advantage in conventional variety over the United States and its allies in Central Europe. This advantage was not overwhelming, and it decreased over the course of the crisis. The variety index for the Soviet Union in 1961 was 0.6693 without a correction for quality, 0.5469 with a small correction for quality, and 0.5014 with a large correction for relative quality. This sounds like an even balance, but it is important to emphasize that the Soviets had an advantage in Berlin and the area immediately surrounding it. East German territory surrounded West Berlin, and NATO forces would have had to fight 100 miles into Warsaw Pact territory to defend the NATO garrison in the city. France, the UK, and the US each stationed a brigade in West Berlin to make a total of around 12,000 NATO troops. There was not much these forces could do against a sudden Warsaw Pact assault. This gave rise to Schelling’s famous comment that their sole purpose was to “die heroically.”

However, in response to a low-intensity fait accompli attempt, the United States could respond with a medium-sized conventional conflict limited to Central Europe and involving 200,000-300,000 troops. In this conflict, the US and its NATO allies could have forced a stalemate, prompting the Soviet Union to escalate to a large-scale conventional war by deploying forces from its homeland. In this war, the Soviets would be able to defeat the US and its NATO allies conventionally. Against a determined Soviet attack, the United States would have to use nuclear weapons to prevent a conventional defeat. The United States deterrent in Western Europe ultimately rested on the threat to use nuclear weapons, but it still retained a plausible conventional option.

364 France’s brigade was “small” according to The Military Balance 1961, 14.

365 Schelling, 2008, 47.
How did American military leaders view the conventional balance during the Berlin Crisis? American military leaders were pessimistic about a low-intensity and a high-intensity conflict, but they evinced cautious optimism about a conflict of intermediate size. Regarding a low-level conventional conflict around Berlin, the Joint Chiefs noted in a report in March 1959 to Secretary of Defense Neil McElroy their agreement with an SNIE analysis that should NATO send a division-sized force into East Germany, “the Soviets would commit the forces they considered necessary to defeat and drive out the Allied units in a minimum of time.”\textsuperscript{366} In a memorandum to President Kennedy, Secretary of Defense Robert McNamara in 1961 implied that a low-level conflict was a losing fight, saying that any conventional use of force in Germany would “require more than two divisions.”\textsuperscript{367} In a medium-sized conflict, military officials expressed less pessimism. The Joint Chiefs in April 1961 assessed that an “intermediate level of non-nuclear ground forces to attempt to restore ground access” could cause a stalemate which would produce “a test of will offering both the United States and the Soviets a wide range of alternatives.”\textsuperscript{368} In the air, comments on National Security Action Memorandum (NSAM) 109 said that “opposing strengths probably be roughly comparable. Military success locally is not impossible.”\textsuperscript{369} At sea, the US and NATO could “exploit pronounced Allied naval superiority” to


impose a blockade of the Soviet Union. This cautious optimism faded when military leaders considered escalation to a high-intensity conventional war. In a high-intensity conflict, superior Soviet numbers and reinforcement capability gave American leaders a dim view of their chances in an all-out conventional conflict. If the Soviets “used such force which clearly lied in their capabilities to apply,” which included their forces in the European portion of the USSR, then “the pattern of events could prove disastrous for the allies.”

From an estimate of the conventional balance in 1958 and 1961 and the statements of American military officials, it appears that the United States lacked options for low- and high-intensity conflict but did possess a conventional option in the form of an intermediate-sized conflict in Central Europe. If the US did have a conventional option in Europe in the form of a limited war confined to Central Europe, then why were American policymakers so pessimistic about the conventional balance in Europe? One reason was that the prospects for keeping a war at the “intermediate” level were slim. It would require the Soviet Union to not escalate and use its advantage at higher levels on the conventional escalation ladder, and that assumption could not be the basis for contingency planning. American military planners had to assume that the Soviets would fight at the conventional level with all available forces. This assumption is implied by the statement in NSC 5727 that “if the USSR should attack Berlin with its own

370 Ibid.
forces, the United States will have to act on the assumption that general war is imminent." If the Soviet Union used its 175 total divisions against NATO’s 25, then a conventional defense would fail.

This brings up another reason why the estimates of the military balance were pessimistic during the late 1950’s and 1960’s: US military analysts routinely mismeasured Soviet military power. This was due to a lack of information and fallacious thinking. Alain Enthoven and K. Wayne Smith point out that the 175-division figure was inconsistent with aggregate economic data, total manpower levels, and military budget estimates for Soviet forces. The upshot of these various “paradoxes” was that the Soviets did indeed have 175 divisions (or close to it), but there was far less manpower per division in the Soviet military than in NATO forces. Many military leaders, especially in the 1958-1961 period, treated the Soviet and NATO divisions as equivalent, causing them to have a more pessimistic outlook on the conventional balance than was warranted. I use the information available to Enthoven, Smith, and other “Whiz Kids” in McNamara’s Defense Department and come to a similar conclusion that they did: NATO was not hopelessly outgunned in Europe.

In sum, the balance in conventional options was such that the Soviet Union could win a low-intensity conflict involving forces in Berlin and the surrounding area. In response, NATO could start a conflict of intermediate size that was confined to Central Europe and involved less than 300,000 troops and force a stalemate. This would force the Soviet Union to escalate to a large-scale conventional war in order to attain victory in the conflict. The Soviet Union had an

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374 Enthoven and Smith, 1971, 132-142.
advantage in this type of conflict. In response, the United States would have to use nuclear weapons first or back down. American military leaders recognized this and assessed that any defense of West Berlin would rest on the credibility of US nuclear threats. Was the American threat of nuclear escalation credible in a war over West Berlin?

The Stakes Involved in the Crisis

Whether the Soviets would press their conventional advantage in a high-intensity conflict or realize that they could not use this advantage depended on how seriously they regarded US nuclear threats. The credibility of the US nuclear deterrent, in turn, rested on the stakes involved in the crisis for the United States. For both the United States and the Soviet Union, the status of West Berlin was a core interest, which should cause the Soviet Union to have greater fear of the chance of nuclear escalation, attenuating the effect of the Soviets’ advantage in conventional options in the crisis.

The issue of Berlin engaged major foreign policy goals for both countries. The fate of Berlin connected to the future direction of important allies in Europe for both countries and therefore control over the European continent. Berlin was therefore related to the defense of a “strategically vital area,” fulfilling the third criterion of a core interest. Usually, the fate of one city is not crucial to keeping an alliance together, but in the unique case of West Berlin, this was true. If the US abandoned West Berlin, West Germany may have left the Western orbit, decided to become neutral, and sought reunification. If East Germany collapsed due to the continued outflow of refugees through the open border in Berlin, that would do great damage to either superpower’s security position. From the perspective of American and Soviet policymakers, Berlin may have been small in size, but it was integral to their Cold War efforts. This made it a
core interest despite being a small piece of territory not directly threatening the survival or territorial integrity of the Soviet Union or the United States.

US Objectives

The United States aimed to maintain its garrison and access rights for its troops in West Berlin (as well as that of other NATO forces). It wanted to make sure West Berlin remained a part of West Germany and continue its policy of non-recognition of East Germany. The success of the United States’ foreign policy in Western Europe hinged on keeping West Germany in the Western orbit.

To understand why that is the case, it is necessary to understand how the United States became committed to the defense of West Berlin and how West Germany became a member of NATO. At the end of World War II, the Soviet Union, the United Kingdom, and the United States agreed to a plan where Germany was divided into four sectors: each of the three countries would control one sector and France would control the fourth. The city of Berlin would be similarly divided, with the Soviets controlling the eastern half of the city and the US, the UK, and France controlling their own sectors in the western half.375 In 1947, the four powers agreed to set up regional governments for their zones, and the Soviets worked to bring communists to power in their sector. Fearing the encroachment of communist influence upon their zones, the French, the British, and the Americans started consolidating their zones into one entity, first Bizonia with the British and Americans combining their zones and then Trizonia when the French joined theirs.

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The Soviets were incensed at Western efforts to combine their zones into one entity. Andrei Smirnov, the head of the European department in the Soviet Foreign Ministry, told the head of the Foreign Ministry, Vyacheslav Molotov, that allied efforts were “a matter not of propaganda or political blackmail but a real threat of the political and economic division of Germany and the inclusion of western Germany with all its resources in a western bloc created by the United States.” This fear was not far off the mark. In June 1948, the French, the British, and the Americans drew up plans to create a separate West Germany. To stabilize the economy within their zones of control, they extended Marshall Aid funding and established a new currency, the Deutsche Mark. Angered over this development and wanting to coerce the US and its allies into halting its policy of consolidating their occupation zones, Soviet Premier Joseph Stalin blockaded West Berlin, which lay inside the Soviet sector. The Americans, British, and French responded with an airlift to supply the city, which was successful in breaking the blockade and convincing Soviet leaders to lift it in May 1949. The First Berlin Crisis accelerated the efforts of the allied powers to forge their zones into an independent political entity. Just as important, it prompted the United States to tie itself more deeply to Europe’s defense, with NATO being established on April 4, 1949, one month before the blockade was lifted. Thus, the borders and the fate of a divided Germany and a divided Berlin emerged as flashpoints in the earliest days of the Cold War.

The consolidation of Soviet influence in Eastern Europe, the formation of NATO, and the formation of West Germany created a conundrum for US foreign policy. The United States had

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to contain the Soviet Union, but to do so, they would have to resuscitate West German military strength. After NATO was first established, the idea of West German rearmament was rejected, the memories of WWII being too fresh. The outbreak of the Korean War changed that policy and brought the vulnerability of Western Europe to Soviet aggression into sharp relief.\textsuperscript{379} By 1953, NSC 160/1 argued that “US security interests require that the continent of Europe be made as impregnable as possible against Soviet attack or subversion. This requires participation in Western defense…of West Germany.”\textsuperscript{380} Yet, this would frighten France, Great Britain, and other NATO allies.\textsuperscript{381} To use West Germany as a counterbalance to the Soviet Union, the United States needed to make West Germany a member of NATO, both to direct its military and economic power against the Soviets and assuage European anxieties about West Germany’s rearmament. If the United States failed, and West Germany became neutral, the whole project of building European cohesion in an effort to balance against the Soviet Union would crumble. The following quotation references American objections to a neutral, unified Germany, but the same could have been said about a neutral West Germany:

“A ‘neutralized’, unified Germany… would deny Germany strength to the West, wreck present and prospective plans for building augmented European strength through union, and open up the whole of Germany to Soviet intrigue and manipulation which would aim at the absorption of Germany into the Soviet bloc.”\textsuperscript{382}

Keeping West Germany tied to the American-led European security framework was thus a pivotal element of the policy of containment.


\textsuperscript{382} NSC 160/1.
If the United States decided to let East Germans control access to Berlin, that would be tantamount to recognition of East Germany, causing West German leaders to think that the path to reunification ran through a neutral course rather than one tied to the West. NSC 5803 recognized that “the West Germans themselves may eventually accept a neutralized status outside NATO in order to achieve unification.”

To prevent this, the United States had to convince West Germany that its best chance for reunification was through closer ties to the West. As an earlier NSC paper on Germany noted: “…to reduce the likelihood of unilateral West German efforts to solve the reunification problem, the West must convince the West Germans that it will seek, as and when possible, to achieve unification.”

To make sure that West Germany stayed within the Western orbit, US officials had to stress reunification on Western terms in public, though internally they knew that the Soviets would “never agree to a Germany united, armed, and free to associate with anyone (including the West).”

To work with East German officials on access rights would start a ride down a “slippery slope” towards recognition of East Germany, and with that an official repudiation of hopes for reunification. As Secretary of State John Foster Dulles remarked to himself, to do this “would...
dishearten and dismay the population of Berlin and, I would assume, the large majority of the people in the Federal Republic. It would expose the lack of willpower in the Western alliance and encourage further pressure.” To go even further and retreat from West Berlin or agree to make it a “free city” would cause West Germany to abandon the West entirely, with dire consequences for the future of NATO. In William Burr’s words, this made Berlin a “superdomino” in the eyes of American foreign policymakers, especially President Eisenhower; if it fell, so would the rest of Europe.

The NATO garrison in West Berlin also served as an outpost of the capitalist system in the middle of communist territory, and its comparative success gave the United States a large propaganda victory. David Coleman writes how Eisenhower, Kennedy, and John Foster Dulles often used terms such as “showplace of freedom,” “beacon of hope,” and “window to the West” when describing West Berlin. The city thus came to have a “symbolic” value as a representation of Western culture that outstripped its intrinsic importance. In short, the success of US foreign policy in Western Europe was linked to the ability to keep troops in West Berlin, to do so without going through East German officials, and to keep West Berlin a part of West Germany. To compromise on those issues would jeopardize its solution to the German problem and undermine its containment of the Soviet Union.

Defending West Berlin was therefore a core interest. This is not to say that it was vital. Favorable geography and a large nuclear arsenal kept the United States homeland secure from Soviet aggression. The United States could lose its position in West Berlin, have West Germany

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turn neutral, and see greater tension among Western European nations and still be secure from attack and have a strong economy, albeit with more instability and a greater opportunity for Soviet influence in a core region of the world. Thus, the defense of West Berlin was important, but the failure to do so did not immediately imperil the survival of the United States. That West Berlin did not constitute a vital interest meant that there was a credibility problem with threatening nuclear war over the city. It was a problem that would go on to prove vexing to American policymakers throughout the late 1950’s and early 1960’s, giving them doubt about whether they themselves would push the nuclear button to protect West Berlin. But American interests were invested enough that in any large-scale conventional conflict, the risk of nuclear escalation was high, even if it was not automatic.

**Soviet Objectives**

It is more difficult to pin down Soviet objectives during the crisis, as we do not have as much evidence as we would like on Soviet decision-making during the Cold War. Nevertheless, there is still ample information from which to estimate what Soviet objectives in the crisis were and how Khrushchev reacted to the military balance. One thing that stands out is that the Soviet Union had a wider range of goals in the Berlin Crisis than the United States. Its first goal related directly to West Berlin. It wanted to kick the armed forces of the Western powers out of West Berlin and make it into a “free city.” This was the core demand in its two ultimatums in 1958 and 1961. The Soviet Union’s second goal was to stabilize its East German ally, which was experiencing a “brain drain” of its younger, more highly educated citizens to West Germany. One way it sought to do this was through forcing the Western powers to recognize East Germany as a country by having them work with East German officials on access to West Berlin. This was implicitly suggested in the two ultimatums. Finally, the Soviet Union aimed to prevent the
proliferation of nuclear weapons to West Germany, and it was using bargaining over Berlin as a lever to get the United States to work with it on that issue. For the Soviets, these were core issues, though they were not vital, meaning that it had a similar stake in the outcome of the crisis as the United States.

The goal of removing Western troops from West Berlin and turning the city into a “free city” was the Soviet Union’s most ambitious and most prominent goal. Khrushchev regarded West Berlin, with its Western troops and attraction for East German refugees, as a “bone in my throat,” and by the autumn of 1958 he ventured a bold strategy that would eliminate the problem. Khrushchev announced the first part of this strategy on November 10 in a speech at the Soviet sports palace to a Soviet-Polish friendship rally. He outlined a plan to hand over control of access to East Berlin to East German officials, and it would be up to the East Germans to determine who and what is allowed into West Berlin. When Polish leader Wladyslaw Gomulka heard of Khrushchev’s plan before the speech, he understood that Khrushchev’s goal was to “liquidate the Western part of Berlin.”

Handing over the access rights to East Germans would force a standoff with NATO troops, one that the Soviets would meet with conventional force of their own, and that would force the United States to back down due to the fear of nuclear war.

With Western troops out of the city, the second part of the strategy aimed to create a new status for West Berlin as a “free city” detached from NATO and West Germany. This idea was developed by Anastas Mikoyan as a concession to the Western desire for a non-Communist West Berlin, and Khrushchev believed it was a “serious concession” to Western interests. The

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391 Ibid, 199.

Soviet Union put these demands into an ultimatum sent on November 27 to the United States, United Kingdom, and France to sign a peace treaty with the two Germanies in six months or the Soviet Union would sign their own treaty with East Germany. Soviet officials hoped that under the pressure of an ultimatum, the United States and its allies would choose to abandon the desires of West Germany and agree to the free city and East German access proposals. By failing to stand up for its West German ally, Khrushchev hoped that a successful ultimatum would decouple the FRG from NATO. Coercing the Western powers into removing their troops and making West Berlin a free city was ambitious, if not foolhardy. Petr Lunàk points out that “Khrushchev’s aims, as outlined in the ultimatum, went beyond the bounds of any conceivable compromise.” Despite its loftiness, the Soviet demands represent a firm goal of changing the status quo in Berlin to be more in line with Soviet interests.

The Soviet Union wanted to accomplish three other goals with the challenge over Berlin, either on their own or as a consequence of changing the status of West Berlin. One of these goals was to stabilize East Germany. The rapid growth in the economic power of the FRG threatened to cause the GDR to collapse. Vladislav Zubok notes that “the early signs of ‘economic miracle’ in the FRG produced a panicky conclusion…the FRG could swallow the GDR.” This is because the widening disparity in living standards between East and West Germany was causing large numbers of young, intellectual, and professional workers to flee to the West through the open border in Berlin. If this continued for too long, Soviet leaders feared that the GDR would

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394 Lunàk, 2003, 10.

be absorbed into the FRG through “conquest without war” via economic strangulation.\textsuperscript{396} By the mid-1950’s, it was clear that to stabilize its East German ally, Soviet leaders had to solve the open door problem in West Berlin.

Vojtech Mastny puts the problem faced by Khrushchev in obvious terms: “Any Soviet leader, however, had to be concerned about the political and economic impact of West Germany’s thriving democracy on the stability of the artificial East German state. Its leader, Walter Ulbricht, assiduously cultivated Soviet resentment of the disruptive influence of West Berlin, surrounded by East German territory, and clamored for the elimination of the enclave.”\textsuperscript{397} Khrushchev chose to solve the issue by demanding a change in the status of West Berlin and forcing the Western powers to recognize East Germany. If West Berlin was a free city detached from West Germany, it could no longer serve as an escape valve from communist rule. Forcing NATO powers to work with East Germany on access to the city would give East Germany a degree of international recognition that would bolster its domestic legitimacy. Zubok writes that one of the main effects of the November 1958 ultimatum was that it “gave decisive support to Ulbricht’s regime in the GDR.”\textsuperscript{398} Thus, one of the Soviet Union’s primary goals in the crisis was to stabilize the communist regime in East Germany.

Related to the complaint about Western troops in West Berlin was Khrushchev’s grumble that it was a “nest of spies” for the West. Khrushchev repeatedly used this phrase when describing West Berlin. Many people at the time thought it was some sort of joke, but Khrushchev was right to use that term due to the number of intelligence agents stationed in West

\textsuperscript{396} Zubok, 1993, 4.


\textsuperscript{398} Zubok, 1993, 9.
Berlin. Blocking their access to East Berlin, and by extension, East Germany, would hinder these agents’ efforts in collecting intelligence on the Soviet bloc.

The final goal that the Soviet Union hoped to accomplish was the prevention of the spread of nuclear weapons to West Germany. Indeed, this goal was so prominent in Soviet communications and statements that Marc Trachtenberg argues that “the German nuclear question lay at the heart of Soviet policy during the Berlin Crisis.” Khrushchev wanted above all else to convince the United States to not let West Germany acquire nuclear weapons, and he “decided to put press on the western powers where they were most vulnerable…Berlin.” Soviet leaders had good reason to be worried about this in the fall of 1958. In January of that year, the Bundestag passed a law allowing the Bundeswehr to acquire nuclear weapons. In a meeting with Mikoyan in April, Adenauer said that West Germany planned to buy the Matador missile, which was capable of carrying nuclear warheads, from the United States. As Trachtenberg put it, if the Soviets were scared of a West German nuclear capability, “they were not simply being paranoid.” That this was an impetus behind the initiation of the Berlin Crisis is clear from a Presidium meeting on November 6, four days before the issuing of the first ultimatum, when Khrushchev stated flatly that the United States “attracted Germany into NATO, they are giving her atomic weapons…Is it not the time to begin rejecting the Potsdam

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402 Fursenko and Naftali, 2006, 188.

403 Fursenko and Naftali, 2006, 189.

404 Trachtenberg, 1999, 255.
With nuclear weapons, Soviet leaders feared that West Germany would undertake an economic and military offensive against the GDR. This could be the opening salvo of a larger campaign against the Soviet bloc. Thus, Soviet Ambassador to East Germany Andrei Smirnov told Ulbricht on October 5 that a key goal of Soviet foreign policy was “to keep putting a braking influence on the formation of the Bundeswehr.”

Even if stopping the spread of nuclear weapons to West Germany was not the overarching goal of the Berlin Crisis, it was at least as important as changing the status of West Berlin and shoring up East Germany. In fact, all three goals were interwoven together in Khrushchev’s mind. Changing the status of West Berlin would provide more stability to East Germany. Preventing nuclear proliferation to West Germany would reduce the military threat to the GDR. Providing a solution to the emigration problem for East Germany would make living with a divided Berlin more tolerable. Despite their interconnectedness, all three goals can be treated as distinct. I will measure the degree of Soviet success in the crisis according to these three aims, knowing that success or failure in one can lead to success or failure in another.

Finally, the stakes involved in accomplishing these goals were central to the Soviet Union’s Cold War foreign policy, but they were not vital. Due to its large military force and nuclear weapons, it would be secure from a US or European attack. Nevertheless, an East German collapse, which could happen without any Soviet challenge on the German issue, would have sent shockwaves through the rest of Soviet bloc, sowing discord within the Warsaw Pact. The Soviet Union therefore had similar stakes involved in the crisis as the United States.

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405 Fursenko and Naftali, 2006, 195.
Predictions and Outcome

What would conventional options theory predict about the outcome of the crisis given the value of the independent variables? The Soviet Union possessed an advantage in conventional options during the Berlin Crises. The Soviet Union could win a low-level conflict involving forces in Berlin and the area immediately surrounding it. The United States and its NATO allies could respond with a medium-sized conventional conflict confined to forces in Central Europe, which would likely result in a stalemate. In response, the Soviets could escalate to a large-scale conflict that it would likely win. The Soviet Union’s advantage in conventional options was such that it could put the United States into a resolve-capability gap by escalating to a large-scale conflict in Western Europe. In this type of conflict, the US would have to choose between backing down or escalating to nuclear use.

For both sides, the Berlin Crisis engaged core interests, making resolve high. In any large-scale conflict, the credibility of threats to escalate to the nuclear level were high, which should attenuate the effect of an advantage in conventional options. According to conventional options theory, the Soviet Union should realize in both crises that it could not use its conventional advantage in Europe and back off of its coercive threats. This outcome, by keeping the status of West Berlin intact, would benefit the Americans more than the Soviets. Conventional options theory would say that the combination of an option for a medium-sized conventional conflict plus the high stakes involved in the Berlin Crisis should cause the United States to maintain the status of West Berlin. Of course, the Soviets dropped their ultimatums in both crises. Did this constitute a successful outcome for the United States?

When it comes to changing the status of West Berlin, the Soviet Union failed to achieve its primary goal while the United States achieved theirs. West Berlin did not become a “free
city” under UN trusteeship with NATO forces out of the city. West Berlin remained a part of
West Germany and NATO troops continued to be garrisoned there. There was also little
movement towards the recognition of East Germany, another point of contention in the Berlin
Crises. The United States did offer compromises that would go towards de facto recognition of
the GDR, but the Soviet Union never accepted them as part of a deal to end the crisis. Plus, even
if they had, they never would have come close to constituting the de jure recognition that a peace
treaty with the GDR would have conferred.

On the goal of stopping East German emigration through Berlin, the Soviets were more
successful. The construction of the Berlin Wall staunched the flow of people to West Germany
and solved the “nest of spies” problem. However, it was an ignominious solution that not so
tacitly conceded the superiority of the Western economic and political system. One could
therefore regard the resort to the Berlin Wall as a net negative for the Soviets. Some, such as
Fred Kempe, argue that the Wall represents an American concession to the Soviets and
“Kennedy’s mishandling of the events surrounding Berlin in 1961.” This is a stretch.
American goals in the crisis never included the protection of travel rights for people living in
East Germany, and American officials accepted that the Soviets and East Germans could do as
they pleased on their side of Berlin. The United States, during both the Eisenhower and Kennedy
administrations, cared about the status of West Berlin, and the Berlin Wall did not threaten West
Berlin’s integrity. It thus did not harm the United States’ main goals in the crisis. The Wall did
help the Soviets achieve a major goal, but it did so in a way that was counterproductive.

Finally, West Germany did not acquire nuclear weapons during the crisis years, and the
Kennedy administration told Soviet officials that they were working to keep nuclear weapons out

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of the hands of West Germans. However, this nonproliferation success was only partial. First, it is not clear that an acquisition of an independent nuclear arsenal with American assistance was ever a serious possibility, even under Eisenhower.\textsuperscript{408} The Soviets were complaining about the nuclear sharing arrangements that the United States had established with the West German military, but dual key arrangements remained in place after the crisis and continue to do so to this day.\textsuperscript{409} Therefore, the statements from the Kennedy administration on nonproliferation are at most partial achievements of the goal of keeping West Germany non-nuclear.

For the United States, the overall outcome represents the achievement of its main goals. West Berlin remained intact as a part of West Germany, East Germany remained unrecognized, and the transatlantic alliance system held firm. For the Soviet Union, the crisis outcome failed to achieve any progress on one of its main goals: changing the status of West Berlin. It was a partial success on shoring up the stability of East Germany. While the refugee problem was solved via the Berlin Wall, the GDR remained unrecognized by the West and the Wall itself harmed the legitimacy of the Soviet political and economic system around the world. It was a partial success on West German nonproliferation, too. It received pledges from the Kennedy administration to not give West Germany independent control over nuclear weapons, but dual key arrangements remained in place. This outcome represents a better deal for the United States than the Soviet Union. This is why I code the outcome of this crisis as a US victory. As Richard Betts explains: “The American victory was far from clear and uncompromising, but in giving up the demand for a separate treaty and revocation of occupation rights in Berlin, the Soviets conceded more from

\textsuperscript{408} Betts, 1987, 109.

their opening position than did the Americans." Did this successful outcome come about through the mechanisms that conventional options theory says should operate in disputes over core interests?

**The Effects of Conventional Options in the Crisis**

Can conventional options theory explain this success for the United States? In the Eisenhower administration, I argue that it is difficult to explain events with reference to the theory. The Eisenhower administration was more pessimistic about the conventional balance than was warranted and relied on a threat of rapid nuclear escalation to keep the Soviets in check. However, Eisenhower was not inclined to compromise with the Soviets. This goes against the mechanism of conventional options theory, which says that states that place heavy reliance on nuclear threats should be induced to compromise. Plus, it is unclear that American conventional capabilities played any role in Khrushchev’s decision to drop his first ultimatum in 1959. In the second Berlin Crisis during the Kennedy administration, there is more evidence that conventional options theory can explain US success. US conventional preparations in the summer of 1961 impressed upon Khrushchev that he would have to escalate to a large-scale conventional war in order to get his way in Berlin via armed force. Judging that this carried too high a risk of nuclear war due to the stakes involved in the Berlin Crisis, he decided to drop his second ultimatum. This sequence of events lends more support to conventional options theory.

*The First Berlin Crisis and the Eisenhower Administration, 1958-1959*

The Eisenhower administration was more pessimistic about the conventional balance than it should have been given the balance in troops and equipment. This meant that President Eisenhower viewed the United States as much inferior to the Soviet Union in Europe. Consistent

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with conventional options theory, this caused the United States to resort to a strategy of rapid nuclear escalation to defend West Berlin. The United States would start with a conventional response to probe Soviet intentions, but once a certain threshold of conventional conflict was crossed, the United States would initiate nuclear war. This was because American military strategists and civilian policymakers thought that winning a conventional war in Europe against the Soviet Union, at any level of intensity, was an unlikely proposition.

During the Eisenhower administration, conventional forces would be used only to test Soviet intentions and then spark an incident that would make the Soviets seem like the aggressors. In the event that access to West Berlin was cut off, NATO would first send a platoon-sized probe down the Autobahn to see if Warsaw Pact forces fired upon it or resisted its progress by force. If that force was stopped, then NATO would send a force “not to exceed a reinforced division” to reopen ground access to West Berlin.\(^{411}\) If this division was met with significant Soviet resistance, this would trigger escalation to nuclear conflict, because it was presumed that the United States could not win if the war remained conventional. An NSC document on US policy on Berlin stated that policymakers within NATO would have to “recognize that Berlin is not militarily defensible and that if determined Soviet armed opposition should develop when US units attempt to force their way into or out of Berlin, no additional units would be committed, but resort would have to be made to general war.”\(^{412}\) US strategy for defending West Berlin thus relied on using troops as “tripwires” that would then instigate a


nuclear strike. Using a poker analogy, President Eisenhower expressed this policy as avoiding the slow escalation of white chips up to blue chips. Instead, the US should put the Soviets “on notice that our whole stack is in play.” Underlying this strategy of threatening rapid nuclear escalation was the belief that the Soviets were bluffing over Berlin and that they would back down once they saw how much risk the United States was willing to bear to protect the city.

Thus, the Eisenhower administration’s strategy for defending West Berlin was to rely on rapid escalation to nuclear force to deter a Soviet challenge. There was some vigorous debate between Eisenhower and the JCS on one side and civilian officials in the NSC on other over how rapid this nuclear escalation should be. General Nathan Twining, the Chairman of the Joint Chiefs of Staff envisioned an automatic escalation from the convoy to the division-sized force, complaining that if civilian policymakers did not commit to that course of action they would “go half way [sic] and then quit.” Dulles disagreed, as did McElroy, and they advocated for a “wait-and-see” approach that built in time for deliberation among NATO allies between the convoy and division stage. Preparations for general war would still be made prior to that decision, mostly as a way to convince the Soviet Union to negotiate over access to Berlin. If the convoy was stopped, then “the decision to apply further military pressures by the use of additional force would be subject to governmental decision.”

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414 Burr, 1994, 194.


civilian officials wanted to keep open a space for negotiation before the final decision for general war would have to be made. US decision-makers agreed to Dulles’ “double-barreled” approach in which they would prepare for general war while also consulting with allies on the use of force.

Nevertheless, everyone in the administration believed that the United States would have to threaten nuclear use early in a fight over Berlin. In a meeting where the timing and sequence of the conventional probes and resort to nuclear war were being discussed, Eisenhower remarked toward the end that “we do not have sufficient forces in Europe, six equivalent divisions [size of the US force in Germany] are not enough to do this job conventionally.”

The United States would have to use nuclear threats to defend its position in Berlin, and NSC 5803, an update to NSC 5404 that was approved a week after the meeting, kept the escalatory strategy intact. Officials within the Eisenhower administration believed that if the United States threatened nuclear use seriously enough, then the Soviet Union would be dissuaded from pursuing a challenge. In a conversation between Secretary Dulles and his aide on Berlin, the aide remarked that “if the Russians think we will use it, we won’t have to. The Sec. [Dulles] said that has been our whole policy all along.”

Mostly out of necessity and partly out of a belief in the effectiveness of nuclear deterrence, the United States enacted an escalatory strategy to defend its position in West Berlin. Or, as one of Daniel Ellsberg’s colleagues once described it to him: “we send in a series of increasingly larger probes. If they’re all stopped, we fire a [nuclear] warning

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417 “Memorandum of Conference with the President.” January 29, 1959.


shot. If that doesn’t work, we blow up the world.” The threat to carry out such reckless planning, it was believed, would deter the Soviets from challenging the US position in West Berlin.

Relying to such a large extent on nuclear escalation should have painted US decision-makers into a corner where they had to choose between over-escalation and backing down. It appears that Eisenhower and officials within his administration felt disadvantaged by being in this bargaining position. On November 30, three days after the Soviets sent their ultimatum, Eisenhower “expressed unhappiness” about the American political commitment to West Berlin and called it “wholly illogical” in relation to its military capabilities. Kara Stibora Fulcher writes that a combination of the necessity to defend West Berlin and the perceived lack of military means to defend it meant that “a diplomatic solution was the only acceptable possibility” to Western policymakers. In addition, Eisenhower administration officials in 1959 and 1960 felt frustrated by the lack of conventional options and felt that it constrained them from pressing their demands on the Soviets to the extent they wished. To this end, the United States, France, and Great Britain sat down to talks with the Soviet Union in Geneva in May 1959.

However, the maximum amount of concessions given by the United States, embodied in Secretary of State Christian Herter’s proposal to Soviet Foreign Minister Andrei Gromyko on

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423 Craig, Campbell. *Destroying the Village: Eisenhower and Thermonuclear War*. New York: Columbia University Press, 1998. Craig argues that Eisenhower relied to such a large extent on nuclear escalation in order to avoid war and force his aides to think of ways to compromise rather than escalate the crisis.
July 28, represented a continuation of the status quo and moved little in the direction of Soviet demands. It called for the maintenance of the NATO garrison in West Berlin (though at a reduced number), free movement throughout all of Berlin, and a couple of concessions to not station atomic weapons in Berlin or conduct any subversive activities from the city.\textsuperscript{424} This proposed settlement was not the type of compromise to resolve the crisis quickly that a country that felt itself so deficient in conventional options should give.

The adverse negotiating position therefore did not lead to the predicted concessions. The lack of concessions did not lead to an escalation of the conflict by the Soviet Union either, as they let the ultimatum deadline quietly lapse without any hint of signing a separate peace treaty with East Germany. There are a couple reasons for this. First, Khrushchev may have viewed negotiations with the Western powers to be itself a concession and diplomatic victory. Zubok argues that in 1959, Khrushchev “decided to use the Berlin Crisis as a stepping stone for his personal diplomacy.”\textsuperscript{425} On June 16, 1959, Khrushchev intimated to Ulbricht that the Geneva negotiations represented progress because it showed that “the Western powers were at least prepared to discuss the future status of Berlin and to have observers from East Germany in the room as they did so.”\textsuperscript{426} Khrushchev also earned a trip to the United States through his Berlin gambit, and he spoke of his personal diplomacy with Eisenhower in glowing terms, declaring that in President Eisenhower he had a counterpart who “sincerely wishes to see the end of the Cold War.”\textsuperscript{427} That Khrushchev dropped the ultimatum because he thought he had achieved an


\textsuperscript{425} Zubok, 1993, 9.

\textsuperscript{426} Fursenko and Naftali, 2006, 224.

\textsuperscript{427} Ibid, 241.
important diplomatic goal is somewhat consistent with conventional options theory: the side with more conventional options perceived themselves as accomplishing dispute success.

The second reason for dropping the ultimatum is that Khrushchev decided to pivot towards improving the consumer economy and raising the living standards of the Soviet people. To do this, Khrushchev decided to reduce military spending and shift the savings into spending on the civilian economy.\footnote{Fursenko and Naftali, 2006, 244-248.} If Khrushchev was going to reduce military spending, he needed to lower the temperature in the Cold War. I find this explanation to be more likely. As noted in the military balance section, the resulting cuts to the Soviet military were drastic, amounting to hundreds of thousands less troops and as much as 28 less divisions. In this atmosphere, Khrushchev likely calculated that it was better to put off superpower confrontation for the time being. This would also explain why he did not issue a new ultimatum after the failure of the Paris Summit in May 1960. The standoff caused by the first ultimatum therefore fizzled out due to a shift in Soviet foreign policy away from diplomatic pressure. The balance in conventional options may have had little to do with Khrushchev’s decision to drop the first ultimatum.

However, he dropped the ultimatum in May 1959 while leaving the wider issues about the status of Berlin and the future of Germany unresolved. By the end of Eisenhower’s term in office, the Berlin issue was very much alive.

*The Effect of the Conventional Balance in 1961*

President John Fitzgerald Kennedy was sworn in on January 20, 1961, and one of his first priorities was finding a better military strategy for defending Western Europe. This included developing conventional options for escalation in a crisis with the Soviet Union over Berlin. This effort culminated in a military strategy that came be to known as “Flexible Response.”
strategy called for multiple options for the use of force to be able to meet a Soviet challenge at any level of conflict.\textsuperscript{429} Officials within the Kennedy administration believed that an over-reliance on nuclear deterrence harmed US bargaining positions in situations of limited or strictly conventional Soviet aggression. The Kennedy administration thus proposed increasing conventional capabilities as a way to improve the American capability to meet limited Soviet aggression. The Basic National Security Policy (BNSP) for 1961, mirroring and then negating the language of BNSP’s during the Eisenhower administration, declared that against limited aggression, the US would “place main, but not sole, reliance on non-nuclear weapons”\textsuperscript{430} (italics mine). At the macro level, the Kennedy administration recognized the adverse negotiating position that inferior conventional options could put the United States in, and in response they decided to invest more in conventional capabilities rather than rely on immediate nuclear escalation.

Khrushchev’s second ultimatum accelerated the Kennedy administration’s search for conventional options. After the ultimatum on June 4, Kennedy was not as sure as Eisenhower that Khrushchev was bluffing over Berlin. Khrushchev’s sharp language in Vienna no doubt played a role in forming this improved assessment of Soviet resolve. Kennedy and his aides put a higher probability on the chance that Khrushchev was serious when he said the “USSR can delay


no longer” a peace treaty with East Germany. Soviets may want to fight over Berlin, and a threat of rapid nuclear escalation may not be credible enough to deter them. As a result, the United States would need to develop a credible conventional option. During a meeting at Hyannisport on July 8, Kennedy instructed his military advisor General Maxwell Taylor to tell McNamara to make recommendations for the use of force “on the assumption that main reliance will not be placed on the use of atomic weapons at the outset of a military engagement with the USSR in Europe.”

The search for conventional options led Kennedy to call for a $3.2 billion increase in defense spending to pay for greater conventional capabilities in his July 25 speech to Congress on Berlin and to contemplate a callup of six divisions of reservists. Secretary of Defense Robert McNamara, Acheson, and other high-ranking officials calculated that these increased conventional forces would add to the credibility of the nuclear deterrent by “creating a chain of plausible US response in which each stage would believably lead to the next higher chain of force.” The six-division mobilization, however, was never implemented with regards to Berlin


434 Ibid.
in 1961; it was not logistically feasible, and declaring a national emergency to call up six divisions worth of reservists would have caused too much unease domestically.435

Yet, the Kennedy administration did not need to send six divisions to Western Europe in order to have conventional option to use against the Soviets. American decision-makers started to realize the extent of their conventional options after a systematic appraisal of conventional forces conducted during the first few months of Kennedy’s presidency. In this review of conventional capabilities, McNamara concluded that in a conflict involving 250,000-300,000 American troops or less, the “non-nuclear forces of the United States are highly trained, ready and competent to accomplish tasks assigned to them by the basic war plans of the United States.”436 This means that the Soviets may not be able to win a medium-intensity conflict over Berlin with using only their capabilities in Eastern Europe, where they had 231,600 troops and the United States had 229,000.437 In order to bring about their preferred outcome in Berlin through force of arms, the Soviets would have to escalate to a large-scale conventional conflict using its reinforcements from the western USSR. Of course, past the threshold of 300,000 troops, nuclear use in a conflict over core interests is likely to occur and therefore threats to initiate nuclear war are more credible. In short, McNamara’s appraisal of conventional capabilities suggests that the United States and its NATO allies had a conventional option if they were willing to escalate to a medium-level conventional war over Berlin.


437 Soviet estimate from the number of divisions in Eastern Europe and troops per division at the highest level of combat readiness in NIE 11-4-61, pg. 28. American estimate from “Appraisal.” May 12, 1961, pg. 3.
There is evidence that US policymakers recognized this capability and felt that it gave them more bargaining power over the issue of Berlin. General Maxwell Taylor, a military advisor to President Kennedy and a former Chief of Staff of the Army, gave a briefing to Adenauer and his Defense Minister Josef Strauss during their visit in November 1961 about the military balance between NATO and the Warsaw Pact. In this briefing, he assessed that the balance of the forces currently stationed in Central Europe were close to even and that the Soviet Union could gain a quantitative advantage only through reinforcements from the western USSR. For example, because of the growth in the West German military, NATO and the Warsaw Pact now had “rough numerical equality in effective divisions currently deployed in the area critical to the Berlin situation. We can now count 21 effective NATO divisions in comparison with the 22 Soviet divisions in East Germany and Poland.” The Soviet Union would have been able to reinforce up to 55 divisions with NATO only being able to reinforce to around 40, but this numerical disadvantage was “far from an unfavorable ratio for the defender,” which NATO would be in a conflict in Central Europe. The same situation was true in the air, where the immediate local balance was even but the Soviets could bring reinforcements to have a quantitative edge in the first month of a conflict.

According to General Taylor, what were the strategic implications of this conventional balance? It was not that NATO could win a large-scale conventional war in Europe or that it

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441 Ibid, 14.
could thwart a minor incursion, but that NATO conventional capabilities were enough to mount a non-nuclear defense “in the middle ground.”\textsuperscript{442} If NATO could force the Soviet Union to escalate to a large-scale conventional conflict in order to win in Europe, then it could raise the risk of nuclear use from a possibility into a likelihood. Because a high-intensity conventional war in Europe carries so much risk of a nuclear war, the Soviet Union would be deterred from “responding with the full non-nuclear strength available to them.”\textsuperscript{443} Taylor summed up the conventional balance by saying that NATO was at a conventional disadvantage, but “only through major non-nuclear attack could the Soviets make serious inroads into NATO territory. There can be no doubt that such an attack would draw a nuclear response with fatal implications for the USSR.”\textsuperscript{444} A successful conventional defense in medium-intensity war could therefore persuade the Soviet Union to back down in a conflict, and the prospect a successful defense in the middle level of conflict could deter the Soviets from initiating an armed challenge at all. NATO had thus had some bargaining power as a result of its conventional capabilities.

This assessment of the balance is at odds with the statements of other policymakers and military leaders during this time. How does one explain the disconnect between General Taylor’s assessment and other calculations of the conventional balance in Europe? Pessimistic assessments of the conventional balance were based on the outcome of a conventional conflict in which the Soviet Union used its full conventional strength against NATO forces. In a report on May 5, 1961, the Joint Chiefs of Staff assessed that the success of armed attempts to reopen ground access to Berlin depended on whether “the Soviets would use force sufficient to crush the

\textsuperscript{442} Ibid, 17.

\textsuperscript{443} Ibid, 19.

\textsuperscript{444} Ibid, 21.
operation, which they are capable of doing if they so choose.”445 If the Soviets mobilized and deployed troops from their country, then they would prevail in a conventional conflict. If they did not, the outcome was more in doubt. The Warsaw Pact held a 3:2 advantage in forces in Germany, which is not overwhelming, and if the US took preparatory measures, then NATO’s deployed ground and air forces would have “approximate numerical parity with Soviet and East German forces deployed west of the USSR border.”446 Thus, despite overall conventional inferiority, American preparations to fight at the conventional level presented a serious military problem to the Soviets. In response to improved NATO conventional capabilities, the Soviet Union would have had to escalate to a large-scale ground conflict in order to get their way in Berlin and Germany.

The participation of NATO countries, especially West Germany, in the conventional fight for Berlin was critical to its success. This is why General Taylor’s military briefing was designed to convince the West Germans to buy in to the administration’s Flexible Response strategy and continue building up its conventional forces. One way to show that Flexible Response was a strategy that could enhance deterrence was by showing that NATO already had a usable conventional capability. In a meeting after the briefing, President Kennedy communicated to the West German leaders that he wanted them to still be confident in the United States’ commitment to use nuclear weapons as the ultimate deterrent in Europe.447 Does this discredit the analysis?

While the analysis had clear political motivations, this does not mean it had a false conclusion. NATO forces in Central Europe were indeed close to equal with Warsaw Pact forces in the region, and Soviet conventional superiority lay in its reinforcement capacity. For instance, it is both true that Chairman of the Joint Chiefs of Staff, Lyman Lemnitzer, wanted to “see 30 divisions on the central front” and that those divisions “would provide a difficult military problem for the Soviets.” Based on the estimates provided by American intelligence at the time, General Taylor’s analysis was sound, and it could serve a political purpose to convince the West Germans to support the administration’s Flexible Response strategy.

To sum up, the growth in NATO’s relative conventional capabilities gave it the ability to thwart Soviet attempts at changing the status quo in Berlin and Germany in a medium-intensity conflict. The Soviet Union would have to escalate to a high-intensity conventional conflict in order to get their way in central Europe through force of arms. This made American policymakers more confident in its bargaining power in the Berlin Crisis. That did not, however, have an effect on its bargaining position, as the United States continued to attempt to maintain the status quo without giving meaningful concessions to the Soviets. Did the United States and NATO’s conventional capabilities help convince the Soviet Union to drop its ultimatum in 1961?

The Conventional Balance and Soviet Calculations in 1961

When Kennedy came into office, Khrushchev believed that he had a negotiating partner with which he could embark on a Soviet-American rapprochement. During the presidential campaign, Khrushchev wondered aloud if Kennedy was another Roosevelt (FDR) and believed that Kennedy “had people around him prepared to reach some sort of compromise on West

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Intimations that Kennedy wanted to meet for talks with Khrushchev only confirmed this feeling. When Khrushchev heard from GRU agent Georgi Bolshakov, his back-channel diplomat to the Kennedy administration, in May that “President Kennedy wanted to talk about practically anything else but Berlin” in their upcoming summit, he grew disappointed and impatient. Khrushchev wanted a settlement on West Berlin, and if Kennedy was not ready to propose a deal, he would force one on the American president. Plus, after the Bay of Pigs fiasco in April, Khrushchev believed he was working with “a weakened American president, who would back off in a crisis situation.” Khrushchev decided that he would sign a unilateral peace treaty with East Germany by the end of the year, and he would use the Vienna Summit with Kennedy to announce it. He told the Presidium at the end of May that “if we want to carry out our policy…it is necessary to be firm.”

On June 4, Khrushchev confronted Kennedy at their summit in Vienna with another ultimatum over Berlin. Khrushchev made it clear to Kennedy that if the United States did not agree to a settlement to make West Berlin a “free city,” he would sign a separate peace treaty with East Germany at the end of the year. Khrushchev’s threat and his language during the conversation with Kennedy confirmed that the withdrawal of the first ultimatum was only a temporary lull in the broader dispute over Berlin. Khrushchev averred that “the decision to sign a peace treaty is firm and irrevocable and the Soviet Union will sign it in December if the US

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452 Mastny, 2010, 328.
refuses an interim agreement.” 453 If the United States and its allies tried to assert its access rights to West Berlin once the peace treaty was signed, then “force would be met by force.” 454 There was no room for compromise. President Kennedy icily “concluded the conversation by observing that it would be a cold winter.” 455 Khrushchev went into the Vienna conference thinking that the new US president would buckle under the pressure of a Soviet military threat. Kennedy’s initial reaction proved him wrong.

Part of the reason Khrushchev thought that the United States would be responsive to such coercion and therefore issued his second ultimatum was that he believed the Americans would not dare to fight a conventional conflict in Europe. The threat of nuclear war was so high that only a foolish Western statesman would initiate a war over the signing of a peace treaty with East Germany, and “there are no such idiots or they have not yet been born.” 456 Plus, the conventional balance favored the Soviet Union, meaning that if a war did remain non-nuclear, the Soviets would likely win anyway. This gave the Soviets a bargaining advantage according to Khrushchev, who said ‘The Russians have the advantage…’ This means, they will agree. We will present this proposition and insist on it. Then this matter will be accepted.’” 457 Yet, other Soviet policymakers were worried about a conventional conflict in Germany, most notably


454 Ibid.

455 Ibid.

456 Zubok, 1993, 18. This quote was made in an interview on April 10, 1961 with Walter Lippmann.

Anastas Mikoyan, who said “they [NATO] could initiate military action without atomic weapons.”

Mikoyan’s fears turned out to be correct. Kennedy’s response to the Soviet ultimatum, as laid out in National Security Action Memorandum (NSAM) No. 58, was to order the military to prepare for “large scale non-nuclear ground action within four months of such time after October 15 as it may be ordered—with tactical air support, as necessary—assuming appropriate use of forces in Europe and assuming reinforcement from the US as necessary to permit the use of two, four, six, and twelve divisions in Europe.” In these operations, the Department of Defense should “ensure that nuclear weapons now in Europe are not used in the course of such action without direct Presidential authorization.” This conventional escalation would be done by expanding the scope of the conflict as well as by adding more ground forces in Europe. In NSAM 109, Kennedy’s directions for a response to a challenge on Berlin included “maritime control, naval blockade, and other worldwide measures, both for reprisal and to add to general pressure on the Soviets.” In a meeting on July 17 with his top advisors, Kennedy also decided to add over $3 billion to the request for the defense budget to pay for calling up reserves to fill out US-based Army divisions and air and naval forces that could be sent to Europe and for greater procurement of conventional weapons. Kennedy announced this decision to the public in a national address.

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458 Ibid, 357.


on July 25. Kennedy declared the United States’ resolve to fight at the conventional level over Berlin.

Khrushchev had erred, and in realizing the weight of this error, he changed his calculations over the risks of following through on his June 4 ultimatum. Fursenko and Naftali write that Khrushchev was “not prepared for the scale of the conventional buildup initiated by the United States.” Khrushchev knew that with NATO capabilities as they were, they could successfully engage in a medium-intensity conflict and force the Soviets to send in their reinforcements. This escalation would make the conflict a full-scale conventional war, with all the risks of nuclear war such a conflict over a core interest in the status of Berlin carried. As Khrushchev noted years later, a military confrontation strictly around West Berlin “would quickly have been resolved in our [the Soviets’] favor…But this would have been only the starting point. It would have meant shooting on some scale, small or large. War might have broken out…We only wanted a surgical operation.” Against a fait accompli in West Berlin, the US and its allies had a credible conventional option in escalating to a medium-intensity conflict in Central Europe, one that would force the Soviets to escalate to large-scale war. In such a war, the threat of initiating nuclear war was much more credible.

Kennedy’s willingness and ability to engage in a medium-scale conventional conflict caused Khrushchev to think that his ultimatum strategy had become too risky. Robert Slusser writes that in response to Kennedy’s July 25 speech, Khrushchev saw that “the United

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463 Fursenko and Naftali, 2006, 386.

States…had raised the stakes to a level which the Soviet Union could not afford to match.\textsuperscript{465} This caused Khrushchev to shift from the “maximum objective” of changing the status of West Berlin to the “minimum objective” of solving the emigration problem from East Germany.\textsuperscript{466} To accomplish the minimum objective, Khrushchev decided, with the cooperation of East Germany, to construct the Berlin Wall on August 13, 1961. The Soviet Union continued its campaign of diplomatic pressure on the West after the Wall went up, but this was being done while the Soviets were looking for ways to ratchet down the crisis. Indeed, in late August, while at the resort town of Pitsunda in Georgia, Fursenko and Naftali argue that Khrushchev “was looking for an excuse to call off his ultimatum.”\textsuperscript{467}

The Kennedy administration was open to negotiations and talks between Soviet Foreign Minister Gromyko and Secretary of State Dean Rusk began in New York on September 21. On September 24, Soviet press attaché Mikhail Kharlamov told Kennedy’s press secretary Pierre Salinger that “the storm in Berlin is over.”\textsuperscript{468} When Kennedy got this message, he recognized it as a ramping down of tensions, saying that “he’s [Khrushchev’s] not going to recognize the Ulbricht regime – not this year, at least – and that’s good news.”\textsuperscript{469} On October 17, Khrushchev announced to the 22\textsuperscript{nd} Party Congress of the Communist Party that he would drop his June 4 ultimatum. He would still negotiate for West Berlin to be a free city, but he would no longer do


\textsuperscript{466} Ibid, 93-96.

\textsuperscript{467} Fursenko and Naftali, 2006, 386-387.

\textsuperscript{468} Ibid, 397.

\textsuperscript{469} Ibid.
so through a military challenge.\textsuperscript{470} The willingness to engage in a medium-intensity conventional war combined with the stakes in the dispute over Berlin had convinced Khrushchev that he could not use his conventional advantage to coerce the United States. He therefore decided to de-escalate the Berlin Crisis.

How was the threat of a conventional stalemate in a medium-intensity conventional conflict enough to bring about such a successful outcome for the US? One explanation puts less emphasis on the stakes involved in a dispute over Berlin and instead points out that the United States had limited nuclear options to which it could escalate, making its strategic nuclear threats more credible. Carl Kaysen led an effort to develop options for the limited use of nuclear weapons in 1961.\textsuperscript{471} In fact, that was one of the main purposes of Flexible Response. A report by Thomas Schelling on the possible benefits of a “demonstration” nuclear strike was in President Kennedy’s briefing book on the Berlin Crisis in July 1961.\textsuperscript{472} Nevertheless, it is unlikely that limited nuclear options increased US resolve in the crisis. The rhetorical emphasis on tactical or limited uses of nuclear weapons never matched the actual ability to use nuclear weapons in a limited fashion. Operational obstacles prevented the development of employment options outside of the SIOP. In December 1963, McNamara reported to President Lyndon B. Johnson that “we do not have an adequate basis at this time for placing greater dependence on a tactical nuclear

\textsuperscript{470} Ibid, 399-400.


strategy.” It is unlikely that limited nuclear options increased US resolve because there was no plan for a limited nuclear strike in 1961.

Summary: The Effect of NATO’s Conventional Option

The Soviet Union possessed a superiority in the number of conventional options available in the Berlin Crises. However, this advantage would have allowed the Soviets to put the Americans in a resolve-capability gap only by escalating to a large-scale conventional war. This type of conflict would have forced the United States to choose between nuclear escalation and backing down. Due to the seriousness with which the United States regarded the stakes in West Berlin and the risks inherent in a large-scale conflict, the US would have had a credible threat of “over-escalation” to the nuclear level. Because of this credible threat of nuclear escalation, if the United States threatened to escalate to a medium-intensity conflict confined to Central Europe, the Soviets would have realized that they could not use their conventional advantage to coerce the Americans in Berlin. This would lead to the Soviets dropping their ultimatums and the preservation of the status quo.

Events did not follow this course in the First Berlin Crisis in 1958-59. The Eisenhower administration was more pessimistic about the conventional balance than was warranted, yet this did not lead to concessions from the United States. Instead, the United States used threats of rapid nuclear escalation to see their way through the first crisis. Khrushchev withdrew his first ultimatum instead of putting more pressure on the United States, and there is little evidence that US conventional capabilities had anything to do with this decision. The Second Berlin Crisis gives much more support to the logic of conventional options theory. The Kennedy

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administration threatened the use of conventional force in response to the second ultimatum and the threat of a blockade of West Berlin. This caused Khrushchev to realize that he would have to escalate to a large-scale conventional war if the Soviet Union was to get its way in Berlin via armed force. Given the stakes in the Berlin Crises, this carried a high risk of nuclear escalation. Khrushchev realized he could not use his conventional advantage to coerce the Americans, prompting him to drop his ultimatum. Because the Americans were defending the status quo, this caused the US to accomplish more of their primary goals in the crisis than the Soviets. The stakes involved plus the limited conventional options the United States possessed combined to prevent the Soviet Union from enacting a strategy of conventional coercion over West Berlin. This more closely follows the logic of conventional options theory.

This reading of the Berlin Crisis is unorthodox, but it can explain Fursenko and Naftali’s finding that Kennedy’s willingness to engage in conventional conflict over Berlin convinced him to drop his ultimatum in 1961.\textsuperscript{474} If the Soviet Union was superior in overall conventional capabilities in Europe, why would it be afraid of American threats to fight a conventional conflict? NATO’s conventional power did not equal Soviet conventional power, but it had taken away their advantages in limited conventional conflict. Preparations for conventional war thus indicated to Khrushchev that a move on Berlin could not be kept “a surgical operation” and pressured him to back down from his June 4 ultimatum. Evidence that the Soviet military no longer thought a victory in a limited conventional war was feasible comes in the war plan the Warsaw Pact instituted in October 1961. In response to the growth of NATO conventional capabilities, the Warsaw Pact scrapped plans for a war in Europe that would remain purely conventional, and instituted a war plan codenamed “Buria,” meaning “nuclear war,” in which

\textsuperscript{474} Fursenko and Naftali, 2006, 386.
nuclear weapons were used in an attack on Western Europe from the outset. Khrushchev was wary of Kennedy’s preparations for conventional war because NATO conventional capabilities could thwart a Soviet *fait accompli* over West Berlin, thereby bolstering the credibility of the US nuclear deterrent.

The case study also highlights the contrast between the Berlin Crisis and the Cuban Missile Crisis. The United States was able to get more out of its conventional superiority in the latter than the Soviet Union was in the former. One reason for this according to my theory is that the United States was more resolved to fight in Berlin and Germany than the Soviet Union was to fight in Cuba and the Caribbean. The defense of West Berlin was a core interest that was in an area where other key US allies resided. While the defense of the missile sites in Cuba was a core interest for the Soviets, the defense of Cuba itself was peripheral, and it lay in an area in Latin America that was in the Soviets’ geographic periphery. This meant that there was more room for conventional force to be used in Cuba before running an intolerable risk of nuclear war. This allowed the United States to use conventional force in the Cuban Missile Crisis and for conventional options to have a coercive effect. The difference in the level of resolve between the United States and the Soviet Union can account for why the side with greater superiority had more room to press its conventional advantage in Cuba but not Berlin.

This shows that for interests that are much more peripheral than what the Soviets had in Cuba nuclear threats may not be effective at coercing an adversary. In these instances, a state will need to build superior conventional options for escalation in order to achieve its interests. Before Berlin and Cuba, the United States attempted to use nuclear threats to achieve a peripheral objective. How successful was this attempt? Were limited conventional capabilities

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more effective than nuclear threats in this case? With these questions in hand, I now turn to the Taiwan Strait Crises of 1954-55 and 1958.
Chapter 5: The Taiwan Strait Crises and Conventional Options Theory

From September 1954 to April 1955 and again from August to October 1958, the People’s Republic of China (PRC) shelled and assaulted some the offshore islands held by the Republic of China (ROC), which was based in Taiwan. The biggest of these islands was Jinmen (Quemoy), but the PRC also shelled Mazu (Matsu) and captured Yijiangshan Island during these crises. US officials believed that the operations against the offshore islands were a prelude to a larger invasion of Taiwan. That these armed challenges did not lead to the capture of Jinmen and Mazu or the opening of an attack against Taiwan is usually explained by the success of US nuclear threats. US decisionmakers at the time believed that the PRC could have defeated the ROC forces on these islands via an amphibious assault, but they chose not to do so. Moreover, US policymakers thought they needed to use tactical nuclear weapons in order to successfully defend the islands. This meant that policymakers relied on nuclear threats to deter a PRC attack. In both crises, hostilities subsided with the two largest islands still in Nationalist hands. After the first crisis, Secretary of State John Foster Dulles attributed this outcome to successful US nuclear deterrence. He told a group of senators that “we have worked very hard to produce…the result’ that had inhibited Communist China’s intentions ‘to follow a Pacific raw

476 Halperin, Morton. *The 1958 Taiwan Straits Crisis: A Documented History*. Santa Monica, CA: The RAND Corporation, 1966. Halperin cites a Special National Intelligence Estimate (SNIE) from August 1958 that concludes that the Communist Chinese could successfully assault Jinmen provided they had naval and air superiority. Comparing the air and naval forces of the Nationalists and the Communists, the Communists would have been able to achieve superiority. Without US involvement, Jinmen and Mazu would not hold out against a PRC attack. As I show later, the Chinese were less optimistic about their chances of a successful assault. Li, Gong. “Tension across the Taiwan Straits.” In *Re-examining the Cold War: US-China Diplomacy, 1954-1973*. Eds. Ross, Robert and Jiang, Changbin. Cambridge, MA: Harvard University Press, 2001, pp. 141-172.

belligerent course.\textsuperscript{478} The United States successfully postured their forces in such a way that they communicated to the PRC a credible risk of uncontrolled escalation should it decide to attack Jinmen and Mazu. Furthermore, the United States was able to execute this nuclear threat without having conventional options for defending these islands. The case thus became important in the development of nuclear deterrence theory in the 1950’s and 1960’s.\textsuperscript{479}

The Taiwan Strait Crises is therefore a hard case for conventional options theory. The United States had little conventional capability, yet it was able to deter a PRC attack in an area peripheral to the larger Cold War struggle. However, there are important differences between the two crises in terms of the achievement of secondary goals. As defined earlier, the primary goal is the top strategic end for which a state is acting in a given crisis. For the United States in the Taiwan Strait Crises, this end was the defense of Taiwan from an attack by the People’s Republic of China (PRC). A secondary goal is any goal that is less important than this top interest but is still valuable for the country to achieve. Secondary goals may be valuable on their own terms or for the contribution they make to the primary goal. For the United States, keeping the offshore islands in Nationalist hands was the secondary goal in the Taiwan Strait Crises. They were important insofar as they aided the defense of Nationalist China materially and psychologically. The conventional options a state possesses influence the achievement of primary and secondary goals by affecting the state’s crisis bargaining behavior. States with few conventional options to defend a primary or secondary interest should be more willing to make concessions on those goals in order to end a dispute. In the Taiwan Strait Crises, evidence for the


\textsuperscript{479} Thomas Schelling uses the example of Quemoy (Jinmen) throughout his seminal book \textit{Arms and Influence}. New Haven, CT: Yale University Press, 2008 (1966).
mechanism of crisis bargaining behavior can be examined by pointing out the willingness of American officials to concede the offshore islands to the Communist Chinese.

The United States was able to achieve its primary goal of defending Taiwan and strengthening its relationship with the Nationalist regime in both crises, but it was more successful in defending the offshore islands in the second crisis. I argue that this divergence in outcomes on secondary goals can be traced to the different levels of conventional military power the United States and its Taiwanese ally was able to bring to bear in the crises. In both crises, US policymakers searched for conventional options for escalation, and they deployed the Seventh Fleet into the waters around Taiwan in order to deter Chinese or Soviet aggression in the area. However, due to military sales to the ROC, improvements to the deployability of air forces, improvements in naval aviation between 1955 and 1958, and greater willingness to deploy carrier groups to the Taiwan Strait in 1958, the United States had more conventional options in the 1958 crisis. This led to two different outcomes. In the 1954-1955 crisis, PRC forces put US decision-makers into a resolve-capability gap over the Tachen Islands, leading them to concede the islands to the PRC. In addition, the lack of conventional options prompted US policymakers to consider convincing the ROC to abandon Jinmen and Mazu to the PRC. Had the PRC escalated the use of force in the first crisis, they may have been able to coerce the Americans into convincing the ROC to abandon the rest of the offshore islands. The PRC called a sudden ceasefire in April 1955; it was uneasy and solved none of the underlying issues of the crisis. In 1958, the United States had the capability to convoy ROC resupply efforts to the island of Jinmen, preventing them from taking the island via air or artillery interdiction. The success of this conventional operation forced Mao Zedong into a resolve-capability gap of his own,
convincing him to switch to a less bellicose strategy in 1958 after he realized that he could not force the ROC to evacuate Jinmen through artillery or air bombardment alone.

The application of conventional military power by the United States helped it to ensure that the ROC held on to Jinmen and Mazu. Moreover, United States’ ability to conduct lower-level conventional operations imposed high costs on any PRC attempt to take Jinmen and Mazu. Because the PRC did not have confidence in the reliability of the Soviet Union’s nuclear deterrent, it decided that the risks of an assault, with the resulting chance of a confrontation with American forces, were too great. While there is ambiguous evidence that this calculus entered the minds of Chinese decision-makers in the 1954-55 crisis, it was prevalent in the 1958 dispute. Improvements in conventional variety between 1955 and 1958 contributed to a better outcome on secondary goals for the United States in Second Taiwan Strait Crisis.

I contrast this interpretation of the crisis to one based on a theory of nuclear coercion. According to a theory of nuclear coercion, the United States deterred the PRC from taking an overt challenge to Taiwan and the offshore islands due to the success of its nuclear threats. The United States made the PRC aware of its potential to use nuclear weapons against it, and as a result, the PRC decided to back off its initial challenge against the offshore islands and Taiwan. Because the United States used brinkmanship tactics over the PRC and its ally the Soviet Union in both crises, such a theory would predict a successful outcome in terms of the primary goal of protecting Taiwan in both cases. This is what happened, which is why it was so useful in the formulation and exposition of deterrence theory. However, this theory cannot explain the variation in the ability to defend the offshore islands between the two crises. It would predict the successful defense of the offshore islands in both crises, but this did not occur. Conventional options theory can explain the success in the primary goal of defending Taiwan and the pattern
of failure and success in achieving the secondary goal of holding on to the offshore island.

Because of that, I argue that variety of capabilities theory can better capture the differences and continuities between the two crises. Finally, the United States did have greater resolve to defend Jinmen and Mazu as compared to the Tachen Islands, but within this higher level of resolve, the US had more conventional options with which to pursue its interests in the 1958 crisis. The overall evidence in the case points to the improvement in conventional options as the reason for the improved outcome in terms of secondary goals between the first and second crisis.

Nevertheless, I cannot eliminate resolve or nuclear weapons as a source of bargaining leverage for the United States. This means that, overall, the Taiwan Strait Crises provide moderate support for conventional options theory.

This case study proceeds in five parts. First, I outline the background to the First Taiwan Strait Crisis, the objectives of each side, and the military balance in the Taiwan Strait area. Second, I summarize developments in the 1954-55 crisis and show how the lack of conventional power near the Tachen Islands encouraged US policymakers to concede them to the PRC and how a similar resolve-capability gap caused the United States to consider a plan to have the ROC cede control over all offshore islands. Third, I describe the improvement in US and ROC conventional capabilities up to August 1958. Fourth, I describe the background, objectives, and military balance in the Second Taiwan Strait Crisis in 1958 and show how American conventional power helped the US keep Jinmen and Mazu in Taiwanese control. Fifth, I conclude by assessing the role of nuclear coercion and the relative merit of an explanation focused on conventional options.
Mao Zedong, Chiang Kaishek, and the Problem of the Offshore Islands

The dispute over the offshore islands was a consequence of the Chinese Civil War. On October 1, 1949, Mao Zedong entered Beijing and declared the founding of the People’s Republic of China (PRC). His opponent, Chiang Kaishek, took 600,000 troops from his Nationalist armed forces and retreated to Taiwan, where he would continue to run the Republic of China (ROC). During the retreat to Taiwan, the Nationalist forces also occupied several islands off the coast of China, most notably Jinmen, Mazu, and the Tachens.480 These islands were less than 12 miles off the coast of China and lay over 100 miles from Taiwan, causing no end of frustration to the Communist Chinese. Nationalist occupation of the islands ensured that ROC and PRC military forces would be within shooting distance of each other, and it would remind the international community that the civil war was not over. For the PRC, the recovery of the offshore islands and the capture of Taiwan was the final stage in the Chinese Civil War.

When victory was near in June 1949, Mao Zedong instructed local commanders in East China to prepare to attack Taiwan and the offshore islands. However, difficulties in capturing Jinmen in late 1949 set this plan back.481 The start of the Korean War in 1950 relegated Taiwan to the status of a secondary concern. Kuomintang (KMT) control over Taiwan and the offshore islands remained a loose end.

After the end of the Korean War, the PRC regarded the offshore islands as a tool for propaganda and for raising concerns over US policy in East Asia. They also saw them as the first targets to capture in an eventual war against the Nationalist government. Nationalist and


Communist forces resumed hostilities in the areas around the offshore islands. These hostilities were so frequent that the first day of the shelling of Jinmen, September 3, 1954, was not significant to Chinese decisionmakers.\textsuperscript{482} In late July 1954, Mao Zedong decided to implement a “Liberate Taiwan” campaign which began with the headline “We Must Liberate Taiwan!” in \textit{The People’s Daily} on July 23.\textsuperscript{483} The vulnerability of the offshore islands to Chinese military pressure gave the Communist Chinese government a means with which to communicate their dissatisfaction with the United States’ emerging alliance with Chiang Kaishek’s Nationalist government. The United States and Taiwan had been building ever stronger defense ties since the start of the Korean War. The government in Beijing came to believe that this was the beginning of an American strategy to “turn Taiwan into a military base for attacking China.”\textsuperscript{484}

US interference in the Taiwan Strait also made the dispute between Chiang Kaishek and the PRC seem like an international rather than an internal affair. If this version of the dispute became accepted by the international community, that would lend support for a “two-China” policy.\textsuperscript{485} Thus, the other major reason behind shelling the offshore islands was to challenge US interference in the Taiwan Strait.\textsuperscript{486} Mao considered the policy of disrupting the budding US-KMT alliance as a necessary corollary to his Liberate Taiwan policy. He phoned Zhou Enlai on July 23, 1954 (the same day the Liberate Taiwan policy started) to say that the new propaganda

\textsuperscript{482} Chang and Di, 1993.
\textsuperscript{483} Chang and Di, 1993.
\textsuperscript{484} Zhang, 1992, 193.
\textsuperscript{485} Li, 2001.
\textsuperscript{486} Jian, 2001, 169.
policy was being done “in order to break up the collaboration between the United States and Chiang and to keep them from joining military and political forces.” 487

The United States viewed the defense of Taiwan as another part of the struggle in the Cold War. The collapse of Chiang Kaishek’s Nationalist government in mainland China was a shock to the American psyche. Many people in the foreign policy establishment, the media, and Congress blamed President Harry Truman for “losing” China, and it accelerated the fear of a Communist advance both at home and abroad. 488 To counter Communist gains, the Truman administration recognized Chiang Kaishek’s government in Taiwan as the official government of China, and it was determined to keep Taiwan out of Communist hands. 489 This commitment took a military form with the start of the Korean War. On June 27, 1950, Truman dispatched the Seventh Fleet to the Taiwan Strait to ensure that it was secure from Chinese attack during the war. 490 Eisenhower deepened the American commitment to Taiwan. In late 1953, NSC 146/2 concluded in a preliminary policy review that Nationalist control over Taiwan was critical to US security, and the United States should intervene to protect Taiwan and the Penghu Islands from a PRC invasion. 491

After the Korean War, the United States kept the Seventh Fleet stationed in Japan in order to deter Communist aggression in East Asia. The Seventh Fleet included multiple aircraft

487 Chang and Di, 1993, 1508.

488 This point is made most eloquently by Halberstam, David. The Best and the Brightest. New York: Ballantine Books, 1994 (1972).

489 Li, 2001.


491 Zhang, 1992, 200-203. Although this intervention was only to come if the PRC attacked. Absent the use of Communist Chinese force, the United States wanted to provide Chang Kaishek with generous military aid and then “let the Asians save themselves.”
carriers, destroyers, cruisers, patrol boats, reconnaissance planes, and attack fighters; these forces were stationed for rapid reaction against the use of force by China or the Soviet Union. One of the Seventh Fleet’s missions was to monitor and defend the Taiwan Strait, and a US Taiwan Patrol Force was formed for this purpose. The patrol force consisted only of a few destroyers and some reconnaissance aircraft, and if the PRC used force against the patrol force, it would be defeated. The Taiwan patrol was thus a tripwire; an attack on one craft would spark the involvement of the much larger Seventh Fleet. However, this tripwire was not strictly nuclear in nature. Although Seventh Fleet forces were trained in nuclear operations, they could also intervene with purely conventional operations. Edward Marolda, a historian of the US Seventh Fleet, argues that the fleet’s air and sea surveillance operations, buildup of bases, and conventional operations during the two Taiwan Strait Crises played an independent role in deterring Chinese aggression.

The commitment to defend Taiwan raised awkward political issues for the United States regarding the offshore islands. Was the defense of Jinmen, Mazu, and other small islands critical to the defense of Taiwan? Would it be worth starting a war to keep them in Nationalist hands? American leaders answered the first question in the negative, but the second question was not so straightforward. The Eisenhower administration regarded Jinmen and Mazu as peripheral to US interests. Eisenhower admitted that it was “probably better” to lose some face by letting the PRC

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493 Elleman, 29, 2015, 29.

494 Ibid, 36.

capture the offshore islands rather than go to war to defend them. Jinmen and Mazu were better used as staging areas from which to launch raids against ports on the mainland rather than as stepping stones to an invasion of Taiwan. Military leaders agreed that “none of these offshore islands was essential to the defense and security of Formosa itself.” If the main interest was the preservation of Nationalist control over Taiwan, then control over the offshore islands was intrinsically unimportant.

On the other hand, US officials attached great “psychological” importance to continued KMT control over the offshore islands for three reasons. One reason for this is that Chiang Kaishek placed 50,000 front-line troops on these islands, and the loss of those troops would have a deleterious effect on the KMT’s military strength. Second, the United States believed that the PRC was aiming for preponderance in East Asia. Gaining control over Taiwan would give the PRC a base from which to exert greater influence in the region. American leaders feared that the fall of Jinmen and Mazu would weaken Nationalist morale, making it more vulnerable to a Communist takeover. The logic of domino theory linked the defense of the offshore islands to a major US foreign policy interest, one that was worth using military force over. The United States needed to act “if these islands are not to be swallowed up by the Communists one by one and if a

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497 Halperin, 1966. Halperin documents a long pattern of Nationalist guerillas launching raids on Amoy and Fuchow harbors from Jinmen and other offshore islands.


500 Zhang, 1992, 46-64.

significant defeat for US policy in the area is to be avoided.” Finally, the PRC’s challenge in September 1954 appeared to flout previous US deterrent threats. The United States had dispatched the Seventh Fleet and given significant military aid to Chiang Kaishek in part to dissuade China from attacking the Nationalists. If the United States failed to respond to this PRC military challenge, it could make future threats to use force ring hollow. In an NSC meeting on September 9, 1954, Admiral Radford, Chairman of the Joint Chiefs of Staff, claimed that “our [US] prestige had been committed 100%.” Though US decisionmakers considered the defense of the offshore islands to be peripheral concerns, they attained importance due to their perceived psychological value to the KMT’s defense of Taiwan.

In sum, the primary issue at stake in the First Taiwan Strait Crisis was the security of Taiwan. The PRC wanted to dissuade the United States from forming an alliance with Chiang Kaishek, prevent the US from deploying naval forces to the Taiwan Strait, and put themselves in a position to take Taiwan in the future. The secondary issue for the PRC was to gain control over the offshore islands by taking the Tachens and testing the Nationalist and American commitment to Jinmen and Mazu.

Before the first Taiwan Strait Crisis in early 1954, Mao approved a plan by the East China Military Command to take the offshore islands, starting with the Tachen Islands. In late

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505 Zhang, 1992, 197.
August, the Central Military Commission in Beijing authorized military leaders in eastern China to prepare an attack on Tachen and to shell Jinmen as a cover.\(^{506}\) Seizing the Tachen Islands was therefore an objective in its own right that Mao and other Chinese leaders were seeking in the first crisis. With regards to Jinmen and Mazu, Mao wanted to coerce the United States into staying out of their defense. If he could so, he would drive a wedge between the US and Chiang Kaishek, depriving him of his greatest international supporter.\(^{507}\) Such a setback could possibly convince Chiang to remove his troops from the offshore islands, thereby relinquishing them to PRC control.\(^{508}\)

If the PRC had complex political motives, so did the United States. They wanted to strengthen Nationalist rule on Taiwan, retain Nationalist control over the offshore islands, and maintain their forward-deployed position in the Taiwan Strait.\(^{509}\) The first was the primary goal, while the latter two were secondary goals that contributed to the accomplishment of the primary aim. However, the United States also set out to restrain and exert more control over Chiang Kaishek during the crisis.\(^{510}\) As mentioned above, the offshore islands were useful areas from which to launch raids on the mainland, and KMT troops had been doing this since 1949. Eisenhower believed such actions, especially after the conclusion of the Korean War, to be needlessly provoking conflict in the Taiwan Strait. The United States therefore sought closer ties with Chiang so that it could stop these raids and “cool off” the Chinese Nationalists from,

\(^{506}\) Ibid, 199.

\(^{507}\) Li, 2001.

\(^{508}\) Zhang, 1992, 199.

\(^{509}\) Halperin, 1966.

intentionally or accidentally, provoking increased hostilities with the Chinese Communists.”

This does not mean that it did not want the ROC to retain control over the offshore islands; US leaders recognized their value for Chinese Nationalist “morale.” It means that the US sought to have the Nationalists maintain control over the islands while seeking a general ceasefire in the Taiwan Strait.

Given this mix of priorities for the United States and the PRC, did they accomplish a “success,” a “draw,” or a “failure” in the two crises? The outcome for the US in the first crisis was a draw, since the United States achieved its primary goal of defending Taiwan but the PRC also partially achieved its main goal of taking offshore islands from the ROC. The outcome in the second crisis was a success. The United States was able to defend Taiwan and keep control of the offshore islands in the face of PRC pressure. The PRC did not achieve any of their primary goals of taking Jinmen and Mazu or breaking apart the US-Nationalist alliance. Can conventional options theory explain this variation in the degree of success the US experienced between the two crises?

**The Military Balance in the Taiwan Strait**

At the beginning of the first crisis, the Communist Chinese held an advantage over their Nationalist counterparts in the area around the offshore islands. SNIE 100-4-54, a study by the Intelligence Advisory Council, noted that the Nationalist Chinese had stationed tens of thousands of troops on the offshore islands, with 10,000 on the Tachen Islands, 5,000 on Mazu, and 43,000...

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on Jinmen. Moreover, the defense of these islands were “aided by fortifications, by small beach areas, and by weather conditions unfavorable to amphibious movement and debarkation from October through March.” Nevertheless, with the exception of Jinmen, the IAC study estimated that the PRC has “sufficient troops and means of improvising amphibious lift to overwhelm within a few days after the commencement of an assault any one of the Nationalist islands.” Important to making this calculation was the estimation that if committed in great enough numbers, PRC air capabilities could “gain air superiority over the Nationalist air force in the area of the islands and make Nationalist naval support operations costly.”

At an NSC meeting on September 9 chaired by Vice President Richard Nixon, John Foster Dulles added more details to this estimate of the relative strength of the PRC and ROC forces. He reported that the Nationalist Air Force was “estimated to be capable of 175 air sorties per day.” The Nationalist naval forces possessed “two destroyers, three destroyer escorts, and additional smaller vessels” for the defense and resupply of Jinmen. Even so, Dulles estimated that it would require “150,000 men” to seize Jinmen, and “well over this number of Chinese Communist troops were available within 150 miles.” In the same meeting, Admiral Arthur Radford, Chairman of the Joints Chiefs of Staff, concurred with the statement that “the Chinese

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514 SNIE 100-4-54.

515 Ibid.

516 Ibid.


518 Ibid.

519 Ibid.
Nationalists would be unable to hold these offshore islands without United States assistance."520 There is scant availability of hard data on the number of troops and different types of weapons platforms for the PRC and the ROC in the area around Taiwan in September 1954. Nevertheless, evidence from American estimates depicts a Communist Chinese military force that could capture the offshore islands from the Nationalist forces, especially if the PRC invested a maximum level of time and manpower.

American forces would have to intervene for Nationalist forces to hold on to the offshore islands. What military forces did the United States have in the Western Pacific that could be used to defend the offshores? The closest forces to the dispute were the Taiwan Patrol Force (TPF), which consisted of four destroyers cruising through the Taiwan Strait, though operational difficulties meant that only two were usually operating concurrently while two others were in maintenance.521 The United States Seventh Fleet was stationed in Yokosuka, Japan. During the crisis, Seventh Fleet commander Admiral Alfred Pride, Jr. dispatched five carriers and their cruiser and destroyer escorts near the Taiwan Strait.522 There was far less airpower deployed to the Far East before the crisis. The Pacific Air Force (PACAF) had only been formed in July 1954, and the 18th fighter-bomber wing (F-86’s) from Japan was rotated to Taiwan starting in November 1954.523 By February 1955, the 18th wing was operating 65 combat-ready aircraft from bases in Taiwan.524

520 Ibid.
522 Marolda, 2012.
524 Van Staaveren, 1962, 8.
The Joint Chiefs of Staff, however, were unsure if this array of conventional power would be able to protect the offshore islands. Admiral Radford explained that the adequacy of US forces depended “in the last analysis on the size of the Chinese Communist effort.”\textsuperscript{525} If PRC operations remained limited, then “the United States could provide an adequate defense of the islands with the forces that were available in the Western Pacific at the present time.”\textsuperscript{526} However, if the PRC put in all their effort to attacking the offshores, US forces would have to “step up” their operations by attacking targets on the mainland.\textsuperscript{527} For US military officials, a large-scale attack against the offshores centered on an attack against Jinmen. Hence Admiral Radford’s view that “the minute we knew that the Chinese Communists were about to launch an air attack on Jinmen, we should go after the airfields in China from which they would launch such an attack.”\textsuperscript{528}

President Eisenhower retorted that discussing any attack against the mainland meant “talking about war.”\textsuperscript{529} Yet this would be a war in which the US would have no backing from its allies or support from among its own public, both of whom saw the offshore islands as intrinsically meaningless. However, the Eisenhower administration predicated its Far East policy on vigorously defending any Communist advance. It could not successfully execute that policy and be seen as abandoning an ally in the region. The United States was caught between avoiding an unpopular and costly war against China on the one hand and maintaining its credibility as an

\textsuperscript{525} “213\textsuperscript{th} NSC Meeting.” September 9, 1954.

\textsuperscript{526} Ibid.

\textsuperscript{527} Ibid.

\textsuperscript{528} “Memorandum of Discussion at the 214\textsuperscript{th} Meeting of the National Security Council, Denver.” September 12, 1954. \textit{FRUS, 1952-1954: China and Japan, Vol. XIV, Part 1}. \url{https://history.state.gov/historicaldocuments/frus1952-54v14p1/d293}. Hereafter “214\textsuperscript{th} NSC Meeting.”

\textsuperscript{529} “214\textsuperscript{th} NSC Meeting.” September 12, 1954.
ally on the other. US policymakers feared an all-out attack by the PRC because it would present them with this “horrible dilemma.” But confronting this dilemma was not inevitable. It would only come about if the Communist Chinese conducted a heavy assault on the offshore islands. With US help, the Nationalist forces could successfully repel a low- to medium-intensity conflict over the offshore islands, especially in Jinmen and Mazu. It was in a high-intensity conflict that the PRC forces would likely have the upper hand. Concern over a looming initiation of a high-intensity assault on the offshore islands would drive US policymakers’ behavior throughout the first crisis.

**US Diplomatic Efforts in the First Taiwan Strait Crisis**

How did US policymakers react to the conventional balance? I argue that, given their conventional inferiority, American decision-makers based their actions on perceptions of likely Communist Chinese behavior in the Taiwan Strait. In the first half of the crisis, US policymakers viewed a large-scale use of force to take the offshores as unlikely, and they pursued a diplomatic strategy to obtain a general ceasefire in the Taiwan Strait in which they stood firm on keeping all of the offshore islands. Starting with the operation to seize the Tachen Islands, US policymakers, especially Secretary of State John Foster Dulles, feared that the PRC was preparing for the all-out attack on the offshores for which the United States did not have a conventional response. It then issued nuclear threats to deter a PRC attack on Taiwan and made plans to evacuate Nationalist troops from Jinmen and Mazu and concede them to the Communists. The crisis ended with the success of a last-ditch diplomatic effort at the Bandung Conference on April 23, 1955, during which Zhou Enlai called for a halt to the artillery shelling of Jinmen and Mazu. This ceasefire, however, did not solve any of the underlying issues that sparked the crisis in the

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530 “214th NSC Meeting.” September 12, 1954.
first place. Nuclear coercion contributed to achieving the ultimate outcome, but the lack of conventional options prompted US policymakers to cede some offshore islands and make offers to concede all of them to the PRC, suggesting that all of the offshore islands could have gone to the PRC had the crisis continued.

First Impressions: Artillery Shelling and the Initiation of Diplomacy

US leaders were concerned but not alarmed by the PRC shelling of the offshore islands in the opening phase of the crisis. Both Secretary Dulles and the Joint Chiefs of Staff believed that the most important of the offshore islands, Jinmen, “could not be held indefinitely without a general war with Red China in which the Communists are defeated.” That is, in a heavy assault on the offshore islands which focused on capturing Jinmen, the United States would have to strike Chinese air bases on the mainland, likely provoking a larger war with Communist China. For the time being, US policymakers did not think this to be too likely. Secretary of State Dulles remarked that the “adverse weather conditions” in the Taiwan Strait between October and March precluded any large-scale attack. In addition, Dulles believed that the concentration on Jinmen by the PRC “may prove to be a feint, with the Tachen Islands the actual objective.” This was a belief he repeated to the Ambassador from New Zealand, Leslie Munro, in a meeting on October 4 about the offshore island situation.

531 Ibid.
532 Ibid.
With hostilities simmering at a low-level intensity, Dulles explained in an NSC meeting that “we do not need to anticipate a critical situation regarding the offshore islands for some time. This, therefore, gives us more time to consider the question.” Dulles argued that the United States had time to take the offshore islands matter to the UN Security Council. A Security Council Resolution “to maintain the status quo” would redound to American interests by painting the PRC as aggressors, keeping the offshore islands in Nationalist hands without having to undertake an unpopular armed intervention, and fostering greater cooperation with the British in the Far East. The NSC meeting on September 12 adjourned with authorizing Dulles to undertake this diplomatic effort to solve the “horrible dilemma” at the UN before matters came to a head.

To get a ceasefire through the UN Security Council, the US would need British backing. Considering that the United Kingdom had recognized the Communist government of Mao Zedong as the leader of China in January 1950, this entailed bridging serious differences between British and American Far East policy. British Foreign Secretary Anthony Eden, in a conversation with Dulles in London, explained that the price of British backing would be a quid pro quo between the Communists and Nationalists. The Communists would agree to stop shelling in exchange for a pledge by Chiang Kaishek to not attack mainland China. The US were amenable to this, accepting that taking the proposal to the UN would “suspend military

536 214th NSC Meeting, September 12, 1954.

537 214th NSC Meeting, September 12, 1954.


https://history.state.gov/historicaldocuments/frus1952-54v14p1/d298.
action” and foster discussion of a “comprehensive settlement.” The U.K. and the US also agreed to use New Zealand as an interested third party to bring up the matter in the Security Council in a diplomatic operation codenamed Oracle. The US quickly secured an agreement with the British on how to calm the situation in the Taiwan Strait, and it seemed that getting a Security Council resolution could also move swiftly, perhaps having the matter introduced in November.

US leaders knew they would have to get the Nationalist Chinese to assent to the deal, and American efforts shifted to managing the Nationalists’ “unfavorable reaction.” Assistant Secretary of State for Far Eastern Affairs, Walter Roberston, argued in a memo to Dulles that the “conclusion of a mutual defense treaty with the GRC (Government of the Republic of China) is … an essential move to offset the effects of the contemplated action in the UN.” Dulles and Eisenhower agreed, yet they knew that any treaty with the Nationalists that explicitly protected the offshore islands would appear to the British like a blank check for Nationalist raids against the mainland. Thus, Dulles told Robertson that the treaty should be “truly a defense treaty and


that we are not going to defend our partner while our partner attacks.\textsuperscript{545} Dulles dispatched Robertson to Taiwan to inform Chiang of the planned UN resolution and to initiate negotiations on a defense treaty.

As expected, Chiang Kaishek was indignant at the news of the plan to neutralize the Taiwan Strait with a resolution from the UN Security Council. He said that the plan would “play into Communist hands” and exert “a destructive effect on the morale of his troops.”\textsuperscript{546} However, Chiang would withhold public criticism of the UN move if it was paired with a US-ROC defense pact. A treaty with the Nationalists made the British uneasy. Dulles was able to elicit their tacit support for the treaty by telling Eden that it “would be clearly defensive” and aimed at protecting Formosa only. Meanwhile, the UN resolution would neutralize the offshore islands.\textsuperscript{547} With these conditions assured, the British gave their support to the United States’ “two-pronged strategy” of a UN move to neutralize the offshores and a defense treaty to placate the Nationalist Chinese. The rest of the year was spent in negotiations with Chiang’s regime and in discussions with the British and the New Zealanders over logistics for the UN resolution. In sum, during the period of low-level operations by the PRC, the US felt that they could use diplomatic maneuvering to strengthen ties with the ROC and did not feel pressure to give up any of the Nationalist-held offshore islands.

\textit{The Crisis Heats Up: Invasion of the Tachens}

\textsuperscript{545} “Memorandum by the Secretary of State to the Assistant Secretary of State for Far Eastern Affairs.” October 8, 1954. \textit{FRUS, 1952-1954, China and Japan, Volume XIV, Part 1}. \url{https://history.state.gov/historicaldocuments/frus1952-54v14p1/d327}.


Most of the diplomacy in November and December of 1954 focused on getting the Nationalist Chinese to agree to a defense treaty that did not include any public American commitment to defend the offshore islands or any language suggesting that the US would tolerate a Nationalist attack on the mainland. This was difficult, since Nationalist officials believed that both of those stipulations were a way for the US to shirk its security commitment and “write off Formosa.” The success of the diplomatic strategy, though, depended on the ROC accepting these requirements as the price of a defense pact with the US. In a conversation with Mao Zedong and Zhou Enlai, Indian Prime Minister Jawaharlal Nehru found that they were agreeable to negotiations over the offshore islands as long as any US-ROC defense treaty did not include any sign that the US would allow Nationalist attacks on the mainland.

American diplomats attempted to overcome this dilemma by getting the Nationalists to agree to a treaty that only covered Taiwan and the Penghu Islands but then have an exchange of notes stipulating that the ROC cannot use force against the mainland or move forces to the offshore islands without American consent. The possibility of US tolerance for Nationalist attacks on the mainland irked the PRC, prompting Eden to speculate that the Chinese Communists did not have the “minimum willingness” needed to negotiate over the offshore islands at the UN. By December 17, Eden told Dulles that the British were suspending their

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participation in Oracle due to the “heated atmosphere resulting from the prisoner of war issue and the signing of the US-Chinese Nationalist treaty.” 552 By the end of 1954, American efforts to resolve the offshore islands dispute at the UN were effectively stalled.

It was in this context that the Chinese Communists began their assault against the Tachen Islands, the northernmost of the offshore islands. 553 The beginning of this assault motivated US officials to restart Operation Oracle and get the British back on board. However, that would take time to be effective, meaning US officials had to decide quickly to try to defend the islands or concede them. A major factor to take into consideration on this question was that the Nationalist Air Force was unable to “provide adequate air defense for Tachen.” 554 Dulles and Eisenhower agreed that the Tachen Islands were “really quite an indefensible position.” 555 Dulles told his Chinese Nationalist counterpart, George Yeh, that the United States could provide air cover for the Tachen Islands, but that it would be unwise to do so. The islands were “too far from our [US] air bases,” Dulles explained. “It would be necessary to provide air cover from a carrier. It would not make any military sense to tie up a major unit of our fleet and its protecting vessels in order to defend a rocky islet of no strategic importance.” 556 In order to keep the Tachens in Nationalist hands, the US would have to escalate to a level past their point of resolve. As a result, they


decided to concede these islands and convince the Nationalists to withdraw from them. These remarks should not be taken as evidence that American policymakers viewed the withdrawal from the Tachens as a good outcome. In fact, McGeorge Bundy notes that Eisenhower’s decision to withdraw from the Tachens went “against the advice of the majority of the chiefs of staff.”\(^557\) American officials would rather not have withdrawn but losing the Tachens was of insufficient importance to justify the effort needed to keep them.

US officials’ reasoning for conceding the Tachens leaves room for the role of both conventional options and resolve. The United States had low resolve, and within this lower level of resolve, it did not have the capabilities to provide air defense for the forces on the islands. As I show later, for Jinmen and Mazu in 1958, the United States had higher resolve, such that they did deploy two aircraft carriers to the Taiwan Strait, and they had more capabilities with which to resist PRC challenges.

During the Tachens row, Dulles contacted the British Ambassador to the US, Sir Roger Makins, to kickstart a new round of Operation Oracle.\(^558\) The British government was chary of approving a public declaration by the United States to defend Jinmen and Mazu. Any such declaration, they felt, would destroy any hope of carrying out a successful UN-brokered ceasefire.\(^559\) Dulles was able to convince the British to move ahead with Oracle was long as the explicit commitment to Jinmen and Mazu remained private and the US did not allow attacks


from those islands against the mainland. Despite heated objections, Chiang Kaishek agreed to remove his troops from the Tachen Islands and concede them to the PRC. In addition, Congress passed the Formosa Resolution, which authorized the President to use force to protect Taiwan, the Penghus, and “related positions and territories now in friendly hands.” The United States had avoided a military disaster in the Tachens, kept a commitment to defend Jinmen and Mazu vague, and convinced the British to rejoin its diplomatic effort at the UN.

Despite the belligerence by the PRC against the Tachens, the original American strategy outlined in the first phase of the crisis still seemed to be salvageable. New Zealand introduced the resolution at the UN Security Council to discuss a ceasefire in the Taiwan Strait. The Chinese Communists rejected this proposal on February 3, stating that it was meant to “intervene in China’s internal affairs and to cover up the acts of aggression by the United States against China.” The PRC’s rejection of UN mediation prompted the British to withdraw their participation from Oracle. The PRC’s rejection also alarmed Dulles as to future Communist intentions. He wondered out loud to the British Ambassador “whether Peiping [Beijing] really wanted peace.” The evacuation of the Tachen Islands seemed to have done nothing to mollify the PRC. They were still developing airfields and concentrating troops on the mainland across

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565 Ibid.
from Jinmen and Mazu. This continued belligerence in face of a UN offer of diplomacy only confirmed to American policymakers the aggressive intentions of the Communist Chinese. To Dulles and others in the Eisenhower administration, the situation was starting to look like the start of another war against China. The crisis was about to enter its most dangerous phase.

Before moving on to the dynamics behind the resolution of the first crisis, I will offer a few remarks about what events in this second phase of the first crisis mean for conventional options theory. This phase is significant because the United States faced a PRC assault on a group of islands that were defensible by conventional means, but only with the use of two aircraft carrier groups. This was more force than the US was willing to invest in keeping the islands. It thus conceded the islands to the PRC and encouraged the Nationalists to evacuate them. In this phase, US estimates of the likelihood that the PRC would conduct a heavy assault on Jinmen and Mazu increased, islands that US leaders did not think were conventionally defensible in such a contingency. This is why Dulles and other US diplomats pursued diplomacy at the UN with such haste and vigor. They wanted to obtain a ceasefire in the region before the Communists started a heavy assault against Jinmen and Mazu. This is evidence for the mechanism of inferiority in conventional options leading a country to search for a compromise to end the crisis.

The End Game: Nuclear Threats and Declaration of the Ceasefire

Dulles and other US officials grew wary of PRC intentions regarding an all-out attack against Nationalist China during the month of February. In late February, Dulles added a trip to Taiwan on his itinerary to gain on-the-ground information about what was happening in the Taiwan Strait. The information Dulles reported back was alarming. Dulles “was impressed by the Communist program of steady build-up airfields, artillery emplacements and roads which
would be required to take the Matsus and Quemoy islands.” Dulles feared that such a buildup could not be cleared except with “massive US intervention, perhaps with atomic weapons.”

During a meeting with Foreign Minister Eden, Dulles argued that “we are in a battle for Taiwan” and that the “Chinese Communists still give every evidence intention take Taiwan by force and no indication willingness seek possible settlement [sic].” The worst-case scenario laid out in the September 1954 meeting in Denver was that the PRC would conduct an all-out assault on the offshore islands as the opening salvo in an invasion of Taiwan. Whatever Dulles saw on his East Asia trip convinced him that that scenario was now highly likely.

To deal with the now likely contingency of a Communist attack, the US took a two-pronged response. First, they prepared US forces to use tactical nuclear weapons to take out the airfields on the Chinese mainland, and they decided to publicize these preparations both to issue nuclear threats to the PRC and “normalize” these weapons to the American citizenry in an effort to minimize public backlash. Eisenhower instructed Dulles to put into his “proposed speech a paragraph indicating that we would use atomic weapons as interchangeable with the conventional weapons.” Dulles explained to Senate leader Walter George “that an effective defense of these islands would require the use of atomic weapons because it would not be

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567 Ibid.


570 “Memorandum of a Conversation Between the President and the Secretary of State.” March 6, 1955. *FRUS, 1955-57, Vol. II*. [https://history.state.gov/historicaldocuments/frus1955-57v02/d141](https://history.state.gov/historicaldocuments/frus1955-57v02/d141). The proposed speech was a radio and news bulletin on Dulles’ recent trip to Asia.
possible to knock out airfields and gun emplacements with conventional weapons in the face of Chinese manpower and capacity to replace and rebuild.”

Dulles reiterated this point to the National Security Council, saying that the PRC was gearing up for war against Taiwan and that “atomic weapons were the only effective weapons which the United States could use against a variety of mainland targets.” In order to convince the Communist Chinese to not attack the islands, the United States needed to stress its willingness to use the only weapons that could stop them.

Dulles further explained that the US public was unaware of this “very grave prospect” and that the US needed to “create a better public climate for the use of atomic weapons if we found it necessary to intervene in the defense of the Formosa area.”

When asked about possible nuclear use for the defense of Taiwan by a reporter, Eisenhower remarked that “we have been, as you know, active in producing various types of weapons that feature nuclear fission ever since World War II. Now, in any combat where these things can be used on strictly military targets and for strictly military purposes, I see no reason why they shouldn't be used just exactly as you would use a bullet or anything else…I would say, yes, of course they would be used.”

A day later, Nixon reiterated the threat to use tactical atomic weapons in response to a

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573 Ibid.

Communist Chinese attack, declaring that "tactical atomic weapons are now conventional and will be used against the targets of any aggressive force."\textsuperscript{575}

The urgency with which the United States needed to pursue diplomacy and make nuclear threats was caused by the belief in an \textit{imminent, all-out} attack by the PRC against the offshore islands as the opening of an invasion against Taiwan. Available evidence led Eisenhower and his staff to think that such an attack could only be repelled with tactical nuclear weapons. In order to achieve the primary goal of defending Taiwan, the US needed to enact a strategy of nuclear coercion. If such an attack was not forthcoming soon or if an attack would be smaller in scale, then calmer, long-term responses, such as taking action to prevent the problem from arising in the future, were more prudent.

Secretary Dulles spearheaded arguments that the PRC was about to attack, reporting to the NSC that the situation in the Taiwan Strait was “critical and acute” and that “the question of a fight for Formosa appeared as a question of time rather than a question of fact.”\textsuperscript{576} The Joint Chiefs gave a calmer assessment of the situation in a meeting with Eisenhower, with General Nathan Twining saying that “it was obvious that the Chincoms [sic] were not going to attack Formosa at this time, because there had not been a sufficient build-up of mainland airfields.”\textsuperscript{577} Eisenhower used this information to remark that the US should, at first, intervene with conventional weapons and that any use of atomic weapons “should come only at the end, and we would have to advise our allies first.”\textsuperscript{578}

\textsuperscript{575} Quoted in Chang, 1988, 108.


\textsuperscript{578} Ibid.
A report from Admiral Stump on the situation in the Taiwan Strait confirmed the prudence of Eisenhower’s decision. Any Communist attack against the offshores would have to include heavy use of airpower to be successful. Because there was no evidence a large buildup of air forces across from Jinmen and Mazu, Stump argued that “an all-out attack will not occur until after at least four weeks from now in the case of Matsu, and eight weeks from now in the case of Quemoy.” These arguments, however, were in favor of temporary restraint rather than long-term restraint. As Admiral Radford explained, the state of intelligence on Chinese Communist air buildups was so weak that the absence of evidence for such a buildup “should not be taken to mean that such a build-up is not going on.” This uncertainty, plus the belief that the PRC wanted to invade Taiwan eventually, prompted the United States to rely on the possibility of nuclear use to protect their Nationalist allies’ rule over Taiwan.

While US officials debated whether or not the PRC would soon attack the offshore islands, the Chinese Communists sat idle. No attempt to seize the offshore islands happened in March. Reflecting on this, Eisenhower wrote in his diary that “I believe hostilities are not so imminent as is indicated by the forebodings of a number of my associates.” On March 28, White House Press Secretary James Hagerty wrote in his diary that he discussed stories in the press that the Communist Chinese would invade Jinmen and Mazu by April 15. Eisenhower was irate at these stories. He exclaimed: “They’re going to look awful silly when April 15th comes along and there is no incident, because honestly our information is that there is no build-up off

579 “Memorandum from the President’s Staff Secretary (Goodpaster) to the President.” March 15, 1955. FRUS, 1955-57, Vol. II. https://history.state.gov/historicaldocuments/frus1955-57v02/d153.


those islands as yet to sustain any attack, and believe me, they’re not going to take those islands just by wishing for them. They are well-equipped and well-defended and they can only be taken, if at all, by a prolonged all-out attack.”

In addition to Eisenhower’s doubts about the likelihood of an attack, Secretary Dulles began to have doubts about the benefits of nuclear weapons. He opined in a State Department meeting that “an atomic attack on the mainland as a beginning would be a poor way to gain the support of the Chinese people for his [Chiang’s] cause” and that “we cannot splurge our limited supply of atomic weapons without serious danger to the entire international balance of power.”

During an NSC meeting on March 31, Secretary Dulles voiced “considerable concern about the political repercussions of the proposed use of atomic weapons.” What caused this shift in the Secretary’s attitude is unclear, but by the end of March he was much less sanguine on the efficacy of relying on nuclear weapons in the Taiwan Strait. The Secretary’s pessimism about nuclear weapons and Eisenhower’s calm assessment of the situation created space for the United States to enact a long-term solution to the problem.

This led to the second strategy that the United States took to solve the “horrible dilemma” of the offshore islands. They decided to cede them to the PRC and subsequently build up Nationalist conventional strength on Taiwan. As Eisenhower summed it up in a meeting on April 1, the best solution would be “to convince Chiang the should: 1) voluntarily evacuate Jinmen and Mazu and 2) entrench himself on Formosa.” As part of this plan, the US would “land a division

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582 “Editorial Note.” The diary entry was on Monday, March 28. Hagerty writes that once Eisenhower had considered the impact of the news stories, “he then exploded, got up from his desk and walked around the room.” FRUS, 1955-57, Vol. II. https://history.state.gov/historicaldocuments/frus1955-57v02/d174.


of Marines on Formosa” and “augment US Air Forces and aircraft defenses on the island.”

With the perceived threat of an imminent attack gone, the US attempted to escape from its reliance on over-escalation by conceding the offshore islands and increasing conventional military strength on Taiwan itself. The dual-track policy of making concessions and seeking to add rungs at the conventional level along the escalation ladder makes sense within the context of conventional options theory. Few conventional options made the United States willing to make concessions in the short term and enhance its conventional capabilities in the long term.

The President decided to dispatch Admiral Radford and Assistant Secretary Robertson to Taiwan to convince Chiang Kaishek to withdraw his forces from Jinmen and Mazu. In the meantime, Dulles and Eisenhower tried one last attempt at achieving a ceasefire via diplomacy at the Bandung Conference. The Secretary urged the British Ambassador to press his government to call for a ceasefire at Bandung, telling him that if “some resolution or statement could come out of Bandung calling for a cease-fire and calling on both parties not to resort to force, the chances of maintaining peace in that area would be very considerably enhanced.” Eisenhower vetoed Nationalist attacks against mainland targets in order to give the Bandung


586 “Message from the Acting Secretary of State to the Assistant Secretary of State for Far Eastern Affairs (Robertson) and the Chairman of the Joint Chiefs of Staff (Radford), at Taipei.” April 22, 1955. FRUS, 1955-57, Vol. II. https://history.state.gov/historicaldocuments/frus1955-57v02/d212.

587 Dulles informs Eisenhower of this effort in a meeting on April 4, telling him that “we were working through the British, the Australians and the Canadians, and hoped to bring some pressures to bear at the Bandung Conference.” See, “Memorandum of a Conversation Between the President and the Secretary of State, Washington.” April 4, 1955. FRUS, 1955-57, Vol. II. https://history.state.gov/historicaldocuments/frus1955-57v02/d188.

diplomatic gambit a chance to succeed.\textsuperscript{589} For reasons that are not yet clear in the historical record, Zhou Enlai agreed to call a ceasefire in the Taiwan Strait and said that the PRC was “willing to enter into negotiations with US.”\textsuperscript{590} The public call by the PRC for a ceasefire was well-timed, as Chiang Kaishek staunchly rebuffed the American proposal to voluntarily evacuate Jinmen and Mazu.\textsuperscript{591}

Dulles jumped on Zhou Enlai’s ceasefire proposal, advising Eisenhower that “we should be prepared to indicate receptivity to any ‘cease fire’ proposal.”\textsuperscript{592} In a press conference on April 26, Dulles announced that the United States looked with approval on the ceasefire proposal and that it would be willing to enter into negotiations with the PRC.\textsuperscript{593} The ceasefire proposal ended a period of uncertainty for US decision-makers in February through April 1955. They thought that the time for nuclear use may be near, and they were wary at having to make such a decision. Zhou’s ceasefire gave them a way to escape the decision between nuclear use and conceding the offshore islands. Nevertheless, the military balance that produced the unpalatable choice still prevailed the day after the ceasefire. The Nationalist Chinese and the United States did not have enough air defenses to combat heavy use of air power by the PRC to destroy the garrisons on Jinmen and Mazu. Furthermore, the PRC’s ceasefire was only temporary. Eisenhower wrote to


Dulles that despite the diplomatic success at Bandung, “we are still on the horns of the dilemma that you and I have discussed a number of times.”

*The Role of Nuclear Deterrence in Producing the Temporary Ceasefire*

Zhou Enlai called for a ceasefire after the United States issued threats to use nuclear weapons in a conflict over Taiwan and the offshore islands of Jinmen and Mazu. After the crisis, Dulles took this to mean that nuclear brinkmanship was effective, remarking in an interview with *Life* magazine that: “Of course we were brought to the verge of war.... If you run away from it, if you are scared to go to the brink, you are lost.”

Some scholars would dispute Dulles’ boasts and argue that the nuclear threats of March played a limited role. The Communist government may not have even meant to seize Jinmen, but used the shelling as a way to disrupt the growing ties between the Nationalist government and the US. In fact, the PRC could have viewed the shelling of Jinmen as a natural extension of their *diplomatic* strategy protesting US interference in the Taiwan Strait. There was not even a military plan to capture Jinmen in September 1954. In addition, these scholars point out that the link between Zhou Enlai’s call for a ceasefire at the Bandung Conference and the United States’ nuclear threats is not ironclad. US officials made their nuclear threats in mid-March, but the conciliatory statement from Zhou came over a month later. Moreover, Zhou understood himself to be making an “impromptu

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597 Chang and Di, 1993, 1507-1508.

response” to questions about Taiwan from other Asian diplomats that was consistent with preexisting policy.599

However, it is difficult to argue that nuclear coercion played no role in convincing the PRC to back down. The Eisenhower administration made multiple public statements that it was prepared to use nuclear weapons to keep Nationalist rule intact on Taiwan. After these statements, the PRC decided to declare a ceasefire in the Taiwan Strait. For the primary goal of protecting Taiwan, nuclear deterrence was useful. An explanation based on conventional options can better at explain why the US was not as successful in the protecting the offshore islands. With the Tachen Islands indefensible by conventional means except with two aircraft carriers, the United States thought it better to convince Chiang Kaishek to withdraw his forces from the islands. The frantic pace with which the United States sought to convince the Nationalists to surrender the rest of the offshore islands was due to the Americans’ feeling of vulnerability prompted by the lack of conventional options available for defending a peripheral interest. This constitutes evidence for the mechanism of willingness to compromise that should be caused by possessing few conventional options. This suggests that if the PRC decided to escalate its use of force in April 1955, it may have been able to obtain a US-backed Nationalist withdrawal from Jinmen and Mazu.

Finally, my theory can still explain why the PRC did not attack Taiwan. Nationalist resistance to an invasion of Taiwan would have been fierce, and the PRC may have found that the price of attacking it were too steep.600 Moreover, it is doubtful the PRC would have been able to take Taiwan even with an all-out assault. As H.W. Brands put it, “its [Taiwan’s] security had

599 Chang and Di, 1993, 1520-1521.

600 Bundy, 1988, 279.
never been in serious doubt, as American intelligence sources reported from the beginning.”

In sum, nuclear deterrence theory can explain why Taiwan was protected during the First Taiwan Strait Crisis, but conventional options theory can also explain it. Plus, conventional options theory is better at explaining the United States’ trouble in achieving its secondary goal of retaining control over the offshore islands.

The Interim Peace and Conventional Buildup between April 1955 and August 1958

The underlying issues that sparked the First Taiwan Strait Crisis remained unresolved. The Nationalist Chinese still held islands only a few miles from the Communist mainland, and neither side had agreed to a general renunciation of the use of force to change the status quo. During the ceasefire period, the United States and the ROC built up their conventional military strength to be better prepared for another Communist provocation against the offshore islands. In particular, US and Nationalist officials focused on improving their air defense capability in the Taiwan Strait. As seen in evaluations of the military balance in the first crisis, the success of a Communist attack against Jinmen and Mazu depended on their ability to destroy the offshore islands’ defenses and cut off any reinforcements from the air. Thwarting the Communist ability to gain air superiority would therefore make it difficult for them to seize the offshore islands.

Three developments occurred in the interim between the first and second crisis that added a rung on the American and Nationalist escalation ladder at the level of winning air superiority. First, the United States sold to Chiang Kaishek F-84 and F-86 fighter jets soon after the end of the first crisis. The Nationalist Defense Minister Yu Ta-Wei stated that the ROC air force had, by February 1956, “two F–84’s and one F–86 wing now combat ready.” He then added that his

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goal was to have five groups by the end of this year.\footnote{Memorandum for the Record by Rear Admiral Truman J. Hedding, Special Assistant to the Chairman of the Joint Chiefs of Staff. \textit{FRUS, 1955-1957, China, Volume III}. \url{https://history.state.gov/historicaldocuments/frus1955-57v03/d153}.} By March 1957, all five F-84 and F-86 air groups were combat ready.\footnote{Memorandum of a Conversation, Washington.” December 18, 1956. \textit{FRUS, 1955-57, Vol. III}. \url{https://history.state.gov/historicaldocuments/frus1955-57v03/d224}. In this conversation, Defense Minister Yu states that all groups are combat ready except for one F-86 group, but he says that that group will be ready by March. That assessment may be optimistic, but even so, that air group was probably combat ready before August 1958.} A study by the air force of developments between the two crises remarked that the Chinese Nationalist Air Force (CNAF) was “strengthened by the acquisition of F-86F fighter-interceptors.”\footnote{Van Staaveren, 1962, 10.} The addition of the F-84 and F-86 aircraft helped increase the size of the CNAF to “nearly 500 jet aircraft,” and the improvement in the number of fighter jets also prompted improved air facilities on Taiwan, though “many inadequacies remained.”\footnote{Ibid.} What would become an important capability in the Second Taiwan Strait Crisis was that these aircraft could be equipped with the Sidewinder missile, an air-to-air missile with infrared homing that was “probably the most widely used guided missile in the world” at the time.\footnote{Department of Defense. \textit{Semiannual Report of the Secretary of the Defense and the Semiannual Reports of the Secretary of the Army, Secretary of the Navy, Secretary of the Air Force: Fiscal Year 1957}. Washington, D.C.: Government Printing Office, 1958. \url{https://www.loc.gov/resource/sgpmbbpres.00416159695/?st=gallery}. Hereafter “FY1957 Secretary of Defense Report.”} Improvements in Nationalist air defense capability would end up bolstering the American escalation ladder. This is because the United States would be able to deny air superiority to the PRC with less investment of its own forces than it would have had to make to accomplish the same mission in the first crisis.

The second development that aided US air defense efforts was the introduction of supersonic jet aircraft that could be deployed throughout the globe on short notice. Starting in
1955, the “century series” of supersonic jet aircraft was introduced into the US Air Force (USAF). The two century series aircraft that were deployed to Taiwan were the F-100D and the F-104A. These aircraft quickly set speed and altitude records for USAF planes, and they led to a “remarkable development” in the Tactical Air Command’s (TAC’s) mobility and reach. Paired with the introduction of these new, more mobile aircraft was the creation of “composite air strike forces” aimed at improving the capacity of the Air Force to “react swiftly to military demands anywhere in the world.” F-100 and F-104 aircraft were sent to air bases in Taiwan from Okinawa, Philippines, California, and even Texas. In addition to greater deployability, these aircraft could be equipped with more firepower than previous aircraft. Even though the USAF was decreasing its number of tactical air wings in the late 1950’s, improvements in striking power on new aircraft meant that “the 105 wings of 1959 will have at least as much effective striking power as the 137 wings of 1957.” Between 1955 and 1958, the United States introduced new fighter aircraft that possessed greater range and striking power than previous models. These aircraft would end up improving the air defense capability in the Taiwan Strait.

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The third development that improved US air defense capability was the deployment of a Nike-Hercules battalion to Taiwan in 1958. The Nike-Hercules missile was a surface-to-air missile with nuclear capability that was introduced to Army units in June 1958. The Joint Chiefs called for a battalion to be deployed to Taiwan on August 25. However, operational plans had not yet even been developed for deployment of the Nike-Hercules to East Asia when the order went out. This meant that the Nike-Hercules anti-aircraft battery was not combat ready until October 25, shortly after the crisis ended. The Nike-Hercules missile was thus a less important contribution to US air defense than the improvements in CNAF air strength and US tactical air mobility. However, if the crisis had continued, the arrival of the Nike-Hercules would have further reinforced US and Nationalist ability to deny the PRC air superiority over the Taiwan Strait.

Although it did not involve the development of a new capability, another move that increased the conventional military power of the United States in the Taiwan Strait was the deployment of a second carrier group to the region in the second crisis. US decision-makers were not willing to tie down two carrier groups in the Taiwan Strait in the first crisis, but they had no such qualms in the second one. In addition to the *Midway*, which was assigned to the Pacific theater, they deployed the *Essex* along with its destroyer escorts from the Mediterranean early in the crisis. The aircraft aboard the *Essex* and *Midway* also contributed to the American air defense capability in the Taiwan Strait.

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One objection to this description of improvements in air defense capability is that these deployments were made with the goal of enhancing the nuclear capability of the United States Air Force. The development of the Composite Air Strike Force was meant to give the United States the ability to use tactical nuclear weapons within local conflicts. The Nike-Hercules missile was nuclear-capable. In addition to the developments I mentioned above, the United States also deployed a Matador missile squadron to Taiwan, which was equipped with tactical nuclear warheads. Finally, PACAF’s plan for defending Taiwan and the offshore islands in the event of a PRC attack, Ops Plan 25-58, called for the use of nuclear weapons early in the conflict. I do not dispute that the United States increased its nuclear options in the Taiwan Strait between 1955 and 1958. However, the United States also increased its conventional capabilities in the Taiwan Strait during this time. Plus, as I show below, the evidence from the case indicates that the improvements in conventional options proved more consequential to US success in defending the offshore islands in the second crisis.

In sum, the United States and its Nationalist Chinese ally increased their air defense and naval capabilities in the Taiwan Strait. This improvement gave the US and the ROC a rung on their escalation ladder at the level of thwarting PRC air interdiction and bombardment efforts. If the PRC wanted to take Jinmen and Mazu, it would now have to escalate beyond the use of air power alone. The deployment of a second carrier group to the Taiwan Strait also buttressed efforts to resupply the Nationalist garrisons on the islands. Did the addition of these rungs to the escalation ladder change the American bargaining strategy in the second crisis? Did it raise the

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616 Ibid, 10.
618 Van Staaveren, 1962, 27.
costs of seizing Jinmen and Mazu to the Chinese? And did it lead to a better outcome for the
United States? These are the questions I will answer in the next section detailing the events of
the Second Taiwan Strait Crisis.

**The Effects of American and Nationalist Conventional Military Power**

Tensions continued to simmer in the Taiwan Strait from 1955 to 1958. The United States
had deployed more military power to the Taiwan Strait in the interim period, and in November
1957, US and ROC forces resumed joint naval and air exercises.\(^{619}\) These moves gave the United
States more conventional rungs on its escalation ladder, but it also increased the military threat to
the PRC coming from Taiwan, and they increased the chance that Taiwan would become an
independent entity.

By the spring of 1958, Mao and other top officials in the PRC began contemplating the
use of force to combat US and ROC actions in the Taiwan Strait. Some of this was done with an
eye towards larger foreign and domestic aims. On May 23, Mao said that in order to deter the US
from continuing its “occupation of Taiwan,” the PRC needed to “demonstrate [sic] our
boldness.”\(^{620}\) Mao also wanted to justify the mass mobilization at the core of his Great Leap
Forward: “It [sparking tension in the Taiwan Strait] is to our advantage in that it will mobilize all
our positive forces…It can [help] us increase steel as well as grain [production].”\(^{621}\) Mao also
had a more direct, limited aim of taking Jinmen and Mazu through coercion. In July and early
August, Chinese military forces were preparing for renewed operations against Jinmen. The PRC
moved 173 aircraft received from the Soviet Union to airfields in Fujian Province in the first

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\(^{619}\) Li, 2001, 156.

\(^{620}\) Zhang, 1992, 229. This comment also shows how Mao wanted to demonstrate his independence from Moscow
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\(^{621}\) Jian, 2001, 180.
three weeks of August, and several air battles took place between ROC and PRC forces during this time. On August 19, Mao said that “after a period of shelling, the other side might withdraw its troops from Jinmen and Mazu,” at which point PRC forces could simply occupy them.

US intelligence had no knowledge of these remarks, but PRC preparations and low-level confrontations with Nationalist forces caused some alarm among top US officials, who raised the issue with President Eisenhower. The US decided to make their own contingency plans in the first weeks of August for the use of force. Similar to the first crisis, the United States’ primary aims were to maintain close ties to Taiwan, defend it from any PRC invasion, and keep the offshore islands of Jinmen and Mazu in Nationalist hands.

Despite reservations about hitting US military forces, Mao decided to initiate the shelling of Jinmen on August 23, 1954. Unlike in 1954-55, this time Mao aimed at capturing Jinmen and Mazu. On August 20, when Mao gave the orders about the renewed Jinmen campaign, he made clear that it may lead to the capture of the island: “After being hit by us for a period of time, the enemy might consider either evacuating from Jinmen/Mazu or putting up a last-ditch resistance there. Whether we attack these islands will depend on how the military situation changes. One step at a time.” Mao was optimistic that an artillery bombardment alone could force Chiang Kaishek to retreat, mostly because the United States would not choose to intervene

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625 Li, 2001, 158. On August 20, Mao asked the commander of the Fujian armed forces, Ye Fei, “Can it [shelling of Jinmen] be done so that no Americans will be killed?” Ye Fei replied, “Chairman, some killing is inevitable.”
626 Zhang, 1992, 237.
to protect Jinmen. Mao did not take into account American and Nationalist improvements in air power and therefore believed that the United States was too weak at the conventional level to defend the offshore islands. On September 5, Mao said in a speech at the Supreme State Conference that “I really don’t know how they can manage a war with us [over Jinmen and Mazu]…In order avoid a war with us, America has to find a way out. How? The only way is to withdraw the 110,000 [KMT] troops from Jinmen and Mazu as they did for Tachen in 1955.”

Frustrated with developments over Taiwan, Mao decided to bombard the KMT garrison on Jinmen in the hopes that it would deter US involvement in the Taiwan Strait and coerce Chiang into removing his troops from the island. This would allow Mao to occupy Jinmen.

Recognizing the challenge to their position in Taiwan, United States policymakers began formulating a response to the artillery bombardment. The Departments of State and Defense dispatched the aircraft carrier USS Essex and four accompanying destroyers to the Taiwan Strait on August 25. US decisionmakers also decided to bolster Taiwan’s air defenses, with 121 USAF fighters deployed to bases in Taiwan during the crisis. The US also decided to convoy (in international waters only) the Nationalist ships charged with resupplying the garrison on Jinmen. These conventional operations were chosen because US decisionmakers wanted to delay for as long as possible the need to use tactical nuclear weapons. There were three phases to

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627 Zhang, 1992, 235.

628 And likely Mazu, since it would be difficult to hold on to that island while conceding Jinmen.


631 “Memorandum of Meeting.” August 25, 1958. For more details on the resupply operation, see Halperin, 1966, 197-211.
the plan for defending the offshore islands, OP-Plan 25-58. Phase I was a convoy operation; Phase II was to retaliate against the PRC attacking forces; Phase III was to destroy the PRC’s capacity to wage war against Taiwan.\(^{632}\) The second phase would involve the use of tactical nuclear weapons. Knowing this, President Eisenhower issued a directive saying that the Pentagon should come up with several “graduated courses of action which might be pursued short of use of nuclear weapons” in the first phase.\(^{633}\) In response, Defense and State agreed that several courses of action would be pursued in the first phase, and the decision to move to the second phase would be taken only with another high-level meeting.\(^{634}\) Consistent with this, Admiral Felt, the commander of CINCPAC, told the Joint Chiefs in a telegram that all preparations were being made to conduct non-nuclear operations.\(^{635}\) By September 7, the US had sent six aircraft carriers, two of which were attack carriers (CVA) and four of which were anti-submarine carriers (CVS), and over 500 warplanes to the Taiwan Strait.\(^{636}\) Even though US leaders knew that “small atomic weapons” would need to be used if the PRC decided to conduct an all-out invasion of Jinmen, they had recourse to conventional options in response to the PRC’s artillery interdiction operation.\(^{637}\)

\(^{632}\) This is reported in Van Staaveren, 1962, 15-16.


\(^{635}\) “Telegram from CINCPAC to the Joint Chiefs of Staff.” August 25, 1958.

\(^{636}\) Zhang, 1992, 250.

The level of deployment shows that the United States had higher resolve to protect the offshore islands of Jinmen and Mazu in 1958 than they did to protect the Tachens in 1954-55. This could have contributed to the better outcome in keeping the former in Nationalist hands in 1958. However, the list of conventional weapons just described also shows that United States had greater capabilities within that higher level of resolve to defend Jinmen and Mazu. I will show how these conventional options affected the dispute outcome in 1958 while also acknowledging some role for increased resolve compared to 1954-55.

The PRC reacted to these measures by continuing their artillery bombardment of Jinmen, albeit at a less intense level than in the first days of shelling. At the same time, the PRC recognized that these American conventional operations meant that the confrontation over Jinmen was more serious than previously thought. Now that the US had demonstrated a willingness to use some force to defend the offshore islands, PRC considered negotiating with the Americans. On September 6, Zhou Enlai remarked that the PRC was “ready to accept the US offer of early August to resume the Sino-American ambassadorial talks.” The PRC embarked on these diplomatic steps while refusing to budge from their belligerent policy towards Jinmen and Mazu. Gong Li shows that Chinese decision-makers decided to maintain a “noose policy” with regards to the offshore islands in which they would be used to nettle the American position in East Asia. Li says this is evidence that Mao did not want to take Jinmen or land troops on the island, but it is likely that he still hoped that the bombardment would lead to the capture of Jinmen at this time. On September 8, Mao told the Supreme Conference for State Affairs that

638 Halperin, 1966, 160, reports that in the first week of September, PRC forces launched only a few thousand artillery shells at Jinmen, compared to around 40,000 on the first two days of shelling each.

639 Zhang, 1992, 252.

Jinmen was untenable for the US to defend and that they will want to get its forces out of the area soon. The way of getting out of Jinmen and Mazu would be “to remove the 110,000 KMT troops from there.” US deployments of conventional troops and weapons platforms to the Taiwan Strait encouraged Chinese Communist leaders to seek negotiation, but it did not convince them to change their strategy of trying to capture Jinmen through artillery interdiction.

Over the course of September, the situation in the Taiwan Strait developed into a stalemate. The first few days of the convoy effort were unsuccessful, as Nationalist ships failed to unload supplies on Jinmen under heavy artillery fire. On September 12, Dulles expressed frustration to the British Ambassador to the United States, Harold Caccia, about PRC success “in preventing Nationalist resupply of the islands [Jinmens].” Dulles also noted in a conversation with Eisenhower that the resupply operation may need to be reconsidered if it continued to struggle. The difficulties of resupplying the islands prompted CINCPAC commanders to start pushing for escalating the conflict by allowing Nationalist planes to attack artillery batteries on the mainland and allowing US ships to sail into territorial waters. US decision-makers decided to stay with the resupply operation but encourage Nationalist forces to use better unloading tactics to deal with the heavy artillery fire.

641 Quoted from Zhang, 1992, 252-253.

642 Halperin, 1966, 298.


This worked, as by September 19, Nationalist forces were able to unload 118 tons of supplies on Jinmen even while taking heavy artillery fire from the mainland.\textsuperscript{646} The unloading missions continued at this level for the next two weeks, effectively breaking the PRC’s interdiction effort. On September 26, Undersecretary of State for International Security Affairs, John Irwin, wrote in a memo to Dulles that “the resupply of Kinmen appears gradually to be improving.”\textsuperscript{647} Three days later, General Nathan Twining, head of the Joint Chiefs of Staff, told Eisenhower that the military was “no longer concerned” about the supply situation.\textsuperscript{648} A CIA assessment on October 1 from an officer in Taiwan proclaimed that the supply situation on Jinmen had stabilized and that the blockade was broken.\textsuperscript{649}

The improved CNAF dominated the battle for air superiority during the crisis. In 25 engagements against Communist aircraft, Nationalist air forces “destroyed 32 aircraft, probably destroyed 3 others, and damaged 10. They lost only 2 F-86F’s and 2 F-84G’s.”\textsuperscript{650} One of the United States’ newest weapons aided in this winning effort. The F-86F’s were equipped with the newly developed Sidewinder missile, and in an air battle on September 24, five of these weapons were aimed at Communist aircraft, “scoring bulls-eyes on four, sending them to earth.”\textsuperscript{651} That air battle on September 24 was the largest in the crisis, with “an estimated 100 Red aircraft aloft

\textsuperscript{646} Halperin, 1966, 300.


\textsuperscript{649} Halperin, 1966, 368.

\textsuperscript{650} Van Staaveren, 1962, 38.

\textsuperscript{651} O’Neill, 1958, 38. O’Neill claimed that the “Sidewinder Accounts for Itself” in the section where he describes the battle for air supremacy.
over the Taiwan Straits.” The CNAF shot down ten while sustaining no losses of their own.652 Throughout the crisis, air engagements were “limited to occasional air clashes between the two Chinese air forces,” and the “anticipated struggle for aerial supremacy over the Taiwan Strait did not materialize.”653 Still, the dominant performance shown by Nationalist air forces in limited engagements could hardly have encouraged PRC leaders that they would win an intense battle for air superiority. These details come from an operational history of the US Air Force, specifically the Fifth Air Force, in the Second Taiwan Strait Crisis. These operational histories tend to exaggerate the capabilities of their services, meaning that some figures should be discounted. Nevertheless, the overall thrust of the details that the United States and its Nationalist Chinese ally were able to win the limited battle for air superiority fits with other, non-USAF sanctioned, accounts of the crisis.654

By the end of September, the PRC recognized that Jinmen could not be blockaded or captured through artillery interdiction alone.655 This caused Mao and other Chinese Communist leaders to drop their effort to coerce the KMT into removing their troops from Jinmen. Instead, PRC strategy would focus on combating the US’ “two Chinas” policy. On October 3, Mao convened the Politburo Standing Committee to consider new strategies for the offshore islands, and they decided to let the KMT retain Jinmen and Mazu in order to keep them more closely tied

652 Quote and statistic from Ibid, 37.
654 Morton Halperin, despite being pessimistic on the overall air balance between the Nationalists and the Communist Chinese, notes that US Air Force leaders believed that US-GRC success in a limited air war prevented the Communists from gaining air superiority in the Strait, contributing to the successful resupply effort. Halperin, 366-367.
655 Ibid, 336.
to the mainland.656 Plus, the vulnerable position of these islands meant that the PRC maintained
the ability to exert pressure over the United States and the KMT, which would, in Mao’s mind,
“make it easier to solve the problem of Taiwan, Jinmen, and Mazu once and for all in the future.”657 To enact this new policy, Mao declared a ceasefire on October 6 as long as American
ships ceased convoying in the area, which they did. On October 13, the ceasefire was extended
for another two weeks.

Dulles traveled to Taiwan on October 20 to meet with Chiang Kaishek and convince him
to reduce his garrison on Jinmen. US decision-makers felt that Chiang had deliberately placed
his troops in a vulnerable position in order to entangle the US in a peripheral conflict, and they
wanted to make sure that a new crisis in the Taiwan Strait was less contentious. Policymakers
hoped that Chiang would reduce his garrison, therefore making the offshore islands more
expendable, in exchange for enhanced amphibious lift capabilities.658 When Dulles arrived in
Taiwan, the PRC resumed intense shelling of Jinmen to send a message that it retained some
leverage over the situation. Chiang Kaishek balked at the American proposal, but Dulles was
able to convince Chiang to sign a joint communique in which he pledged to seek reunification of
Taiwan and the mainland “through peaceful means.”659 The PRC also agreed to use peaceful
means to seek reunification. However, it also wanted to signal that it had leverage over the KMT

656 Li, 2001, 163-165.

657 Quoted from Zhang, 1992, 261.


regarding the offshore islands and that any move toward a “two China” policy would be met with hostility.\textsuperscript{660} It thus began a policy of intermittent shelling of Jinmen on October 25, with bombardment restricted to the beaches on odd days and no shelling on even days. The beginning of this intermittent shelling effectively marked the end of the Second Taiwan Strait Crisis.

\textit{Assessment: The Roles of Nuclear Coercion and Conventional Military Operations}

On the primary goal of securing Taiwan, the outcome of the second crisis was the same as the first. There is some role for nuclear deterrence in producing this outcome. Mao and other Chinese leaders did not want to get US forces involved in combat during the crisis for fear that this would turn the incident into a war. In such a war, the PRC knew that the US was likely to use tactical nuclear weapons. The Soviet Union declined to extend its nuclear umbrella over the PRC if it was attacked by nuclear weapons in response for a provocation against Taiwan. This episode caused strain in the Sino-Soviet relationship, and one effect of the crisis was that it reinforced the PRC’s belief that it needed to pursue an independent nuclear capability.\textsuperscript{661} In addition, the United States deployed nuclear-capable Matador missiles to Taiwan, making manifest their latent nuclear threat. That the PRC decided to back down in the face of American nuclear superiority is suggestive evidence that nuclear coercion contributed to US success in protecting Taiwan in the second crisis.

Similar to the first crisis, the defense of Taiwan could have been successful without nuclear coercion; the United States and its Nationalist ally maintained large conventional forces in and around the island. On the secondary goal of protecting the offshore islands from PRC seizure, conventional options theory would predict that the US would be more successful. This is

\textsuperscript{660} Li, 2001, 170.

because improved conventional capabilities raised the cost of taking Jinmen and Mazu for the PRC.

The evidence indicates an important role for conventional denial in convincing the PRC to back down from its challenge on the offshore islands in the second crisis. Once American policymakers were alerted to the coming of a confrontation over the offshore islands, they scrambled to develop conventional options. President Eisenhower in particular, wanted to manage the escalation of the conflict and avoid making the nuclear decision, remarking that “I kept to myself the decision to employ US forces.”\(^\text{662}\) Regional commanders chafed at the suddenness with which they needed to craft plans for conventional operations,\(^\text{663}\) but these efforts nevertheless ended in a plan to convoy Nationalist ships to resupply Jinmen and break the PRC’s artillery blockade. The strength of the US bargaining position hinged on the success of the resupply effort and the battle for air superiority. In a call to the Secretary of Defense, Neil McElroy, Dulles explained that he felt good about the outcome of the crisis “if he felt we could keep the supply business going.”\(^\text{664}\) With regards to the air superiority battle, the United States could feel confident. The success of Nationalist engagements against PRC aircraft and the existence of further US air power on Taiwan and on the deployed aircraft carriers gave the PRC little hope that it could gain control of the skies over the Strait. The success of the resupply effort was more in doubt, but once it started to succeed US policymakers became more confident in a positive conclusion to the crisis. It was this success that caused the US and the ROC to defend Jinmen and Mazu. As Eisenhower writes: “But while speeches were made, statements issued,

\(^\text{662}\) Bundy, 1988, 182.

\(^\text{663}\) Van Staaveren, 1962, 50-59.


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and resolutions passed, the crisis was really eased by the success of the Nationalist Navy, with the help of United States advisers, in defeating the Red interdiction of Quemoy [Jinmen].”

Crucially for conventional options theory, the convoy operation was implemented so as to minimize the risk of further escalation. US ships could only escort to within three miles of Jinmen, far enough to remain in international waters. This decision made a direct confrontation between U.S and PRC forces less likely, which is the antithesis of a brinkmanship tactic. The focus of the conventional response was to implement a successful conventional defense, not introduce the prospect of an immediate PRC-US battle.

If the United States could assist Nationalist forces in successfully resupplying Jinmen and thwarting the PRC’s ability to conduct airstrikes, it would raise the costs of seizing Jinmen and Mazu for the PRC. They would have to choose between escalating the conflict to an amphibious assault against Jinmen or they could change their policies toward the offshore islands and cease the bombardment. They chose to do the latter. From this viewpoint, the change in policy to focus on the “two Chinas” aspect of the issue was due to the failure of the artillery interdiction. As Morton Halperin explained in his history of the 1958 crisis for the US government, “probably looming larger in the Chinese decision to stop their artillery fire was to halt before it became clear that the blockade had been broken by the G.R.C convoys with US escorts up to three miles.” The announcement of the ceasefire may have been timed come before an American convoy was set to embark for Jinmen. American and ROC officials had “no doubt that the convoy would succeed and would go a long way toward making it clear to the world that

665 Bundy, 1988, 282.
666 Halperin, 1966, 205.
667 Ibid, 485.
Quemoy [Jinmen] could be resupplied under current military conditions.” In a conversation with the head of the Senate Foreign Relations Committee, Theodore Green, Dulles said that the success of the resupply meant that the PRC would have to at least escalate to airstrikes against Jinmen in order to seize the island. But the efforts to increase US and Nationalist air power made airstrikes untenable, and an amphibious assault carried a greater immediate cost and risk of escalation. Because of this, the PRC decided on a ceasefire. The ability to convoy Nationalist ships, resupply the garrison on Jinmen, and deny air superiority to PRC forces allowed the US to resist PRC pressures to convince Chiang to remove his forces from the island. It also put the decision to escalate the conflict back in PRC hands, which they declined to do.

The second Taiwan Strait Crisis demonstrates the logic of conventional options theory. The United States made nuclear threats, but the success of American and Nationalist Chinese arms at lower levels of conflict determined their degree of success in the dispute. This explanation fits with the analyses of other scholars. Todd Sechser and Matthew Fuhrmann conclude from their case study of the crisis that “China’s conventional military weakness—particularly in the air—loomed far larger [in its decision to back down] than its vulnerability to nuclear attack.” Bundy concludes that “the one man closely engaged who can press the nuclear button becomes the man most interested in doing well enough in the ‘tiny’ war to avoid the choice between nuclear weapons and defeat. The bomb, present in the wings, makes both sides focus on the lesser onstage battle.”

668 Ibid, 486.


670 Sechser and Fuhrmann, 2017, 199.

671 Bundy, 1988, 286.
One counterargument is that part of the success of being able to keep Jinmen and Mazu in Nationalist hands, as opposed to failure to do the same for the Tachens, could be due to the higher resolve to defend the former. Dulles described the main Tachen island of Yijiangshan as a “rocky islet of no strategic importance.” While US policymakers did not think much of the intrinsic importance of Jinmen and Mazu, they thought more highly of it than they did for the Tachens. This does not mean that all of the success should go to the role of resolve in the crisis. Rather, within this higher level of resolve, American policymakers had more options for conventional escalation in the 1958 crisis. Eisenhower and Dulles felt less confident that they could defend Jinmen and Mazu in 1955 as compared to 1958, and they made more efforts to convince Chiang Kaishek to remove his forces from the islands because of this. Even so, the fact that resolve was higher for protecting Jinmen and Mazu means that greater resolve could have played some role in producing a better outcome in the achievement of secondary goals in the second Taiwan Strait Crisis. This is why I say that the crisis only gives moderate support to conventional options theory.

Conclusion: Implications for Conventional Options Theory

How do the Taiwan Straits Crises illustrate or question the mechanisms of variety of capabilities theory? On the one hand, the ultimate outcome of both crises, the successful defense of Taiwan, is explained well by nuclear deterrence theory. The United States made nuclear coercive threats, both implicitly and explicitly, to the Communist Chinese that they would use tactical nuclear weapons to protect Taiwan. Available evidence suggests that the PRC took these threats seriously, and in the first crisis, the PRC backed down only after the Eisenhower administration made overt nuclear threats. In the second crisis, the US placed nuclear-capable
Matador missiles in Taiwan. US leaders believed that their nuclear coercion prompted PRC restraint after its initial belligerence.

However, in terms of explaining the differences in achieving secondary goals between the two crises, nuclear coercion theory performs less well. During the first crisis, US policymakers believed that in the face of an all-out PRC attack on the offshore islands, they would have to respond with tactical nuclear weapons to prevent PRC seizure of the islands. As the fear of a Communist Chinese invasion increased, so did the feeling among American policymakers that they were in a resolve-capability gap. In response, they issued statements intended to normalize nuclear weapons to the general public and indicate willingness to use nuclear weapons to the Communist Chinese. However, the stress of relying on the use of nuclear weapons caused Eisenhower and Dulles to consider conceding the offshore islands to the PRC. It convinced the Nationalists to withdraw from the Tachen Islands, and it hatched a plan to convince them to withdraw from Jinmen and Mazu before the PRC called a temporary ceasefire in the Strait in response to international pressure. This implies that the PRC could have obtained a Nationalist withdrawal from Jinmen and Mazu had they escalated their use of force. While this ceasefire cooled tensions for a time, the outcome of the crisis left one set of offshore islands in Communist hands and kept the basic structure of the dilemma over Jinmen and Mazu unresolved. Little conventional options made it difficult for American leaders to hold on to the offshore islands.

In the second crisis, improvements in the United States’ conventional variety, mostly through augmenting Nationalist air power and giving greater deployability to US air forces, gave it greater bargaining power, leading to less concessions on the offshore islands. The United States, due to additions to its Pacific air and naval forces and aid to its Nationalist Chinese ally,
calculated that it could hold out from a Communist artillery bombardment and win control over the skies above the Taiwan Strait. This gave Eisenhower greater confidence to start by responding with conventional force and to keep using conventional force throughout the crisis. US officials also never decided to attempt to withdraw Nationalist forces from Jinmen and Mazu during the crisis. In the end, the United States’ capability at lower levels of the escalation forced the onus for escalation back onto the PRC, and it resulted in the PRC backing down due to high costs of an amphibious invasion. The PRC ceasefire, intermittent shelling, and pledges by both Chinas to not use force against the other froze the status quo, keeping Jinmen and Mazu in Nationalist hands indefinitely. Finally, conventional options theory can explain why the United States could defend Taiwan in both crises. The US and the ROC had a large air and naval force in and around Taiwan. If there was an absence of a nuclear threat hanging over such an attack, it was doubtful that the PRC could have invaded Taiwan successfully anyway. Thus, conventional options theory can explain the pattern of success in the primary outcome but differences in the ability to achieve secondary goals. In the end, higher resolve to defend Jinmen and Mazu than to defend the Tachens makes it difficult to pin all of the difference in dispute outcome to improved conventional variety. Therefore, the Taiwan Strait Crises give only moderate support to Variety of Capabilities theory.

In addition to providing evidence in moderate support of the logic of conventional options theory, the case also sheds light on how the theory should operate in other contexts. The capability to carry out successful conventional operations at the lower rungs of the escalation ladder was the most important difference in accounting for the increase in US bargaining power between the two crises. That could bring up the possibility that “low-level dominance” may be more consequential than comprehensive variety, especially when the risk of nuclear escalation is
present. In fact, lower level superiority could bolster the credibility of nuclear threats. In the
Second Taiwan Strait Crisis, Mao Zedong and Zhou Enlai decided not to escalate to an
amphibious invasion because the risks of nuclear use in such an intense conflict were intolerably
high. The United States had nuclear superiority in this crisis, and for states with superiority in the
nuclear balance, low-level dominance coupled with high-level threats may be sufficient to win a
dispute.

The Taiwan Strait Crises also show the relevance of conventional options theory to
conflicts between nuclear states and non-nuclear adversaries. In the crisis, the PRC did not have
nuclear weapons, but the United States still viewed nuclear escalation as too costly for two
reasons. First, they feared retaliation by the Soviet Union in the event of nuclear use against the
Chinese mainland. Second, they feared the international backlash that would result from using
nuclear weapons and breaking an emerging “non-use norm.” Such international opprobrium and
norm-breaking could hurt their alliances and give the Soviets an excuse to use the bomb in a
future conflict. This illustrates the unilateral costs to using nuclear weapons. Because of these
unilateral costs, keeping escalation below the level of nuclear use is still important in disputes
with non-nuclear adversaries. Because the logic of conventional options theory can apply to non-
nuclear adversaries, I can apply it to the conflicts the United States had in the aftermath of the
Cold War, which I do in my next chapter examining the utility of conventional options in the
Gulf War.
Chapter 6: The Gulf War and Conventional Options Theory

On August 2, 1991, Iraqi President Saddam Hussein invaded Kuwait in order to gain control over the country’s oil and augment his power in the Middle East. This touched off what could be considered as both the first international crisis of the unipolar era and the last crisis of the Cold War.\textsuperscript{672} It is through both of these framings that I can apply the predictions of conventional options theory to the Gulf Crisis. What would conventional options theory predict about the success of the United States, the Soviet Union, and Iraq in achieving their goals in the crisis?

In terms of outcomes, conventional options theory would predict that the United States would achieve all of its goals, which in this case consists of the defense of Saudi Arabia, the eviction of Iraqi forces from Kuwait, and the destruction of Iraq’s offensive military power. Iraq would be unable to retain control over Kuwait, and the Soviet Union would fail in its objective to convince the United States and their allies to halt the air campaign and forgo the ground offensive. In terms of the process by which these outcomes occurred, the United States should succeed because its ability to build multiple conventional options allowed it to keep the use of force below its level of resolve. This would then force Iraq and the Soviet Union to contemplate escalating past their points of resolve or backing down. The Soviet Union would think that the risk of nuclear escalation was too high to justify pressing its demands to avert a ground war on the United States. Iraq would accept defeat because it saw a larger, all-out war as too costly.

Did the events in the Gulf War correspond to the predictions of conventional options theory? I argue that the case gives moderate support to the theory. At the outset of the Gulf War, Iraq possessed superiority in conventional options in the Persian Gulf region despite facing an

opponent in the United States that had global conventional superiority.\textsuperscript{673} This gave Iraq a brief window in which it controlled the pace of events in the conflict and could have put the United States into a resolve-capability gap if it attacked Saudi Arabia. However, the United States military had a high level of deployability, which allowed it to transfer hundreds of thousands of troops and tons of equipment to the Persian Gulf in a short period of time. This gave the United States preponderance in conventional options in the Gulf vis-à-vis Iraq. After using global capabilities to build superiority in conventional options in the Persian Gulf, the United States achieved its goals of defending Saudi Arabia, evicting Saddam’s forces out of Kuwait, and destroying Iraq’s offensive military power. The last goal brought the United States into conflict with the Soviet Union, which had recourse to zero conventional options in the Gulf crisis. The Soviet Union was unable to achieve its goal of averting a ground war. In terms of matching independent variables to crisis outcome, the resolution of the Gulf War corresponds to the predictions of conventional options theory.

In terms of the process through which the outcomes of the crisis occurred for each side, the United States’ war effort provides strong support for the theory. By building conventional options that Iraq and the Soviet Union could not match, the US was able to keep the cost of using force below its level of resolve. This put Iraq and the Soviet Union into their own decision-making binds of whether to escalate to unconventional uses of force or back down. The process behind the Soviets’ failure to avert war provides weak support for the theory. The Soviet Union could have pressed their compromise proposals to avoid war with the threat of armed force, and they had no means to do this except for threatening nuclear use. This put them into a resolve-

capability gap. However, there is no evidence as of yet that the Soviet Union backed off its proposals because they were afraid of the costs of nuclear use or that they even contemplated making militarized threats against the US. The process through which Soviet diplomatic initiatives failed provide inconclusive evidence for or against the theory. Finally, the process behind Iraq’s defeat provides support to the theory. As expected, Iraq did seek to withdraw from Kuwait once it realized that it had no effective response to the allies’ air campaign. However, the United States rejected all Iraqi proposals for doing so. Once the ground war started, Iraq opted to surrender rather than launch chemical or biological weapons. Most evidence points to this being due to the fear of escalation, but it could have also been due to purely tactical considerations.

The case study expands on this argument in four parts. First, I outline the military balance in the Persian Gulf region among the United States, the Soviet Union, and Iraq both at the outset of the crisis in August 1990 and on the eve of war in January 1991. This will show how the United States built conventional preponderance in the region. Second, I go over the goals of the United States, the Soviet Union, and Iraq in the crisis, highlighting how the Soviet Union did not want to see the US and its allies go to war against Iraq, making a dispute out of what had been superpower cooperation in the crisis. Third, I connect the military balance to the ability of the United States, the Soviet Union, and Iraq to achieve their goals in the crisis. Fourth, I assess the implications of the Gulf War for conventional options theory. I explain how the case fits with the theory’s predictions, and I discuss how it reveals both the benefits and potential temptations of conventional military preponderance and unipolarity.

The Military Balance in the Persian Gulf

The main independent variable is the options for the use of conventional force available within a dispute. This is shaped by the number of conventional forces that a state has in the area
where a dispute takes place. States can deploy conventional capabilities to a region to augment their conventional options within a crisis. The extent to which a state sends forces from outside the area of a dispute depends on its resolve and the deployability of its forces. Sending forces sends a signal of a state’s resolve by communicating the areas on the escalation ladder at which it may be willing to fight and by messaging that the state cares more about this dispute than it does about disputes in other areas that may arise. But not all states with similar resolve will deploy the same level of forces into a theater. Some states have more capability to project their power over long distances. These states have a greater ability to turn inferiority in conventional options into superiority within the course of a crisis. By deploying forces into the area where a dispute takes place, the state signals high resolve but also adds to its conventional capabilities. Deploying forces leads to crisis success either by signaling that a state has more resolve or because added conventional options allow a state to put its adversary into a resolve-capability gap.

For a crisis where the deployment of capabilities from outside the theater of a dispute could be important to determining the balance in conventional options, there are four factors to examine. What is the local conventional balance at the beginning of the crisis? What is the relative deployability of each side’s forces? How did the deployment of capabilities change the local conventional balance? Did the deployment signal that a state had more resolve than its adversary? Over the next two sections, I note that Iraq had a large conventional advantage in the Persian Gulf region at the outset of the crisis, but the United States used its high relative level of deployability to send forces into the area that gave it a conventional advantage. This deployment signaled to the Soviet Union that the US was more resolved than it was, and it confirmed for Iraq that the Americans had similarly high resolve as them.

*The Balance in August 1990*
At the outset of the Gulf War, both the United States and the Soviet Union had little conventional capabilities in the area where the crisis took place. I count the Persian Gulf, the Arabian Peninsula, Iraq, the Levant, Turkey, and Iran as forming the crisis theater. Iraq had ample military power relative to both countries in this area, which meant that neither of the superpowers had much coercive influence over Iraq’s behavior in August 1990. In this phase of the crisis, both superpowers had the same goal of stopping Saddam Hussein from moving into Saudi Arabia and of convincing him to leave Kuwait. None of them had any conventional options to deter or coerce Iraq. However, the United States’ military had a high level of deployability thanks to their power projection capabilities and an easing of Cold War tensions.

When Iraq invaded Kuwait on August 2, 1990, the responsibility for commanding any US forces that would respond to the invasion fell to Central Command (CENTCOM) and its commander-in-chief (CINC), Army General Norman Schwarzkopf. CENTCOM, though it had a staff at MacDill AFB in Tampa of 700, was a “largely a paper command,” which would have to draw units from other areas of the world in a crisis. CENTCOM had 6 principal surface combatants and 1 aircraft carrier deployed to the Persian Gulf region at the time hostilities broke out. In Turkey, outside of CENTCOM but bordering Iraq, the United States had 1200 Army and 3600 Air Force troops. This meant that the United States would have to deploy forces to the Gulf region if it wanted to deter Saddam from invading Saudi Arabia or coerce him out of Kuwait.


This was little match to the large number of armored forces that Iraq used in its invasion of Kuwait, giving the US few conventional options with which to deter further aggression by Saddam in August 1990. Even once the US had deployed 16,000 paratroopers from the 82nd Airborne and sent the F-15’s from the 1st Tactical Fighter Wing to the Gulf on August 6, American military leaders did not feel confident in their conventional capabilities relative to the Iraqis.\(^677\) In a conversation with the Chairman of the Joint Chiefs of Staff General Colin Powell, Secretary of Defense Dick Cheney fretted that “we’ve only got a few paratroopers over there, and wing or so of aircraft, so far…We don’t have enough muscle to stop anybody yet. Suppose all we do is provoke Saddam, push him to invade the Saudis? There isn’t a damned thing we could do.” Schwarzkopf writes in his memoir that on August 9 if Saddam had started executing employees of the US embassy in Kuwait City, “Central Command had little to offer short of a nuclear strike on Baghdad. I would never have recommended such a course of action, and even if I had, I am certain the President would never have approved it.”\(^678\) In the first few weeks of the Gulf War, the United States had little or no conventional options with which to respond to an Iraqi provocation.

However, the United States military had a high level of deployability such that it could quickly generate conventional options in the Persian Gulf. Once the decision was made to send troops to Saudi Arabia, Powell writes that the US military formed a “pipeline” to send soldiers, weapons, and materiel to the Gulf. Indeed, in the exchange above he calmed Cheney’s fears by saying that “the flow goes on.”\(^679\) By early September, the buildup “was starting to reach

\(^677\) Powell, 1995, 467-468.

\(^678\) Schwarzkopf, 1993, 313.

\(^679\) Powell, 1995, 471.
The United States had the capability to deploy a large amount of conventional military strength to the Persian Gulf in the space of a few months due to its unmatched airlift and sealift capabilities as well as its superior naval power. Just as crucial was the easing of Cold War tensions, which freed up troops and weapons that had been stationed in Western Europe. While the United States started the crisis with no leverage over Iraq due to a paucity of conventional capabilities, that would soon change due to the ability of the United States to deploy superior conventional strength to the Gulf.

It is good to note here that there are two further reasons that the United States was able to deploy a large number of forces to the Gulf, both of which lie outside the scope of conventional options theory. First, the end of the Cold War allowed the US to take forces away from Western Europe without worrying about encroachment or opportunism by the Soviet Union. If the invasion of Kuwait had occurred in 1985 rather than 1990, the crisis would have gone much differently. As Iraqi Foreign Minister Tariq Aziz said, if the Soviets were around, “none of this would have happened.” Second, without the permission of Saudi Arabia, the United States would have been hard-pressed to build a sufficient number of conventional options in the region with which to challenge Iraq. This may not have happened had Saddam not put even more military force into Kuwait and southern Iraq after his invasion, thereby (inadvertently) threatening Saudi Arabia. Given the condition that these factors went the United States’ way, the US was able to capitalize due to its high level of deployability. The Soviet Union also had limited military strength that it could exert in the Middle East at the beginning of the Gulf Crisis.

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680 Ibid, 472.
The Soviet Union was in the midst of a reduction in its military forces, cutting its military budget by close to a hundred billion dollars and its armed forces by almost 1,000,000 soldiers between 1988 and 1991.\textsuperscript{683} In addition, the Soviet leadership had to send troops to deal with internal unrest that threatened to dissolve the country into its constituent republics.\textsuperscript{684} The Soviets had no forces in the Persian Gulf area and only a few thousand troops in the Middle East as a whole serving in advisory roles.\textsuperscript{685}

The Soviet Union did have troops in the Trans-Caucuses Military District less than 1000 miles from Baghdad. This district held 12 total motorized rifle divisions and 1 airborne division, with the airborne division at full strength, 6 of the motorized rifle divisions at half-strength and the other 6 at three-quarters strength.\textsuperscript{686} Each full-strength Soviet division had close to 10,000 troops, and using this rough estimate yields an approximation of 85,000 troops in Trans-Caucasus MD. This force was equipped with 240 tactical combat aircraft and around 2400 main battle tanks.\textsuperscript{687} The troops in the Trans-Caucasus, if they could be used, represented some military strength that the Soviet Union could exert in the Gulf. There was a cap on how much military strength the Soviet Union could bring to bear, however. Compared to the United States, Soviet forces had much lower deployability, with inferior airlift and sealift. Plus, as mentioned previously, domestic unrest likely made Soviet leaders reticent to use military force abroad. The


\textsuperscript{684} The Military Balance, 1990, 29.

\textsuperscript{685} These troops were in Libya (1500), Syria (2000), and Yemen (1000). The Military Balance, 1990, 43.

\textsuperscript{686} Ibid, 42.

\textsuperscript{687} Ibid, 29, 42.
Soviets had little ability to shape events in the Gulf at the outset of the crisis, and it would be hard-pressed to increase its capability to do so as the conflict progressed.

Iraq was the strongest military power in the Middle East at the outbreak of the Gulf War. It boasted a force of about 1,000,000 troops, the vast majority of which were in the Army. The Army was heavily mechanized and armored, with over 5500 main battle tanks spread across 6 crack Republican Guard divisions and 7 armored divisions among the regular troops.\(^{688}\) The Iraqi Air Force possessed 689 tactical combat aircraft.\(^{689}\) Its Navy, however, was weak, with only 5 frigates and 38 patrol and coastal craft, meaning that it could not deny entry to its water space to a great power.\(^{690}\) Nevertheless, Iraq’s forces gave it one of the world’s largest militaries at the outset of the Gulf War.\(^{691}\) While Iraq did not use all of these forces in the invasion of Kuwait, it could still draw on all of them in a confrontation with the United States. US leaders saw the military threat from Iraq as a great challenge. In a briefing to President Bush at Camp David on August 4, General Schwarzkopf assessed that “Saddam had approximately double the number of troops needed for his country’s arsenal against its neighbors. His arsenal included some of the best weapons the international arms bazaar had to offer.” Iraq’s military was strong in its ability “to wage an offensive with chemical weapons.”\(^{692}\)

At the outset of the Gulf War, Iraq possessed the most powerful military in the Gulf, giving it the ability to ignore any diplomatic pressure applied by the Soviet Union or the United

\(^{688}\) Ibid, 105.

\(^{689}\) Ibid, 106.

\(^{690}\) Ibid.


\(^{692}\) Schwarzkopf, 1992, 300.
States. It also gave it control over the pace of events. The first two weeks of August was “the
time of greatest disparity between the capabilities of several divisions of deployed Iraqi troops
and the few thousand American forces in place and operational.”

Both of the great powers possessed limited capabilities to coerce Iraq into leaving Kuwait in August 1990. However, the
United States could rectify this by deploying hundreds of thousands of troops rapidly into the
Persian Gulf region. The Soviet Union could not. This would affect how the military balance and
the bargaining power of each country changed over the course of the crisis.

The Military Balance in January 1991

By January 1991, the United States had deployed over 500,000 troops to the Gulf
region. This deployment included the full panoply of US military capabilities, with heavy
armor, special operations forces, carrier strike groups, tactical air wings, and guided missiles. In
all, the US order of battle on the eve of Desert Storm included 2170 main battle tanks, 1272
artillery pieces, 420 attack helicopters, 1285 tactical combat aircraft, 6 aircraft carriers, 58
surface combatants, and 6 nuclear-powered submarines. US allies poured in an additional
200,000 troops, 967 tanks, 270 artillery pieces, 88 attack helicopters, 164 combat aircraft, and
30 surface combatants. The addition of more troops and a diverse array of weapons platforms,
each in large numbers, gave the US many conventional options to use in the Gulf crisis.

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693 Haass, 2009, 72.
696 Powell, 1995, 490.
This assembly of forces gave the United States the bargaining advantage to press for its maximum demands. The calculation was no longer if the US could succeed but what would be paid to do so. Colin Powell wrote, after seeing the massing of “planes, tanks, artillery, armored vehicles, ammo dumps, and hundreds of thousands of troops…any military men on his [Saddam’s] staff with an ounce of guts or sense would have to tell this nonsoldier, nonstrategist that his way was madness.”698 General Schwarzkopf wrote that with the Iraqis’ exposed flank not being covered as January 15 closed in, “Iraq’s best chance for a successful defense was slipping away.”699 This point about expected victory clashes with public perception in the winter of 1990/91 and some of the remarks made by the military leaders cited above.700 On December 3, 1990, Powell gave a “cold, hard appraisal of what we faced” to the Senate Armed Services Committee.701 Schwarzkopf wrote that “we had no idea what our casualties would be, how the American public would react, or even whether the coalition would hold together.”702

These pessimistic assessments on the part of military leaders should be read as concerns about what Prussian military theorist Carl von Clausewitz called the “friction” of war, or the inherent uncertainty involved in any use of force against an adversary.703 These leaders knew

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698 Powell, 1995, 497.
699 Schwarzkopf, 1992, 408.
702 Schwarzkopf, 1992, 408. By the end of 1990, Schwarzkopf had received intelligence estimates that casualties would be in the low thousands. This statement is either a lie meant to hide intelligence sources or a reflection on his thinking at the outset of planning for Operation Desert Storm in September/October 1990.
that the Pentagon’s calculations put the most likely estimates of American casualties in the few thousands. Secretary Baker chafed at the performance of Democratic Congressman Peter Kostmayer who asserted in Bakers’ hearing before the House Foreign Affairs Committee that 250,000 troops could die. Baker knew that the Pentagon’s worst-case estimates left a few thousands US military casualties, but he could not say that in public. In a briefing to President Bush, Powell came in at an estimate of 3000 US casualties, with Schwarzkopf estimating 5000. This estimate, while high, was in the range of acceptability for US policymakers. The only variable that could change this calculus, and hence provide uncertainty about the outcome, was whether or not Iraq would use chemical or biological weapons. The implication of this potential escalation will be discussed below.

In sum, the United States and its allies had amassed a massive military presence in the Gulf by January 1991. This gave US policymakers near certainty that they would defeat the Iraqi military, allowing them to press for maximum demands in pre-war negotiations with Iraq.

Against this array of American strength, the Soviets had not deployed any military capability of their own into the Gulf region. In fact, the Soviets likely had less military power they could send to the area than at the beginning of the conflict. From 1990 to 1991, at least ten divisions had been disbanded as part of arms reductions implemented by Soviet Premier Mikhail Gorbachev. Two of these divisions may have been in the Trans-Caucasus Military District, which had 10 motorized rifle divisions and 1 airborne division in 1991 rather than 12 and 1.

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707 Ibid, 44.
Soviet leaders were also preoccupied with the disintegration of their multinational empire.\textsuperscript{708} The Soviets had little military power with which to pursue their goals in the Gulf crisis.

Since the invasion of August, Iraq had moved more troops and weapons into the Kuwaiti theater of operations in anticipation of a conflict with the United States, what Saddam Hussein called the “mother of all battles.” In early December, Powell testified before the Senate that Iraq had 450,000 soldiers, 3800 tanks, and 2500 artillery pieces in or near Kuwait.\textsuperscript{709} By the eve of war, Schwarzkopf’s team estimated the opposing Iraqi force at 545,000 men, 4300 tanks, and 3100 artillery pieces.\textsuperscript{710} Iraq was weak against the United States in the air, whose 1285 aircraft nearly doubled what Iraq possessed and was far superior technologically.\textsuperscript{711} Saddam incorporated Iraqi air inferiority into his strategy, which gambled on making the ground fight a war of attrition.\textsuperscript{712} Moreover, in land strength, Iraqi numbers belied their weakness. Michael Gordon and General Bernard Trainor write that “most infantry divisions were sent to the Kuwaiti theater undermanned, short of equipment (or with poor equipment), and with little or no idea of what they were to do upon arrival…According to Army intelligence, front-line and second-echelon units deployed at no more than 80 percent, and in some cases 50 percent, of their authorized strength.”\textsuperscript{713} The numbers of Iraqi soldiers may therefore have been lower than Powell and Schwarzkopf indicated. Plus, many military leaders had serious doubts about the


\textsuperscript{709} Powell, 1995, 493.

\textsuperscript{710} Schwarzkopf, 1992, 408.

\textsuperscript{711} \textit{Military Balance, 1991}, 239-240.

\textsuperscript{712} Gordon and Trainor, 1995, 180.

\textsuperscript{713} Gordon and Trainor, 1995, 185.
quality of Iraqi units. Marine General Walter Boomer wrote to a colleague: “I believe that we have a rather hollow Army facing us, despite the amount of equipment they possess…these guys are not in our league except in total amount of equipment. My gut feeling is that they are very shaky.”\(^{714}\) Iraq had put a large quantity of land power in or near Kuwait to fight the US and its coalition allies, but they were inferior in terms of weapons technology, unit quality, air power, and naval power. This inferiority to the United States gave Iraq little bargaining power in pre-war and intra-war negotiations.

**American, Soviet, and Iraqi Goals in the Crisis**

For what purposes were these military forces put to use in the Gulf War? The United States had three goals in the Gulf War: the protection of Saudi Arabia, the restoration of Kuwait’s independence, and the destruction of Iraq’s offensive military power. All of these were core goals for the United States, as they were tied to whether Iraq would be able to revise the status quo in a strategically important region. The defense of Saudi Arabia was the minimum goal of the United States in the crisis. On August 4, President Bush decided in an NSC meeting on August 4 that “the first imperative was to deter an Iraqi move on Saudi Arabia.”\(^{715}\) If Iraq gained control over Saudi Arabia’s oil fields, they could wield considerable economic and military power in the Middle East, an outcome regarded as a disaster by American political and military leaders. The first 200,000 troops sent to the Gulf region were there to achieve the defensive mission of protecting Saudi Arabia from an Iraqi invasion.\(^{716}\) This American goal is what Powell referred to as the “line in the sand.”\(^{717}\)

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\(^{714}\) Ibid, 165.

\(^{715}\) Baker, 1995, 277.

\(^{716}\) Schwarzkopf, 1992, 301.

\(^{717}\) Powell, 1995, 463.
Coupled with this objective was the removal of Iraqi forces from Kuwait and the restoration of Kuwait’s government. This coercive goal was decided on early in the crisis, with President Bush famously telling reporters on the White House lawn on August 5, 1990 that “this will not stand, this aggression against Kuwait.” At first, US policymakers hoped they could accomplish this goal via economic sanctions, namely by preventing Iraq from selling its oil. However, by October, once enough troops were in place to defend Saudi Arabia and economic sanctions were fully instituted by the UN, US policymakers were frustrated that Saddam was “impervious” to economic pressure. In order to accomplish its coercive goal, the United States had to send in troops to conduct offensive operations against the Iraqi military. Bush decided to more than double the number of American troops in the Gulf to 500,000 at the end of October and announced this increase on November 8, stressing that the deployment resulted in an adequate offensive option when he did so.

The final goal of the United States, and one that emerged later in the crisis, was the destruction of Iraq’s offensive military power. This war aim started out as an operational imperative. The United States could not eject Iraq from Kuwait if it did not destroy a lot of Iraqi military forces. But the destruction of Iraq’s offensive firepower became an end in itself by January 1991. Haass recounts that the small group of advisers close to the president wanted to “cut Saddam and the Iraqi military down to size and thereby reduce the scale of the postwar threat we would have to contend with.” By the middle of February, US policymakers were


719 Ibid, 300.


hesitant to support any compromise with Saddam Hussein because they felt that by withdrawing he could use his military strength to threaten neighbors in the future.\textsuperscript{722} US leaders wanted to prevent Iraq from being a regional threat after the war, thereby protecting the status quo in a region that at the time was a source for most of the world’s oil.\textsuperscript{723}

This goal became operationalized as the destruction of the Republican Guard. In a briefing to his field commanders, Schwarzkopf said that “we need to destroy – not attack, not damage, not surround – I want you to destroy the Republic Guard. When you’re done with them, I don’t want them to be an effective fighting force anymore. I don’t want them to exist as a military organization.”\textsuperscript{724} That this goal went beyond the liberation of Kuwait became clear in the last two days of the ground war, where Gordon and Trainor write that “the outcome of the offensive to liberate Kuwait was a foregone conclusion. The question now was whether the Army would be able to destroy the Republican Guard before the war’s denouement.”\textsuperscript{725} In short, the United States’ minimum goal was the defense of Saudi Arabia, its main goal was the restoration of Kuwait’s independence, and its maximum goal was the destruction of Iraq’s offensive military power.

What I do not count as a goal for the United States during the Gulf War was the removal of Saddam Hussein from power. The Bush administration was criticized for not continuing the fight to Baghdad and deposing the Iraqi leader, most notably by British Prime Minister Margaret Thatcher who quipped: “Now, just look, there is the aggressor, Saddam Hussein, still in power.

\textsuperscript{722} Baker, 1995, 405-406.
\textsuperscript{723} Schwarzkopf, 1992, 469 and Powell, 1995, 525-527.
\textsuperscript{724} Schwarzkopf, 1992, 381.
\textsuperscript{725} Gordon and Trainor, 1995, 374.
There is the President of the United States, no longer in power. There is the Prime Minister of Britain who did quite a lot to get things there, no longer in power. I wonder who won?" These criticisms miss the mark, as the Bush administration never shared an explicit goal, even in private, of ousting Saddam. Powell writes that the Bush administration knew that, “barring a lucky bomb hit, Saddam would likely survive the war.” This was fine, as the Bush administration was afraid of the consequences of Iraq becoming too weak as a result of the war. President Bush and his National Security Advisor, Brent Scowcroft, write that they did not want to see a “breakup of Iraqi state.” US Ambassador to Syria Charles Freeman wrote during the Gulf War that Iraq should have enough power to “constrain Iran and/or Syria” after the war.

Plus, the Bush administration had internalized the coalition’s goals as its own. The mandate from the UN called for the expulsion of Iraqi forces from Kuwait. Coalition members, especially Saudi Arabia, may have accepted Saddam being cut down to size in the course of the fighting. However, they would not have accepted the US “unilaterally exceeding the United Nations’ mandate” by going all the way to Baghdad and enacting regime change. Such an action would have caused the coalition to collapse and turn the US into the one thing they were fighting against: an occupying power. Due to the high costs of removing Saddam from power, the Bush administration never developed it into a war aim. American policymakers hoped that

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727 Powell, 1995, 523.


729 Powell, 1995, 527.

defeat would cause a popular revolt or military coup to unseat Saddam, but this was a wish more than a goal. The line between a goal and a wish can be murky at times, but in this case, I consider the removal of Saddam in the Gulf War an example of the latter.

The Soviet Union also wanted Saddam to not attack Saudi Arabia and to leave Kuwait. However, it also wanted to avoid a war between Iraq and the American-led coalition, putting them in a dispute with the United States in January and February 1991. By August 1990, the Soviet Union had surrendered the Cold War struggle and was trying to save itself from internal collapse. To keep the Soviet Union intact, Gorbachev implemented a series of domestic economic reforms under the program of perestroika. In order for these economic reforms to succeed, he needed to reduce the Soviet defense apparatus that diverted resources away from the domestic economy. To do that, he had to enact a foreign policy that prioritized cooperation, rather than competition, with the United States. This led to a radical shift in how the superpowers engaged with each other, marked by Soviet acceptance of the unification of Germany, pro-democracy movements in its Eastern European satellite states, and reductions in nuclear arsenals by the thousands.

The Soviet Union’s aims in the Gulf War need to be understood in this context. Iraq was a client state of the Soviet Union, and its invasion threatened to undo the progress in cooperation between the Soviet Union and the United States. In an oral interview with PBS Frontline,

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733 Documents of this shift in superpower relations can be seen in the collection assembled by Svetlana Savranskaya and Thomas Blanton, eds. The Last Superpower Summits: Gorbachev, Reagan, and Bush, Conversations that Ended the Cold War. Budapest, Hungary: CEU Press, 2017.

Gorbachev said that “this action seemed done with an idea to explode all this. This is why it surprised me and angered me. I resented it.” Gorbachev wanted to negotiate with the United States a new international order that maintained the norm of territorial integrity and the norm against conquest. If the Soviets and the Americans could not work together in the Gulf Crisis to enforce those norms, then Gorbachev’s international vision would take a serious blow. As Gorbachev put it: “A country was occupied. If we were not able to cope with that situation, everything else would have been made null and void.” Plus, the prospect of a strong Iraq in its near abroad controlling a large share of the world’s oil supply likely disquieted Gorbachev. For these reasons, the Soviet Union and the United States had a shared interest in reversing the invasion of Kuwait and preventing further aggression.

The crucial difference between the Soviets and the Americans was that the Soviet Union did not want the coalition to go to war against Iraq to reverse its conquest of Kuwait. For the United States to use overwhelming force against a former client state would show the degree of American influence in the sensitive Gulf region and the extent of Soviet decline. For Soviet hard-liners who had always been skeptical of Gorbachev’s reforms, this would be too much to bear.

As a client state, the Iraqi military was equipped with mostly Soviet equipment and advised by Soviet military officials such that its tactics and operations reflected Soviet military doctrine. If the American-led coalition dominated the Iraqi military, this would reflect poorly on Soviet military power. Secretary Baker recalls Marshall Sergei Akhromeyev telling him in the Helsinki Summit in September 1990 that “you should not underestimate these boys [the Iraqis]. They will


736 “Oral History: Mikhail Gorbachev.”

put a very good fight. And it will not be easy.’ Now, Akhromeyev and other senior Soviet military officials had to be extremely nervous that a ground war would not simply defeat Saddam but expose even more starkly the myth of Soviet military power.”

If the Soviet Union wanted to avoid war, it would have to either convince Iraq to leave Kuwait before the air or ground war started or convince the United States to desist in its efforts to wage war on Iraq. As I discuss in detail below, the Soviets attempted both. The Soviet Union sent Yevgeny Primakov on a mission to Baghdad to broker a compromise in which Iraq withdrew from Kuwait. It protested against draft language in UN Resolution 678 that specifically used the phrase “use of force.” Gorbachev called Bush multiple times during the crisis in an effort to convince him to stop Desert Storm. In sum, the Soviet Union and the United States, despite their initial cooperation, entered into a dispute over whether or not the coalition would use force against Iraq.

Despite its importance, this objective amounted to a peripheral interest for Moscow. Gorbachev was consumed with domestic troubles as he attempted to hold the Soviet Union together. The outcome of war in Iraq would be of little consequence to the Soviet Union should the latter cease to exist, and the war’s outcome would likely not accelerate or slow down Soviet decline. This means that the United States had more at stake in the Gulf War than the Soviet Union, likely giving the US higher resolve.

Iraq aimed to keep its gains from the conquest of Kuwait. Iraq entered 1990 economically spent from the long war with Iran between 1980 and 1988. It was over $80 billion in debt and had economic reconstruction costs estimated at over $230 billion. Saddam perceived a power

vacuum in the region with the retreat of the Soviet Union, one that would likely be taken by the United States if Iraq did not act now.\textsuperscript{740} Indeed, Iraqi leaders thought that the United States was already trying to smother Iraq by 1990. Iraqi Foreign Minister Tariq Aziz remarked that “By the end of June we started to realize that there is a conspiracy against Iraq, a deliberate conspiracy against Iraq, by Kuwait, organized, devised by the United States.”\textsuperscript{741} Iraq faced economic crisis and what it believed to be a looming geopolitical threat. Both could be overcome by striking quickly to take Kuwait and sell its oil. That would alleviate Iraq’s economic pain and augment its geopolitical power so that it would be better positioned to resist US attempts to impose hegemony in the Middle East. What is crucial here is that the taking of Saudi Arabia’s oil reserves was not a goal for Iraq in 1990-91. Many American officials, notably Secretary Baker, believed that Saddam was about to move against Saudi Arabia in a few months were it not for quick US troop deployments to Saudi Arabia.\textsuperscript{742} This may have been a goal for Saddam Hussein, but from the evidence we have of Iraqi war aims there is no indication that they intended to keep going past Kuwait in the near future. Thus, Iraq’s goal in the Gulf War was to hold on to its Kuwaiti conquest so that it could reap profits from the sale of Kuwait’s oil. Because this would affect Iraq’s power position in its home region, I count this a core interest for Iraq.

Did the American deployment of conventional forces to the Gulf signal that it had more resolve than the Soviet Union or Iraq? This is possible in the case of the Soviet Union, as the United States had more at stake in the crisis, and the deployment of American troops to the Gulf may have been the signal that confirmed this for the Soviets. For Iraq, the troop deployment only

\begin{footnotesize}
\textsuperscript{740} Ibid, 23-24.


\textsuperscript{742} Baker, 1995, 300.
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confirmed that the United States was highly resolved to fight over Kuwait. Saddam had been expecting and boasting about winning a war with the United States throughout 1990: “We are ready to fight America. And if God wills, we will fight them. With the help of God we will fight them and kick them out of the entire region.” As Paul Avey explains, Iraqi leaders thought that Kuwait and the United States were part of a conspiracy to weaken and destroy Iraq. He quotes Tariq Aziz saying that “we started to realize that there is a conspiracy against Iraq, a deliberate conspiracy against Iraq, by Kuwait, organized, devised by the United States.” If Iraqi officials believed the US was working with Kuwait to weaken Iraq, then it would be odd to think that the US would not retaliate against an invasion of Kuwait. Indeed, in a response to a question about the effect of the meeting with US Ambassador to Iraq April Glaspie on July 25, 1990, Aziz stated: “She didn’t tell us in the sense that we concluded that the Americans will not retaliate. That was nonsense you see. It was nonsense to think that the Americans would not attack us.”

If the global balance in conventional capabilities can cast a shadow on crisis dynamics if one side has a high level of deployability and sufficient resolve to transport forces into the dispute area, then why was Saddam optimistic about a victory? Saddam’s bravado was a product of his belief that he could win a war against the United States by inflicting high casualties on American forces, prompting the US to give up the war. In February 1990, Saddam gave a speech in which he noted the United States’ quick withdrawal from Lebanon and said that the US had


745 Ibid, 49.
recently “displayed some signs of fatigue.”\textsuperscript{746} Iraq believed that the US was likely to retaliate, but the global conventional balance did not deter it from attacking Kuwait because it had a theory of victory in a war with the United States.

**Rungs on the Ladder of Escalation and the Theory’s Predictions in the Gulf War**

Did the balance in conventional options affect the ability of each side to achieve its goals during the Gulf War? To answer this, I need to specify the rungs on the escalation ladder each side’s military capabilities gave them. I will then use that to see whether success was caused by the ability to tailor the use of force to the level of resolve and whether defeat was caused by the pressure to avoid escalating past the state’s point of resolve.

The United States had seven rungs on its ladder of escalation. The first rung was the use of naval forces to blockade Iraq. This would involve minimal force and low risk of casualties, making it the least escalatory option. The second rung was a defensive ground war to protect Saudi Arabian territory against Iraqi attacks. This would expand the conflict into the land domain and involve higher risk of US military casualties, constituting a greater escalation. The US put the forces in place to acquire these two rungs early in the Gulf War, and the US executed both of them as the basis of Operation Desert Shield. This mission aimed to defend Saudi Arabia from an Iraqi attack and impose economic sanctions on Iraq by preventing it from exporting its oil. The third rung was a limited air war against select Iraqi military targets. This air campaign would only target Iraqi positions in or near Kuwait. The fourth rung was a strategic air war against Iraqi command and control targets and civilian infrastructure. This would constitute an escalation by expanding the geographic scope of the war and exposing US pilots to more danger from Iraqi air defenses, causing greater casualties. In the first part of Operation Desert Storm, the US escalated

\textsuperscript{746} Woods, 2008, 52.
straight to the fourth rung, going after Iraqi military positions in the Kuwait Theater of Operations, command and control targets in Iraq, and civilian targets at the same time.

The fifth rung was a limited ground offensive that would be confined to Kuwait and involve 250,000 to 300,000 troops. The sixth rung was a large ground offensive that would involve more troops and incursions into Iraqi territory. The ground war phase of Desert Storm constitutes an escalation past the fifth rung and straight to the sixth one. The objective of the ground offensive was to push Iraqi forces out of Kuwait and then destroy Iraq’s Republican Guard units positioned in Iraq. Rungs three through six were interconnected. If the air war did not succeed in degrading Iraqi C2 and softening up the Iraqi Army’s front lines, the ground offensive would be a much more difficult fight. One reason for this interconnectedness was that the air campaign was necessary to keep the Iraqi military from shifting forces to the west to counter the United States’ “left hook” strategy. The air war would knock out Iraq’s reconnaissance capability and then prevent any Iraqi forces from shifting west if they somehow found out about the flanking strategy. Having to fight a frontal assault would increase military casualties. In addition, air war planners wanted to destroy 50 percent of Iraq’s armor and artillery in the theater of operations. If it could succeed in knocking out a fraction of that, the Iraqi forces would be an easier target for US ground forces to go after. Thus, the strategic air war needed to succeed in order for the large ground offensive option to fall below the US level of resolve.

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748 Indeed, the first plan for a ground offensive was simply a strike right into the middle of Iraq’s defenses in Kuwait. It was estimated that the US would win this fight at the cost of 10,000 casualties, much higher than the few thousands casualties expected in a “left hook” flanking strategy. Gordon and Trainor, 1995, 132-133.

749 Ibid, 186-191.
The seventh and final rung was the conduct of a full-scale war that went all the way to Baghdad and imposed a regime change in Iraq. This rung lay above the US level of resolve for two reasons. First, as noted previously, American leaders were sensitive to the physical costs of a postwar occupation of Iraq and the diplomatic costs of far exceeding the coalition’s mandate for the use of force. Second, the escalation to a full-scale war raised an intolerable risk of Saddam using his chemical or biological weapons (CW or BW) on US forces. Fighting Iraq after it used chemical or biological weapons would be past the American point of resolve. The latter were particularly worrisome, as they could have caused more destruction than chemical weapons. Though biological weapons were worse, I mention them in the same phrase because US policymakers talked Iraqi escalation by referencing both types of weapons. “The Iraqi biological arsenal,” Powell wrote, “hung like a specter over the desert.”\(^{750}\) Two factors would cause the use of CW or BW to make the war too costly for the Americans. First, it could lead to very high military casualties. Schwarzkopf said that, due to the uncertainty surrounding whether or not Iraq would use CW/BW, he “didn’t know bloody the ground war might be…it if they choose to dump chemicals on you, they might even win.” Indeed, “the possibility of mass casualties from chemical weapons was the main reason we had sixty-three hospitals, two hospital ships, and eighteen thousand beds ready in the war zone.”\(^{751}\) Second, the escalation contemplated in response to CW or BW use was the use of “unconventional means” by US forces. This included bombing the dams on the Tigris and Euphrates Rivers to cause mass flooding as well as the use of nuclear weapons.\(^{752}\) This would entail a large reputational cost on the part of the United States

\(^{750}\) Powell, 1995, 493.

\(^{751}\) Schwarzkopf, 1992, 439.

to inflict this level of punishment, a cost that was likely too high to justify attacking Iraq in the first place.

The Soviet Union had zero conventional rungs on its ladder of escalation, and its only rung was the use of nuclear weapons to stop the United States from attacking Iraqi forces. That this was well beyond the Soviets’ level of resolve is easy to grasp; using nuclear weapons would have meant widespread opprobrium and national suicide. As I discuss below, even though the changing geopolitical context severely limited the credibility of a Soviet nuclear threat, it would have lacked credibility in a more competitive environment because the Soviets had no conventional options with which to bolster such a threat.

By January 1991, Iraq was left with two rungs on its escalation ladder. Iraq had no response against a US-led air campaign. In the first three days of the air war, Iraq lost 14 fighters to only one loss of an FA-18 for the Americans. During the rest of Desert Storm, Iraqi planes would hide in concrete shelters, where they were pounded by coalition airstrikes, or take sanctuary in Iran. In all, the United States and its allies flew 69,000 fighter or bomber missions to just 910 for the Iraqis.\textsuperscript{753} The allies gained air superiority at the outset of the war, hampering Iraq’s ability to successfully prosecute a defense against a large ground invasion. This left Iraq with only two options that carried a plausible chance of victory. The first was the firing of Scud missiles against Israel. The United States kept a coalition of Arab allies together by promising that Israel would not be involved in the war. If Saddam could provoke Israel into attacking, US officials feared that the coalition would break up, putting the entire war effort in peril.\textsuperscript{754} This rung fell below Iraq’s level of resolve, given that firing the Scuds involved little extra cost and

\textsuperscript{753} These details are found in Gordon and Trainor, 1995, 223-224.

\textsuperscript{754} Baker, 1995, 385.
did not invite any extra use of force from the United States. The second option was the use of CW or BW against coalition forces. This was likely above Iraq’s point of resolve. By increasing coalition casualties, using CW or BW could have prompted the United States and its allies to decide the objective of freeing Kuwait was not worth the level of pain being experienced. However, such a move would invite even further international condemnation and the chance of nuclear retaliation upon Iraq.

The implication of this analysis is that all sides in the conflict had a rung on their ladder of escalation to which they could escalate and achieve their objectives. However, doing so would go above their point of resolve. This makes the Gulf War amenable to an analysis through the lens of conventional options theory. For the theory to add to our understanding of the Gulf War, three questions need to be answered. Did the United States succeed because the presence of multiple conventional options allowed it to keep the cost of the war below its point of resolve? Did the Soviet Union feel constrained in its bargaining position by the inability to use conventional forces and the incredibility of threats to use nuclear weapons? Did Iraq back down because it saw CW or BW use as too costly or risky? Below, I go through the evidence from the Gulf War to answer these questions.

Testing the Mechanisms of Conventional Options Theory in the Gulf War

Explaining US Victory

The outcome of the Gulf War, a US victory, matches my prediction of how the balance of conventional options should affect the outcome of a conflict. Moreover, I argue that the conventional options the United States was able to build in the Persian Gulf were a key mechanism in producing a US victory. I count the outcome as a US victory because the United States achieved its main objective of expelling Saddam’s army from Kuwait and destroying
Iraq’s offensive military power. Iraq lost because it failed to achieve its main objective of maintaining possession of Kuwait. Some would say that Saddam never surrendered or lost, and thus, the US did not win, because he stayed in power and kept some of his military power intact. As mentioned previously, this criticism misses the mark. The United States never had an explicit policy goal of toppling Saddam and imposing a regime change on Iraq, meaning the dispute outcome should not be measured in those terms. Plus, while the United States would have liked to destroy more of Iraq’s military power, Iraq still left the Gulf War with 68% less tanks, 46% less armored personnel carriers, and 69% less artillery pieces than they had before the war. This level of devastation was such that “four years afterward, its army was still half its original size.”\textsuperscript{755} The US accomplished its primary objectives while Iraq did not, making the Gulf War a US victory.

Superiority in conventional options contributed to American success was because the United States had the ability to deploy forces to the Gulf in a short period of time. As mentioned in the Theory Chapter (2 in the current outline), without a high level of deployability, it is difficult to give yourself conventional options in a faraway theater of operations. American airlift and sealift capability allowed it to build conventional options for the use of force in the Gulf. Without this level of deployability, the United States would not have been able to leverage its overall conventional superiority over Iraq.

General Schwarzkopf articulated the gap between what forces the US could potentially bring to bear against Iraq and what it actually could early in the conflict. He said that “I want a list of options, minimal up to full-scale attack. If the president comes to me and says ‘I have to

\textsuperscript{755} Powell, 1995, 525.
retaliate,’ I have got a platter to pick from.” To do that, he needed troops and equipment deployed from the United States and from the nearby island of Diego Garcia. The beginning of Desert Shield kicked off a massive deployment of US military power to the Persian Gulf. The United States military moved “3.9 million tons of cargo and 540,000 people to the Gulf between August 1990 and February 1991.” This entailed “15,000 airlift missions to the Persian Gulf, and another 7,000 within the theater…the Military Sealift Command operated an average of 210 cargo ships a day during the crisis.” Operational analyses of the Gulf War are actually critical of this logistics effort, particularly the sealift portion. Gordon and Trainor point out that the Navy had only 8 fast sealift ships due to years of underfunding sealift programs to transport the Army. Moreover, the Ready Reserve Fleet, was aging and needed maintenance, as well as more longshoremen to load the ships. Only 17 of the 96 vessels included “Roll-On, Roll-Off” capability, and of the 72 vessels activated, just one-third arrived in the Gulf on schedule.

These criticisms reflect tactical as opposed to strategic shortcomings. The United States still displayed a capability for force deployment that far exceeded any other country in the world. Powell puts these problems in context by pointing out that “in the first six weeks of Desert Shield, we brought in more tonnage than in the first three months of the Korean War.” It took six months to position all the forces necessary for the Persian Gulf, but no other country could

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756 Gordon and Trainor, 1995, 76.
758 Gordon and Trainor, 1995, 58.
760 Powell, 1995, 496.
have transported that much manpower and equipment in such a short span of time. If the United States had addressed the problems behind these tactical issues, namely by allocating more funding for heavy cargo planes and fast sealift ships, they would have gotten their troops and weapons to the Gulf faster. As it is, the United States deployed its forces in a reasonably short amount of time and at an acceptable cost. This allowed it to build the “platter of options” General Schwarzkopf demanded.

Another way in which superiority in conventional options played a role in US success was that superiority in multiple platforms across different domains lowered the overall cost of using force. As mentioned above, success in the strategic air phase of Desert Storm would lower the expected casualties in the ground offensive phase. The United States was quickly able to gain air superiority over the Iraqi air force, and with control of the skies the US and its coalition allies conducted 23,340 air strikes against Iraqi ground units.\(^{761}\) The CIA and CENTCOM differed on their assessment as to how much of Iraq’s tanks, APC’s, and artillery pieces these strikes destroyed.\(^{762}\) Nevertheless, all intelligence agencies agreed that the air campaign had sapped the Iraqi will to resist a large ground offensive. On February 21, an intelligence official named Charles Allen briefed Pentagon officials that “we judge the majority of Iraqi forces will not have the will to leave their defensive positions and try to prevent an encirclement.”\(^{763}\) After a briefing from CIA director William Webster that same day, President Bush “expressed confidence to his family that the ground war would be relatively brief.”\(^{764}\) Air power had decimated the Iraqi


\(^{762}\) “Gulf War Air Power Survey,” 142.

\(^{763}\) Gordon and Trainor, 1995, 335.

\(^{764}\) Ibid, 337.
force, making any ground offensive much easier to execute. Bernard Trainor remarked that at the conclusion of the air war “desertions, abandonments, and surrenders became widespread. Air power had been stunningly successful.”

After the air war, the ground campaign quickly pushed out the Iraqis from Kuwait and destroyed much of Iraq’s offensive military power with minimal casualties. The Marines job in the frontal assault up the Kuwaiti coast was to hold the Iraqis in place. Instead, they punched through the enemy defenses on the first day and by the second day were fighting in and around Kuwait City. By the third day of fighting, Kuwait City was liberated, and of the 42 Iraqi divisions in the theater at the beginning of war, 27 had been eliminated or overrun and six more were “combat ineffective.” The fourth day of fighting was spent hounding the Republican Guard units and bombing Iraqi equipment as it moved out of Kuwait. This created the “Highway of Death” that worried US policymakers with its optics. By the end of the fourth day, Schwarzkopf exclaimed that the “gates are closed.” The US declared a ceasefire on February 28. They had taken over 60,000 Iraqi soldiers as prisoners of war and tens of thousands of Iraqi soldiers killed. The US suffered just 382 soldiers killed. That the casualties were kept low

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767 Schwarzkopf, 1995, 467. It is worth noting that the “gate” was not entirely closed and that some Iraqi troops and equipment got through. However, not so much got through that the coalition failed to destroy a large segment of Iraq’s military power.

768 Powell, 1995, 519.


was critical to the success of the ground campaign. From August to January, it was not clear that the United States public would be willing to fight to liberate Kuwait. The vote to authorize the use of force passed on January 12, 1991 with a thin majority in the Senate of 52 to 47. The domestic audience in the United States was ambivalent about the war effort, and any ground offensive that involved close to 10,000 casualties could have swayed the public to oppose the war. Thus, the success of the air war, by making the ground offensive easier to execute, may have prevented the United States from being in its own space for exploitation.

The success of the air and ground operations put the Soviet Union and Iraq into a resolve-capability gap. This is yet another way in which conventional options shaped US success. For the Soviet Union, the success of the air war put it in a bind: it wanted to convince the United States to stop the air campaign and avert a ground war, but it had no conventional means with which to bring any pressure to bear on the United States. Should it resort to threats to use nuclear weapons to get their way? For Iraq, the success of the ground offensive put it in its own conundrum. Should it accept defeat, or should it use CW or BW against coalition troops in an effort to get them to retreat? The United States’ successful use of conventional options exposed the lack of conventional options for its adversaries, which should occur according to conventional options theory. The question then becomes: did this lack of capabilities convince US adversaries to back down?

*Explaining Soviet Failure to Avert War*

In January and February 1991, the Soviet Union made several attempts to stop the air war and avert a ground offensive by cajoling the Iraqis into accepting a withdrawal deal from Kuwait and attempting to convince the United States to accept such a deal. On January 18, 1991, Gorbachev called Bush and told him that “now that war is beginning, our number one priority
should be to shorten it and make sure it does not spread.”

Gorbachev called to inform Bush that he was trying to get Saddam to agree to leave Kuwait, and he was asking Bush whether, if Saddam did agree to withdraw, “you would be ready to pause in the military action.” Bush, wanting to make sure Iraqi military power was cut down to size, demurred, saying that “a lot of his [Saddam’s] military power is still intact” and that with “the coalition participants highly motivated...a cessation now would clearly be a victory for Saddam Hussein.” On February 12, in another attempt to avert a ground war, Gorbachev sent Yevgeny Primakov as an envoy to Baghdad. Primakov found the Iraqis amenable to a negotiated withdrawal, and the Soviets invited Aziz to come to Moscow for further talks.

Talks with Aziz produced an agreement in which Iraq would withdraw from Kuwait over a period of six weeks, which became the basis for last-minute negotiations to avert war. After hearing US objections, Aziz agreed to make this timetable three weeks and to drop any connection to holding Arab-Israeli peace talks. In a call with Gorbachev on February 22, however, Bush rejected this deal as “totally unacceptable.” On February 23, Gorbachev called again and said that the Iraqis had now agreed to withdraw within four days, “that is to say we have a white flag from Saddam Hussein.” Bush rebuffed this Soviet diplomatic effort as well.

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telling Gorbachev that there was no time left for diplomacy and that the United States would not accept “any other choice but the instant acceptance of these conditions [the 12 UN Resolutions] immediately.” In sum, the Soviet Union spent considerable effort to avert war by making deals with the Iraqis and trying to convince the United States to accept them.

In line with the predictions of the theory, the Soviet Union was unable to convince the United States to halt the war effort and drop its goal of destroying Iraq’s offensive military power. The outcome of last-minute US-Soviet diplomacy provides support to my theory. The side with no conventional options to buttress its nuclear deterrent was unable to gain any positive bargaining outcome. However, the evidence is inconclusive that that failure was due to the Soviets’ lack of conventional options. The Soviet Union never publicly extended its nuclear umbrella over Iraq or privately did so in communication with American leaders. There is no evidence that the Soviet Union viewed their disagreement with the United States in the terms of a military dispute.

For my theory to explain the Soviet failure to find a negotiated solution, there would need to be evidence that Soviet leaders thought among themselves about extending the nuclear umbrella over Iraq or at least using military force to assist Iraq. They then decided not to make nuclear threats or use force because they recognized that they had no conventional response if the United States went ahead and used force against Iraq anyway. They would then need to recognize that this would leave them with the decision to use nuclear weapons or not, and they would see that using nuclear weapons would be too costly. In short, conventional options theory would be confirmed if Soviet leaders thought about using a military threat to prevent the United States from going to war against Iraq, but they backed off due to prospective assessments of the

ultimate bind that such a threat would put them in. As of yet, there is no evidence that this occurred.

Even if the Soviet Union did think in terms of a military dispute, the United States could have succeeded because it had more resolve than the Soviet Union in the Gulf crisis. As noted previously, the invasion of Kuwait threatened to upset the balance of power in an oil-rich region at a time when the US imported about half of its oil. This made the Gulf crisis a core issue for the United States. The Soviet Union relied far less on imported oil, and it was consumed with its own internal troubles. Gorbachev was much more focused on shoring up his precarious domestic position. This made the invasion of Kuwait a peripheral issue for the Soviet Union. On this basis, US success could have been due to more resolve to fight over the fate of Kuwait rather than its superiority in conventional options.

Overall, the Soviet failure to avert war provides inconclusive support for conventional options theory. The bargaining outcome is in line with the predictions of my theory. However, the process by which it happened proves inconclusive because there is no evidence that the Soviet Union thought in terms of a military dispute and even if it did, the US could have succeeded due to having greater resolve.

*Explaining Iraqi Defeat*

Once the air war started, Iraq responded with two conventional options that were below its level of resolve, firing Scud missiles at Israel and launching an attack on coalition forces at Khafji in Saudi Arabia. The Scud is a short-range missile that is notorious for its inaccuracy,
making it useful only for sowing terror among a civilian population. Without air superiority, any Iraqi ground defense would likely fail, and one way to avert war and hold on to Kuwait at a reasonable cost was by breaking up the US-led coalition. If Israel were provoked into fighting the Iraqis, this would threaten the participation of Arab countries in the multinational force. The Scuds were successful in stirring Israel to attack Iraq, with Israeli Prime Minister Yitzhak Shamir writing in a letter to Bush on January 23 that in response to the Scud attacks, “we believe we can, and must, mount an operation that has a chance of carrying out the task and achieving the objectives.” US military responses against the Scud attacks proved unsuccessful. Despite hundreds of strikes against Scud launching sites between January 17 and February 28, the mobility of the Scud launching teams made them difficult to track and target, such that “national intelligence resources did not definitely confirm any of the claimed ‘kills’” of Iraqi Scuds. The United States gave Israel Patriot anti-missile batteries to Israel to defend against the Scuds, but more than half the time, Patriot missiles deflected rather than destroyed the incoming Scuds, “leaving their warheads to fall where they might.” However, the Scuds failed to achieve Iraq’s strategic aim of bringing Israel into the war and fracturing the coalition. One reason was military, as coalition airstrikes caused the number of Scud attacks to fall after the first two weeks of the


782 Gordon and Trainor, 239, 247.

But the failure to bring Israel into the war is due to a diplomatic scramble by the United States and restraint on the part of Israeli PM Shamir.785

Once it was clear that the Scuds would not achieve their strategic objective, Saddam made a desperate attempt to provoke a bloody brawl with an offensive against coalition forces at Khafji in Saudi Arabia. By late January, Saddam knew that to keep taking damage from air strikes would dash his hopes for an effective ground defense. He needed the ground war to start now, and if the allies would not come north, he would go south to them.786 On January 29, Saddam sent his 5th mechanized division and the 3rd armored division of the III Corps in a two-pronged attack with the 1st mechanized division from IV Corps providing a screen to the west. An advance guard from the 5th division took Khafji,787 but this success was short-lived. Marine reconnaissance teams were able to spot Iraqi forces leaving Kuwait and relay information on Iraqi movements to their commanders.788 By the next day, January 30, the coalition was punishing the forces meant to reinforce Khafji with airstrikes, a total of 262 between January 28 and 31.789 By January 31, Saudi forces had retaken Khafji and Iraqi units were in retreat. The Iraqis lost 90 tanks and armored personnel carriers in and around Khafji, and they suffered 2000 casualties and 300 vehicles lost in the entire operation.790

784 These airstrikes may not have destroyed many Scud sites, but they forced them to move into hiding and undertake camouflage measures that made the Scuds take longer to fire. See, Gordon and Trainor, 1995, 239-248.


787 Ibid, 279.


789 Ibid, 283.

790 Ibid, 286-287.
The failure at Khafji left Iraq in a resolve-capability gap. They could either back down or fight a losing ground war. Either way, Saddam was not going to achieve his goal of holding on to Kuwait. Trainor writes that “from that point on, according to intelligence analysts, the Iraqis knew they were beaten. The best that Saddam could hope for at that point was to preserve what forces he could and survive as a ruler.”\textsuperscript{791} Powell said that by February, “they [the Iraqis] had shown us everything they had, and it was nowhere near enough to stop our left hook.”\textsuperscript{792}

This brings me to a puzzle for conventional options theory within the Gulf War. If the Iraqis knew by the beginning of February that they would lose a ground war, why did they fight one? In fact, Iraq did make compromises to withdraw from Kuwait in mid-February. It was the US that was intransigent in negotiations and continued to press for its maximum demands of destroying Iraqi military power. As early as January 18, Bush told Gorbachev that by accepting any Soviet-brokered deals with Iraq to withdraw, “they [the US’ Arab allies] would see this as the one thing we said we wouldn't do--compromise. They would see Saddam Hussein, though weakened, with a military still intact, his ground forces in particular.”\textsuperscript{793} In the middle of February, Iraq agreed to Soviet-brokered proposals to withdraw from Kuwait without a ground war. They were giving up on their main goal in the crisis. However, the US did not accept these compromises from Iraq, mostly because the timetable for withdrawal was too long and Iraq was demanding that the UN sanctions be rescinded once the withdrawal was over. Baker complained that these deals were too lenient. In discussing the compromise proposals of mid-February, Baker said that “the air war had finally pushed Saddam to the edge of reality. Now he wanted to

\textsuperscript{791} Trainor, 1992, 210.

\textsuperscript{792} Powell, 1995, 514.

\textsuperscript{793} “Telephone Conversation with Gorbachev.” January 18, 1991.
be released from the other consequences of his unprovoked aggression.” On February 22, Baker told Gorbachev that the United States demanded an immediate ceasefire, a full Iraqi military withdrawal from Kuwait within one week, and continued application of the UN sanctions after the withdrawal. Baker knew full well that the second demand would require that the Iraqis abandon their armored and heavy weapons in Kuwait, therefore crippling their military capability. In addition, he said that the Iraqis had to agree to these terms by the next day, February 23, at 12 PM Riyadh time. This demand the Iraqis found to be unacceptable and logistically infeasible. That the side with preponderance in conventional options would reject compromises and press for the achievement of its maximum goals is in line with the predictions of conventional options theory.

Iraq was still in a resolve-capability gap once the ground war started. It could either surrender or escalate to the use of chemical or biological weapons. At the outset of the ground war, if the Iraqis did not use chemical or biological weapons, “the question was not whether the allies would win. They had the full might of the American military, and the Iraqis were already a defeated force.” The biggest variable that left American commanders uncertain as to the outcome and level of casualties they would experience in the war was the possible use of chemical or biological weapons by the Iraqi military. Using reports from Iraqi deserters,

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796 What the US did in the run-up to the ground invasion was similar to a game of Big Bully, where the larger power imposes war on the weaker side despite the latter’s pleas for a compromise. For more, see Snyder, Glenn and Diesing, Paul. Conflict among Nations: Bargaining, Decision Making, and System Structure in International Crises. Princeton, NJ: Princeton University Press, 1977.

American intelligence reports “had predicted that the Iraqis would use chemical weapons.” Schwarzkopf wrote in his CINC log that “Iraq’s leaders are telling their troops to prepare for chemical warfare because the Americans are going to use chemical weapons against them. This is the same technique they used in the Iran War when they used chemicals.” American leaders had good reason to fear that Iraq would unleash chemical weapons once the fighting began, but they did not and accepted defeat once the Americans called a ceasefire. However, exactly why the Iraqis abstained from using chemical or biological weapons is still not explained.

If the lack of chemical weapons use was due to the fear of retaliation, then the choice to abstain and accept defeat would be in accordance with the predictions of conventional options theory. The lack of chemical weapons use could have been due to practical or tactical considerations such that using those weapons would not have altered the battle in Iraq’s favor. If that is the case, then conventional options theory would have less power in explaining Iraq’s defeat, since it can be due to the lack of any options with which to counter the Americans. There is more evidence that the Iraqis held off from using CW or BW due to fear of US nuclear retaliation. There is some evidence that the decision to not use CW or BW was based on tactical considerations. Trainor writes that Iraq had an “inability to locate lucrative targets for chemical attack for lack of a target acquisition capability.” In addition, the use of chemical weapons may not have benefitted the Iraqis, as they “had shoddy chemical-protective gear and were ill-equipped to survive on a chemical battlefield.”

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798 Ibid, 353.
800 Trainor, 1992, 212.
Most officials in the United States and Iraq cite the probability of nuclear retaliation by the United States as the reason for choosing to surrender rather than use CW or BW. Dick Cheney “recalled that the Iraqi military intelligence leader said after the war that they thought that if Iraq used chemical weapons the allied troops were certain to use nuclear arms and the price will be too dear and too high.”

During the war, in November 1990, Tariq Aziz stated that using chemical or biological weapons “would give them [the United States] an excuse for a nuclear attack.” Aziz hinted at this concern in an interview after the war with PBS’ Frontline having this exchange with an interviewer:

“Q: Why didn’t you use your chemical weapons?
Aziz: Well, we didn’t think it wise to use them.
Q: Could you tell me in more detail…?
Aziz: That’s all I can say. It was not wise to use such kind of weapons in such kind of war, with such an enemy.
Q: Because they had nuclear weapons?
Aziz: You can…make your own conclusions…”

Overall, Iraq’s acceptance of defeat instead of escalating to chemical or biological weapons use provides support for conventional options theory. Iraq’s attempts to compromise once its Scud firings and attack on Khafji failed to dent the coalition’s war effort are in line with the predictions of conventional options theory. Iraq found itself in a resolve-capability gap and attempted to get out of it by agreeing to withdraw from Kuwait, the occupation of which was its main goal in the crisis. Iraq’s decision to surrender rather than use chemical or biological weapons was likely due to the high risk of retaliation that the latter action carried. Again, faced with a resolve-capability gap, there is evidence that Iraq decided to concede rather than risk

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802 Avey, 2019, 59.
803 Ibid.
804 “Tariq Aziz Oral History.”
further retaliation from the Americans. Furthermore, as noted previously, both Iraq and the United States were fighting over core issues, making it possible that both sides had relatively even levels of resolve. The totality of Iraqi behavior in the Gulf War therefore provides moderate to strong support for conventional options theory.

In sum, the outcome of the Gulf War is consistent with the predictions of conventional options theory given the conventional balance. The process through which those outcomes occurred offers varying levels of support for the theory for each actor. The theory explains the success of the US quite well. The United States succeeded because they were able to build a large number of conventional options in a short amount of time in the Persian Gulf region. They used these options to keep the use of force within its level of resolve. This may be the way in which a conventionally preponderant country brings its power to bear on an adversary, which is something I address below in the conclusion.

This forced the Soviet Union and Iraq into resolve-capability gaps. The process through which the Soviets failed to avert a ground war offers inconclusive support for the theory. The Soviets, with no conventional options, would have had to rely on the extension of their nuclear umbrella, which they never tried. They accepted the United States ground invasion and chose not to threaten nuclear use. However, it is not clear if the Soviets were even contemplating making a nuclear threat to the United States during the conflict, and even if they did, the United States could have succeeded due to greater resolve. The process through which the Iraqis were defeated provides moderate to strong support for the theory. The Iraqis tried to respond with two options below their level of resolve, and once it was clear that those options would not work, they accelerated their attempts at compromise to leave Kuwait. However, there is no conclusive evidence on why they decided not to use chemical or biological weapons. Without such
evidence, it is hard to say whether Iraq accepted defeat due to the risks of escalating past its point of resolve or simply because there were no options they could use against the United States.

**Conclusion: Implications for Unipolarity**

The Gulf War provides three lessons for thinking about the benefit of conventional power preponderance in a nuclear world. The first is that having preponderance in conventional options for the use of force in the area where a dispute is taking place allows a state to press for its maximum demands. More importantly, pressing for maximum goals is not synonymous with getting what you want without going to war. Indeed, by pushing the cost of war lower, a state with overwhelming conventional superiority may prefer to go to war if that is the only way to achieve its maximum demands. This Gulf War case study gives credence to the idea that conventional military preponderance leads to “imperial temptation.”

Second, having a comprehensive variety of conventional capabilities at the global level means having a large force with a diverse array of weapons platforms. It also means having a force with forward-deployed positions and that is rapidly transportable. This level of variety allows a state to build several conventional options within a region on short notice. Conventional variety is the mechanism through which conventionally stronger states bring their power to bear on smaller ones. Stronger states build a variegated force structure and then use that capability to build conventional options in the local theater of a crisis. Conventionally stronger states that do not send enough forces to an area to build more conventional options than their adversaries will be at a bargaining disadvantage despite their overall superiority. For example, despite the United States being much stronger in conventional military terms than Iraq, if it had chosen not send

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troops to the Gulf, then it would have been unable to build bargaining leverage over Iraq. This gap between conventional options and aggregate strength can be due to low deployability (and hence, low conventional variety), or it could be to geopolitical constraints that tie up the stronger state’s resources in another area.

This last possibility brings me to the third lesson of the Gulf War about the value of unipolarity. One benefit of unipolarity is that the sole great power can concentrate a lot of resources on one adversary without having to worry about opportunism or competition from another great power in another area. It therefore knows that in whatever major dispute arises, it can bring a preponderance of military power to bear given that it has adequate deployability. The United States was able to shift so many military resources to the Gulf because it did not have to worry about competing with the Soviets in Europe or that the Soviets would use America’s preoccupation with the Gulf to make a gain in Europe. I use this point about the upside of unipolarity in my discussion of my theory’s implications for grand strategy in the next chapter.

\[806\] Indeed, as mentioned previously, the US was lucky that Saudi Arabia agreed to host its forces. Without this agreement, the US would have been hard-pressed to create the superiority in conventional options that they did.
Chapter 7: Conclusion and Implications US Grand Strategy

My dissertation has laid out and tested a theory of the usefulness of conventional military superiority in the nuclear age. I posit that in nuclear disputes, having more options for conventional escalation gives a state more bargaining power in a nuclear dispute by shrinking its resolve-capability gap. This gap is the distance between its level of resolve and the highest intensity of conflict represented by the conventional option below that level. In this gap, decision-makers must face the choice between over-escalation, accepting the costs and risks of sudden nuclear use associated with escalating past their level of resolve, and backing down. States with more options for conventional escalation are more likely to avoid this gap and force their adversaries with less conventional options to confront this dilemma. Because the costs of backing down relative to the costs of over-escalation are higher over core disputes, nuclear threats should be more effective in disputes over core interests. Therefore, the bargaining advantage from having superior conventional options should apply most over peripheral disputes.

The number of conventional options for escalation has in each dispute is determined by the capabilities that a state has in the area where a dispute takes place as well as by its ability to rapidly deploy forces into that area. It is hard to know where the next crisis will take place or what form it might take, and to meet the range of contingencies that a state may face, states are incentivized to build a variety of conventional weapons platforms. The logic of conventional options theory therefore argues that the benefit of conventional military superiority in the nuclear age lies in having a large, diversified military force with forward-deployed troops and rapid deployability. This presents a paradox of conventional military power in the nuclear age. States
build larger forces and spend more on defense to capture bargaining advantages over issues on the periphery of the threat space.

To test the logic of this theory, I first conducted a quantitative overview of disputes between nuclear states to see if the balance in conventional options affected dispute outcomes. I used the local conventional balance as a proxy for the balance in conventional options, with the idea that states with more forces across a range of platforms would have more conventional options for escalation. I find that, overall, states with local conventional superiority perform better in nuclear disputes. There is some evidence that this benefit is larger in disputes over peripheral issues that do not affect a state’s survival, territorial integrity, or strategically vital areas that impinge on the former. This provides support to the core logic of conventional options theory that having more conventional options for escalation enhances bargaining power in a nuclear dispute.

I moved to the Cuban Missile Crisis as my first case study in order to examine the causal process through which states with more conventional options for escalation obtain better dispute outcomes. In that crisis, the United States had local conventional preponderance in the Caribbean. They used this conventional power to escalate to a naval blockade of Cuba that the Soviets could not respond to. The US then threatened an invasion and air strike of Cuba to remove the Soviet nuclear-tipped missiles from the island. The Soviets could only respond to this by using their tactical nuclear weapons stationed with their forces in Cuba. This put Khrushchev into a decision-making bind: either he risks further escalation and the high costs of tactical nuclear use or he withdraws the missiles. He chose to withdraw the missiles, and the United States gave up two concessions to help Khrushchev save face— the non-invasion pledge of Cuba and removing the Jupiter missiles from Turkey — in exchange.
The Cuban Missile Crisis illustrates that the core causal process of the theory can operate in important nuclear disputes. I then apply the theory to the Berlin Crisis. I show here that the United States was inferior to the Soviet Union in terms of conventional options. However, the United States was disputing a core interest in the form of the fate of West Berlin, and it was not so inferior to the Soviets that it had zero conventional options. This allowed the United States to raise the credibility of its nuclear threat by threatening to engage in a medium-sized conventional conflict in Germany. This would have caused Khrushchev to escalate to an even larger conventional war, in which the probability of nuclear use would be quite high. Khrushchev realized that he could not use his conventional advantage to coerce the Americans in Berlin. A combination of American resolve and limited conventional options in Central Europe combined to bring about a successful dispute outcome for the United States in the Berlin Crisis. This provides moderate support to the logic of conventional options theory, and it indicates how the conventional options of states with less conventional military power in areas where they have core interests at stake can support a brinkmanship strategy. The case also serves as a useful reference point for Cuba. If the side with more conventional options (Soviet Union) did not succeed in Berlin, why did the side with more conventional options (United States) do so in Cuba? Cuba was in the Soviet Union’s geographic periphery, while Berlin was in the middle of a divided Germany, over which both countries’ hopes for the Cold War hinged. There was more room to use conventional force in Cuba than in Berlin.

Indeed, in disputes over peripheral interests, conventional capabilities will be important for gaining successful dispute outcomes. The Taiwan Strait Crises show that nuclear threats are unlikely to be effective over peripheral interests. The United States attempted to use the threat of tactical nuclear weapons to defend the offshore islands in the First Taiwan Strait Crises. They
were successful at defending Taiwan, but they could not prevent the capture of the Tachen Islands, allowing the PRC to accomplish one of its main goals in the crisis. This assessment of the outcome of the First Taiwan Strait Crisis is more pessimistic than the one shared by US policymakers at the time. However, it fits with the ICB’s coding of the outcome as being a stalemate for the US and a partial success for China. The Communist Chinese initiated another crisis in an attempt to seize Jinmen and Mazu via coercion of the Nationalist Chinese in August 1958. Improved ROC and US naval and air power in the area around the Taiwan Strait allowed the US to rebuff Communist coercion attempts and raise the costs of seizing Jinmen and Mazu. This caused the PRC to back off its challenge over Jinmen and Mazu for good. The US was more successful in achieving the goal of defending the offshore islands in the second crisis. The implication of this finding is that in peripheral disputes, conventional options for limited escalation are likely to play a greater role than nuclear threats. The possibility that the United States had more resolve to defend Jinmen and Mazu than they did to defend the Tachens could have affected the differential outcome between the two Taiwan Strait Crises, however. This means that the case gives a moderate amount of support for conventional options theory. The Taiwan Strait Crises also show that the theory can apply to disputes between nuclear states and non-nuclear adversaries.

This is helpful for the Gulf War case study which illustrates how a state with conventional preponderance in the aggregate brings its power to bear on an adversary. At the beginning of the conflict, Iraq had superiority in conventional options in the Persian Gulf region, allowing them to take Kuwait and giving them the ability to put the United States into a resolve-capability gap if they invaded Saudi Arabia. However, the United States was able to use its strategic mobility and forward-deployed forces in the Indian Ocean to send hundreds of
thousands of troops to the Persian Gulf region in only a few months. This gave them near full-spectrum dominance over the Iraqis in the Gulf War. That level of superiority allowed the United States to use conventional force in a sufficiently limited fashion that it kept the costs of war below its level of resolve. It also allowed the US to pursue its maximum objective of destroying Iraq’s offensive military power. This is why the United States rejected Iraqi concessions wrangled out of them by the Soviets, who wanted to avoid a war between Iraq and the US-led coalition. This case shows that the benefit of conventional preponderance lies in the ability to build conventional options for escalation in several areas around the globe. In turn, this shows that if states want to be able to respond to a range of contingencies in several areas, they need to build a large and diversified military force at home and deploy forces abroad.

I summarize how each test provided support, rejected, or qualified my theory in the table below:

**Table 7.1: Summary of Evidence for Conventional Options Theory**

<table>
<thead>
<tr>
<th>Test</th>
<th>What it showed</th>
<th>Level of support for theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative Analysis</td>
<td>More conventional options lead to better dispute outcomes; advantage may apply more to peripheral issues</td>
<td>Moderate</td>
</tr>
<tr>
<td>Cuban Missile Crisis</td>
<td>Use of conventional options can put adversary into resolve-capability gap; this</td>
<td>Strong</td>
</tr>
<tr>
<td>Crisis</td>
<td>Advantage</td>
<td>Degree</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Berlin Crisis</td>
<td>Can overcome resolve-capability gap if defending core interest; conventional capabilities still play role in helping US</td>
<td>Moderate</td>
</tr>
<tr>
<td>Taiwan Strait Crisis</td>
<td>Hard to overcome resolve-capability gap over peripheral interest; better to build up conventional capabilities for limited conflict; can apply to non-nuclear adversaries</td>
<td>Moderate</td>
</tr>
<tr>
<td>Gulf War</td>
<td>Conventional military superiority benefit comes through having variety of capabilities that you can deploy rapidly (versatility of military forces)</td>
<td>Moderate to Strong</td>
</tr>
</tbody>
</table>

In sum, the benefit of conventional military superiority in the nuclear age lies in having more conventional options for escalation than your adversary in areas where nuclear deterrence
is less likely to be effective. In order to face a range of contingencies and have options for escalation in particular disputes, states build a commensurate variety of weapons platforms and capabilities. The benefit of conventional superiority, however, is more likely to apply to disputes at the periphery of the threat space, presenting a paradox of conventional military power in the nuclear age. States build more types of weapons, prepare for a wider range of contingencies, and deploy more forces abroad in pursuit of peripheral objectives. What does this mean for US grand strategic choices? Should the United States lean into this paradox by building a large, diversified military, investing in strategic mobility systems, and stationing forces and equipment abroad? Or should it keep its troops at home and not contest the peripheral objectives over which conventional options for escalation would be useful?

Answering this key question requires answering two underlying questions. First, over which objectives are nuclear deterrence likely to be effective, and in which cases are conventional superiority likely to be useful? Second, would the benefits of achieving advantages in the latter cases justify the costs necessary to maintain the large, diversified, and diffuse military force with which you can create conventional escalation options? To the first question, I argue that the United States can use extended nuclear deterrence to ensure the survival and territorial integrity of its major allies such as those in Western Europe, Japan, and South Korea. There are three areas in which conventional options for escalation would be useful in its relations vis-à-vis Russia and China: maintaining command of the commons, protecting Eastern European NATO allies, and preventing Chinese aggression against Taiwan and in the South China Sea.

To answer the second question, I assess the opportunity costs of defense spending to accomplish each set of objectives relative to the opportunity costs of giving up the bargaining advantage conferred by conventional superiority for each of them. At the aggregate level, I argue
that the United States does not currently face high opportunity costs for maintaining high levels of defense spending. The opportunity cost of a dollar spent on defense increases as the public debt becomes harder to service and domestic needs rise. While both areas are becoming more constraining on the federal budget, interest rates on the debt are still low and it is still possible to fund social entitlement programs. This means that the United States does not yet face a meaningful resource constraint on its defense budget at its current level. This could change, though, if the United States needed to undertake a large increase in defense spending to achieve a certain objective.

Over the command of the commons, US efforts are worth the benefits it provides, meaning that the United States should maintain conventional options for escalation in any fight to keep the world’s waterways and airspace open. For Eastern Europe, the United States would need to dramatically increase defense spending to gain more conventional options for escalation than Russia. This would make the opportunity cost of defense spending higher than the opportunity cost of giving up a bargaining advantage in a dispute over Eastern Europe. The United States will need to lean on its European allies and try to close the “credibility gap” in NATO to make its nuclear deterrent more credible. Finally, US efforts to rebuff Chinese attempts at expansion in the South China Sea, East China Sea, and Taiwan are worth the security benefits. The United States currently has several conventional options in East Asia, and no East Asian ally would be able to provide the naval and air power that the US does in the region. However, China is becoming more powerful over time, meaning that in the long run, the US will have to increase its defense spending to keep up with China. Within the next ten years, the US should also focus on strengthening its allies’ military power in East Asia, which it can do with arms sales and military advising.
Conventional options theory says that conventional superiority is most useful over in disputes over peripheral interests, but these objectives are still important. For command of the commons and defending the Western Pacific, the benefit of the bargaining advantage conferred by having more options for escalation is worth the cost to maintain this advantage. For other objectives, it is not. My recommended force posture would thus be to maintain a strong Air Force and Navy, keep air and naval forces stationed abroad in East Asia, have a quick reaction force for rapid deployment, invest in strategic mobility, and scale back deployments of ground troops overseas, especially in Europe and the Middle East. This would result in a grand strategy that I call “deep engagement with a light boot print.”

The chapter proceeds in four parts. First, I review the grand strategic options facing the United States and what conventional options theory says to each side in the grand strategic debate. Second, I lay out the areas in which superiority in conventional options could be useful for the United States. Third, I explain the opportunity cost framework for defense spending, and I apply it to the objectives outlined in the previous section. Fourth, I conclude with a discussion of what the resulting grand strategy would be by examining the costs and benefits of forward-deployed forces through the lens of conventional options theory.

At Home or Abroad: The Two Main Force Posture Options Facing the United States

Grand strategy is a “means-end chain” linking the resources a state has to the objectives it needs to keep it safe from threats. It is a theory about how a state will “cause” security for itself.807 This theory can be in the form of an explicitly held “grand plan,” or can be implicitly

stated through a state’s “grand principles” or “grand behavior.”

The United States can implicitly or explicitly take one of four choices before it: restraint, deep engagement, liberal internationalism, and conservative primacy. One of the central questions that will guide American policymakers in this choice is whether forward-deployed conventional forces contribute to US security and how they do so. On this question, restraint is alone in arguing that the United States does not need to station forces abroad to the level that it does in order to make itself secure. Advocates of deep engagement argue that forward-deployed conventional forces undergird the global economic system that provides disproportionate economic benefits to the United States. They also claim that they help to keep the peace in Europe, East Asia, and the Persian Gulf. Advocates of liberal internationalism and conservative primacy go even further and claim that conventional troops are good for changing regimes and institutions in other countries.

I do not address the latter contention, and I focus my attention on the central question of whether forward-deployed forces contribute to stability vis-à-vis great powers. If they cannot do this, then the bedrock of liberal internationalism and conservative primacy are also undermined. I


810 For a view from an advocate of restraint that is specifically critical of overseas bases, see Glaser, John. “Withdrawing from Overseas Bases: Why a Forward-Deployed Force Posture is Unnecessary, Outdated, and Dangerous.” CATO Institute, Policy Analysis, Number 816 (July 2017).


therefore focus only on the debate about the utility of forward-deployed conventional forces between restraint and deep engagement. Restraint argues that the advantages of geography and nuclear deterrence keep the United States safe from a major power challenger such as Russia and China: “Given its geographical advantages and nuclear arsenal, the United States would be very secure even if Japan, China, and Russia matched its defense expenditures.”

In addition, US allies can do the job of balancing against China, Russia, and other regional threats themselves, especially if they acquire nuclear weapons. Continuing to provide security in the form of forward-deployed forces only encourages NATO and East Asian allies to “free-ride” on US strength. The use of forward-deployed forces to bolster extended nuclear deterrence may keep major challengers in check, but it raises the chance that the United States would become entrapped in a catastrophic war. As Barry Posen argues, “one lesson of the Cold War should therefore be that extended deterrence is a risky business, and the United States ought to have been glad to shed such commitments after the Soviet Union collapsed.”

According to restraint, forward-deployed forces are at the very least redundant given America’s defensive advantages and potentially counterproductive given their negative effect on allies’ incentives to build their own military forces and the chances of entangling the United States in a large war.

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816 Posen, 2014, 76.
Proponents of deep engagement argue that forward-deployed forces enhance US security by helping to keep the peace in major areas of the globe. Brooks and Wohlforth, instead of arguing that extended deterrence is a risky endeavor, stress that US alliances are well structured to deter potential adversaries. One reason this is the case is that “actual US forces are deployed abroad in order to…increase the speed and firepower of early responses to any use of force, decreasing the chances for quick victory by adversaries.”

Hal Brands argues that it is a “robust US forward presence” that prevents Russia and China from taking actions to alter the status quo in Europe and East Asia. At the very least, forward-deployed troops make the American nuclear umbrella more credible. Moreover, US forward-deployed military power provides the backbone of the international economic order that disproportionately favors the United States. The security and economic benefits of a large and forward-deployed force posture are larger than the costs of maintaining this force.

What is odd in this debate is that the implications of the utility of extended deterrence are not fully explored for either side. If it works as well as advocates of deep engagement says it does, then the United States can reduce its overseas forward presence and still deter Russia and China. In other words, if nuclear weapons can keep the peace in a region with little US conventional forces present, then the response of the United States should be to stay in the extended deterrence business, not leave it. Gholz, Press, and Sapolsky hint at this when they

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817 Brooks and Wohlforth, 2016.


argue that “the Cold War’s great power peace…was overdetermined. Nuclear weapons brought a restraining influence… US engagement was not necessary for peaceful great power relations during the Cold War.” If extended deterrence is difficult to make credible, then the United States will need to back up its security commitments with extensive conventional options for escalation. Identifying limitations to the usefulness of nuclear threats indicates that forward-deployed troops can contribute something tangible to the achievement of certain security goals. Therefore, adjudicating whether a forward-deployed force posture is beneficial requires understanding where nuclear threats are likely to be effective and where conventional options are likely to have their greatest benefit.

Another source of disagreement between restrainers and deep engagers is on whether the United States can bear the costs of maintaining a large and diffuse military force. Advocates of restraint argue that the United States’ defense spending prevents it from allocating more resources to other social and economic problems, such as public health, infrastructure, education, etc. Lowering the defense budget can free up dollars for these priorities, which would make the United States stronger in the long run. As Gholz, Press, and Sapolsky put it, “the greatest foreign policy threat to US prosperity is that America will spend too much on the military.” Advocates of deep engagement argue that this tradeoff is not real: US defense spending does not constitute any undue burden on the US economy. Norrlof and Wohlfarth, for example, show that


822 I stress the long-term nature of this trade-off because domestic investments would take time to reap rewards and because some restrainers admit that, in the short-term, the US fiscal position is strong enough to support both foreign and domestic priorities. See Posen, 2014, 70.

the US defense budget is not a significant contributor to US sovereign debt.\textsuperscript{824} The debate over the costs of a large, forward-deployed conventional force posture brings up the possibility that the costs of such a force posture may outweigh its security benefits.

**The Benefits of Conventional Military Superiority in US Grand Strategy**

The debate over US grand strategy brings up two questions: what are the benefits of forward-deployed conventional forces? And are those benefits worth the costs of maintaining conventional military superiority? Conventional options theory sheds light on the first question by showing _where_ and _in which contexts_ conventional options for escalation are likely to be more successful than nuclear deterrence. The theory predicts that over core interests, states can use nuclear deterrence to substitute for conventional options for escalation in order to deter an adversary. Over peripheral interests, conventional options for escalation, and their ability to close the resolve-capability gap, are more valuable. What constitutes a core interest for the United States? The most obvious starting point is the survival of the American state and territorial integrity of the United States mainland. The United States can easily make their adversaries believe that any serious threat to these objectives would be met with a nuclear response.\textsuperscript{825} Other countries in similar situation, such as Pakistan and North Korea, are able to make the threat of nuclear retaliation believable if their survival were threatened by a conventional attack.\textsuperscript{826}


\textsuperscript{825} One pathway this could happen through is via the logic of revenge, where the purpose of retaliation is punishment for its own sake, not because it ends up saving you. The expectation of “revenge” is potentially what makes nuclear threats to ensure survival so credible. See McDermott, Rose. Lopez, Anthony, and Hatemi, Peter. “Blunt Not the Heart, Enrage It': The Psychology of Revenge and Deterrence.” *Texas National Security Review*, 1, No. 1 (November 2017): pp. 68-89.

A core interest also includes the defense of “strategically vital areas” that, if controlled by an adversary, could allow them to threaten a state’s survival or territorial integrity. For the United States, these areas include its coastline on the Pacific and Atlantic Oceans, Western Europe, and Japan and South Korea in Northeast Asia. Control over the United States’ near abroad would give a country the opportunity to invade should it choose to do so. Control over Western Europe would cause a state to become a regional hegemon on the European continent, giving it sufficient economic power to harm the US economy and enough military power to jeopardize US territorial integrity in the future. The same holds true for Japan and South Korea. If China were to gain control or influence over those countries, that would make it the regional hegemon in East Asia, giving it enough resources to one day be able to threaten the territorial integrity or survival of the United States.

In these areas, the US can credibly communicate that the expected costs of over-escalation are lower than the expected costs of backing down in a dispute that could affect who controls them. Evidence from the Berlin Crisis demonstrates that, for these core interests, the United States does not need to have more conventional options for escalation than its adversary. For the defense of Western Europe and Japan and South Korea, extended nuclear deterrence is effective. The Berlin Crisis also indicates that it does help to enhance the credibility of the nuclear threat if there are enough conventional forces to make any conventional war a large one in which the chances of nuclear escalation are higher. Would this not indicate that forward-deployed forces make extended deterrence more effective? I argue no, because today, US allies in Western Europe and East Asia can provide that level of conventional strength themselves. In the Cold War, the size of the Soviet military and the existence of an open plain in North Germany meant that NATO needed to place a lot of conventional forces in Europe in order to
force the Soviets to escalate to a high-intensity conventional war. Without US deployments, the NATO European allies may not have been able to raise the required forces themselves.

Today, in Western Europe, the main threat is Russia, which has a much smaller military than the Soviet Union, and Russia would have to first go through Eastern Europe before it threatened to take control over the western half of the continent. The biggest three European NATO powers, the United Kingdom, France, and Germany have less armored vehicles, artillery pieces, tactical combat aircraft, and manpower combined than the Russian military. However, these countries have a combined GDP that is greater than 2.5 times that of Russia’s. Russia’s military spending was 3.9% of its GDP in 2019, while the United Kingdom, France, and Germany spent 2.14%, 1.84%, and 1.38% of their GDP on defense, respectively. Even with that, the combined defense budgets of the UK, France, and Germany are greater than Russia’s defense spending. Western European NATO countries have the capacity to spend more on defense and spend their defense dollars on more firepower. This plus the advantages of geography mean that the United States’ NATO partners in Western Europe can build the requisite conventional forces to make a war in Europe costly by themselves.


China poses a much bigger military threat to Japan and South Korea than Russia does to Western Europe. Nevertheless, the advantages of geography and the economic strength of South Korea and Japan mean that they also can build enough conventional capabilities to force China to escalate to a high-intensity war in order to gain control over East Asia. Eric Heginbotham and Richard Samuels show that even though the Japanese military is inferior to the Chinese military, it can use a strategy of “active denial” to prevent a quick Chinese victory, causing the conflict to be costly to China and giving time for US forces to deploy from the American mainland.\textsuperscript{833} The People’s Liberation Army (PLA) is enhancing its capabilities in the Korean Peninsula, but the advantages of being separated by water from China also allow South Korea to engage in maritime denial of quick gains by China, similar to Japan.\textsuperscript{834} China could attack South Korea through North Korea over land, but this would require a high-intensity use of force. East Asian allies have the requisite forces and capacity to make conventional conflicts costly, forcing China to escalate to high-intensity war in which US nuclear threats would be more credible. In sum, America’s key allies already have the large conventional forces that helped raise the cost of war in the Berlin Crisis. Adding more forward-deployed forces would offer little help in terms of protecting their territorial integrity and sovereignty.

There are three areas outside of the defense of major allies in which conventional superiority would have a positive effect on the ability of the US to accomplish its security goals. The first area is in defense of the “global commons,” or the sea, space, and airspace above


15,000 feet.\textsuperscript{835} The foundation of the different grand strategic choices facing the United States is that it currently commands the global commons.\textsuperscript{836} A threat by an adversary to contest this command would have major implications for US foreign policy and any international order it attempts to implement.\textsuperscript{837} Examples of a threat to global commons would be an attempt by one country to gain control over a key waterway for its own use, such as the Straits of Malacca, the Strait of Hormuz, or the Suez Canal. It could also be an attempt to gain control of some airspace above 15,000 feet and deny its use to others. In a conflict over these objectives, US threats to use nuclear weapons would not be credible. If the United States were fighting Russia or China, there is little reason to think that the United States would risk the fate of its citizens for the sake of keeping the Straits of Malacca open to transit. Even if the United States were not fighting a nuclear-armed adversary, the normative and strategic implications of using nuclear weapons for the first time in 75 years would be too great to justify the benefits of winning the dispute.

Conflicts over control of the global commons are likely to take place in peripheral areas, and because of this, conventional options for escalation are necessary for the United States to prevail in these conflicts. Moreover, the United States wants to avoid having to fight a large, costly conflict in these areas, giving priority to having several conventional options that can keep the conflict below the United States’ level of resolve. This would have the extra benefit of forcing the adversary to consider fighting a large-scale war to keep control over a piece of the global commons or backing off its challenge. Therefore, in fights to defend certain waterways or


\textsuperscript{836} Ibid.

\textsuperscript{837} Though there is a debate over how much US military strength contributes to the maintenance of the current global economic order, which I discuss below. See Maass, Richard, Norrlof, Carla, and Drezner, Daniel. “Correspondence: The Profitability of Primacy.” \textit{International Security}, 38, No. 4 (Spring 2014): pp. 188-205.
airspace, the United States will need to lean on its conventional capabilities, making the possession of more conventional options for escalation than its adversary helpful.

The second area in which conventional options for escalation would add to the United States’ bargaining power in a conflict is in Eastern Europe. The Baltic states – Estonia, Latvia, and Lithuania – and several countries in the Balkans are part of NATO, which has, at its heart, a collective defense commitment in the form of Article 5. The United States could use nuclear deterrent threats to make this security commitment credible in the Cold War. However, the fate of the Eastern European member countries is not as vital to American security as control over the resources of Western Europe. This creates a “credibility gap” within NATO where the United States could be willing to risk New York City for the sake of London but a threat to risk Boston for the sake of Vilnius is not believable. As Joshua Shifrinson writes: “where the United States could plausibly claim to trade Boston for Bonn prior to 1991, no amount of reassurance can make the promise to trade Toledo for Tallinn credible today—the stakes of the game are too low.” 838 The incredibility of nuclear use can explain why NATO created a 4,000-strong rapid reaction force as a way to respond to Russian aggression against the Baltic States. 839 That NATO will need to rely on conventional forces to defend the Baltic States and other Eastern European members stresses the alliance’s military leaders. 840 For a dispute over the Baltics or in other parts of Eastern Europe, having more conventional options for escalation would provide a security benefit to the United States.

The third area in which conventional options would add to US security is in the western Pacific. This area is related to the first objective of defending command of the global commons in that it involves the defense of major waterways whose control could have ramifications for the openness of the global economy.\textsuperscript{841} However, it also involves quasi-territorial disputes with US allies and partners in the region, such as the dispute with Vietnam, the Philippines, and others over island-building in the South China Sea. Against a Chinese challenge to control over Taiwan, the islands in the South China and East China Seas, or full control over all of these, a US nuclear response is not credible. In such a conflict, the United States will need to lean on its naval and air capabilities. Having more conventional options for escalation in these domains would benefit the US bargaining position over security issues in the South China Sea. Table 7.2 below summarizes where extended nuclear deterrence is likely to be effective and where conventional options built by forward-deployed forces are likely to be beneficial.

Table 7.2: Summary of Where Conventional Options Would Yield Security Benefit

<table>
<thead>
<tr>
<th>Where Nuclear Deterrence is Effective; Forward-Deployed Forces Unnecessary</th>
<th>Where Conventional Options are Effective; Forward-Deployed Forces Helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Defense of Western Europe</td>
<td>• Maintaining command of the commons</td>
</tr>
<tr>
<td>• Defense of Japan and South Korea</td>
<td>• Defense of Eastern Europe</td>
</tr>
<tr>
<td></td>
<td>• Defending western Pacific</td>
</tr>
</tbody>
</table>

\textsuperscript{841} To hear a good argument for how a Chinese challenge to these waterways could affect the openness of the global economy, see Lissner, Rebecca and Rapp-Hooper, Mira. \textit{An Open World: How America Can Win the Contest for Twenty-First Century Order}. New Haven, CT: Yale University Press, 2020.
The Opportunity Costs of Defense Spending

Would the benefits of forward-deployed conventional forces in the areas just mentioned outweigh the costs of maintaining those forces? Answering this type of question is often a subjective enterprise. The costs of military spending are measured in an objective dollar figure, while there is no objective and discrete measure for “security benefits.” The question could be asked in a different way, one that is more objective. Does the United States face a resource constraint in the attempt to provide superior conventional options for escalation in the global commons, Eastern Europe, and the western Pacific? The way to gauge the resource constraint is to consider the opportunity costs of defense spending. Each dollar a state spends on its military could either be saved or spent on other domestic priorities. These opportunity costs can be weighed against the costs of giving up an advantage in conventional military power in the regions where it could be helpful. If the United States faces high opportunity costs on defense spending, then the attempt to gain a bargaining advantage in peripheral areas could be considered harmful to American prosperity. Estimating the level of opportunity costs associated with defense spending can therefore be an objective way to measure whether pursuing conventional superiority in peripheral regions is a net benefit.

I begin gauging the level of opportunity costs associated with defense spending by specifying that each dollar spent on defense could either be saved (not spent at all) or spent on a domestic program. The first alternative use of a defense dollar is touted by libertarians who want to reduce the federal budget and begin decreasing the national debt. The other references the popular “guns vs. butter” tradeoff cited by progressives who seek a way to pay for larger social

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service programs. This opportunity cost is not fixed but changes according to economic and fiscal conditions in a country. For example, studies in defense economics find that defense spending hampers economic growth and productivity. They also find that military spending results in the creation of less jobs than spending on domestic programs in health care, education, and clean energy. These adverse effects do not have uniform impacts on all countries, however. China’s GDP growth is already above 6% per year; cutting defense spending in order to boost growth is only going to have a marginal economic benefit. In 2019, the United States unemployment rate fell from 4.0% to 3.5%, reaching below the presumed level of natural unemployment in the US In that type of jobs environment, who cares if spending less on defense and more on other defense programs would boost employment? Conversely, if a country were facing an economic crisis and needed to boost growth and employment, the opportunity cost of spending on defense would be quite high.

In the US context, the opportunity costs of defense spending can be estimated because a certain amount of money must go into paying off the interest on the federal debt and to entitlement programs such as Social Security and Medicare. As these requirements increase, a


defense budget that stays at the same level (adjusted for inflation) would take more and more federal funding away from non-defense discretionary programs. I gauge the opportunity costs associated with the United States’ defense spending by judging the requirements for servicing the national debt, providing Social Security and Medicare, and addressing issues at home. Before going into the rough estimate, it is important to stress that the tradeoff between defense spending and the alternative use of a defense dollar is between short-term security provision and long-term preservation of American welfare. As noted earlier, defense spending is at a little over 3 percent of GDP and adding an extra $50 to $100 billion a year would not bring this figure into the levels of defense spending by percent GDP seen in the Korean War, the Vietnam War, or the Ronald Reagan presidency.\footnote{Brooks, Ikenberry, Wohlforth, 2012/13, 17-19.} On a current, per-year basis, the tradeoff would look small. However, the consequences of rising public debt and mounting domestic requirements will be felt over the course of decades. Similarly, most of the benefits of domestic spending and reducing public debt occur over time and require long-term fiscal commitments. If policymakers chose to spend extra money on defense every year, it would eventually harm long-run efforts to tackle budgetary and social problems. Thus, I am comparing the costs of neglecting challenges to long-term prosperity versus the short-term benefits of forward-deployed forces.

In terms of the national debt, the United States can continue to run high deficits for now, but it may reach a point in the next couple of decades where the debt becomes a meaningful resource constraint. Federal debt stands at 78 percent of GDP and is projected to rise to 92 percent of GDP by 2029, more than twice the 50-year average between 1969-2019.\footnote{Congressional Budget Office. \textit{Updated Budget Projections: 2019-2029}. Washington, D.C.: Congress of the United States, May 2019. \url{https://www.cbo.gov/system/files/2019-05/55151-budget_update_0.pdf}. This projection does not even consider the high amounts of deficit spending undertaken to deal with the coronavirus pandemic.} The
United States is more insulated from the effects of public debt because interest rates are low. In addition, the dollar is the international reserve currency, and the United States can issue debt using that currency.\(^{850}\) However, the interest rate to service the national debt could rise over time. Payments for interest on the debt could then take more money away from spending on discretionary items such as infrastructure and education. Plus, it is possible that the United States is not yet feeling the effects of high public debt. The economies of countries with high levels of public debt grow more slowly than countries with low levels of debt, and this may be because more government funds must go towards servicing the debt.\(^{851}\) The United States may start to feel the downward pressures of debt on growth as it accumulates over time.

Most importantly, increasing defense spending without passing new taxes would increase the national debt. This would increase the amount of money necessary to service the debt and may increase interest rates as the government borrows more money and lenders begin to worry about the US government’s ability to pay them back.\(^{852}\) This means that the opportunity costs associated with each extra dollar on defense increases as the defense budget increases. The United States may not be facing a constraint on its ability to borrow money and service its debt now, but it could in the future, providing a greater opportunity cost to defense spending. Plus, higher defense spending itself will increase the marginal opportunity costs of an extra dollar


spent on defense. These are resource constraints to keep in mind when thinking of the requirements for building conventional options for escalation in peripheral areas.

In terms of spending on social programs, the United States faces rising opportunity costs as well. This is in large part due to the “Baby Boomer” generation aging into Social Security and Medicare. All of the baby boomer generation will be over 65 by 2030, increasing the share of people aged 65 and older in the population to around 20 percent.\textsuperscript{853} This aging will occur as the fertility rate is projected to remain at a historically low level of 1.9 children per woman.\textsuperscript{854} Even now, the Social Security Administration cannot fund its current level of benefits with taxes and is using its reserve funds to remain solvent.\textsuperscript{855} The United States will need to increase entitlement spending on Social Security and Medicare over the next two decades, which could put a squeeze on the amount of money available to spend on discretionary budget items. Thus, increasing domestic demand for social programs is also raising the opportunity costs of dollars spent on defense.

Does the United States need to use its discretionary spending on non-defense, domestic efforts? If the share of money allocated to discretionary spending programs is likely to shrink in the future, but demand for non-defense related projects is projected to be low, then the opportunity costs of defense spending could still remain manageable. Unfortunately, the United States’ domestic needs in areas not covered by entitlement spending are growing. The American Society of Civil Engineers claims that there is a $1.5 trillion “funding gap” for US infrastructure

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that needs to be close by 2025.\textsuperscript{856} In addition, maintaining a leading economy into the future requires a large base of people well-skilled in science and mathematics, but American students rank in the middle of the pack in those subjects.\textsuperscript{857} The requirements of mandatory social spending will shrink the amount of discretionary spending that can go towards improving infrastructure and education. If policymakers choose to pursue the benefits of a forward-deployed defense posture and spend a high amount of money on defense, the military could take up a bigger share of discretionary spending. This could reduce the amount of federal dollars going towards infrastructure and education at a time when the United States should be increasing its funding of both. This is yet another reason why the opportunity costs of defense spending are likely to increase for the US over the next two decades.

Overall, the United States is facing growing opportunity costs on its defense spending due to rising public debt, increasing requirements for entitlement programs, and urgent domestic needs in infrastructure and education. The United States can maintain its current level of defense spending for now and do so in the future (as a percentage of GDP). However, any peripheral security goal that requires the United States to increase defense spending as a percentage of GDP by any significant margin is likely to prove counterproductive. The opportunity costs of spending enough on the military to achieve that security goal are probable to be larger than the costs of giving up a bargaining advantage over that objective. It is with this benchmark in mind that I assess whether or not stationing conventional forces in the areas where they would be helpful would provide a net benefit.


Is the Game Worth the Candle?

In which of the three areas identified above – the global commons, Eastern Europe, and the western Pacific – would the forward deployment of conventional forces provide a security benefit larger than the costs of maintaining that deployment? I start by gauging the requirements for defending the global commons. One important naval mission is to maintain command over sea lanes of communication (SLOC’s) in the open ocean and at various chokepoints. Performing this mission on the open oceans requires a technologically sophisticated and large surface fleet and anti-submarine force that can operate multiple mission simultaneously around the world.858 Fortunately, the United States already possesses such a force, and it has reached an “economy of scale” with its technological base such that its qualitative superiority in naval forces will be hard for major rivals to match any time soon.859 Applied to the defense of the open oceans, this means that China and Russia do not have the submarine capability to wage a sustained campaign to disrupt transoceanic shipping.860 It is possible that regional powers could lay down mines and use anti-ship cruise missiles (ASCM’s) to close chokepoints such as the Strait of Hormuz or the Straits of Malacca.861 The United States, with a little more investment in anti-mine and suppression of enemy air defense (SEAD) capabilities so that it could take out any ASCM’s on


shore, could neutralize these threats. Protecting the maritime portion of the global commons is a valuable mission well within current US capabilities and capacity to accomplish.

In terms of airspace, it is also possible that the United States could accomplish this within its means, though with more difficulty. The United States has qualitatively superior aircraft compared to any country, including major rivals such as Russia and China. It has also improved its suppression of enemy air defense (SEAD) capabilities over the years with doctrinal innovations and investments in new weapons platforms such as the F-16CJ with HARM (high-speed anti-radiation missile) firing capability, the upgraded EC-130H, and the EA-18G. In airspaces outside of Russia and China, the United States’ air-to-air capabilities and ability to suppress ground-based air defenses should allow it to maintain air superiority with continued levels of investment and forward deployment.

In the air over Russia and China and in airspace very close to those countries, the United States faces a “problem of scale.” That is, the United States has the ability to shoot down Chinese and Russian fighters and disable and evade their air defense systems, but it does not have enough fighters and electronic warfare (EW) aircraft to gain complete control of the skies over or very near to Russia and China. In the short-term, further investments in building more fighters and EW aircraft could give the US an advantage in these areas, but it appears that improvements in air defense are moving faster than the US can keep up. However, the United

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862 Heginbotham, et. al. 2015, 92. A conclusion of a US-China fight for air superiority recognizes America’s geographic challenges but also acknowledges the United States’ “unparalleled air-to-air capabilities.” The F-22 and the F-35, while troubled in production, are the best tactical air platforms today. Posen, 2014, 149.

863 Heginbotham et. al., 2015, 103-104.

864 Ibid, 130.

States could use its high-end assets to gain temporary advantages in the air over a fixed area to give time for ground and naval forces to operate unmolested. This could help provide some more conventional options in a dispute, and it is within current US capacity to provide it. Therefore, over the medium to long term, it makes sense for the United States to forward deploy naval and air assets to maintain command of airspace above 15,000 feet across most of the world. In a conflict very close to or on Russian or Chinese territory (e.g., Taiwan Strait), the United States will need to accept that it will work in contested airspace and use its forward-deployed assets to gain any temporary advantage it can.

The difficulties of operating in airspace close to or over the territory of a major power implies that in certain areas where conventional superiority could be useful, the costs of conventional capabilities would outweigh their benefits. I argue that this is the case in Eastern Europe. Against its neighbors, Russia maintains escalation dominance, as illustrated by a quick glance at the size comparisons between the Baltic NATO states and the Russian armed forces: 18,300 Army and 2250 Air Force troops in Lithuania, Latvia, and Estonia combined compared to 280,000 Army and 165,000 Air Force troops in Russia.\(^{866}\) NATO supplements this with around 4,000 troops in its Enhanced Forward Presence in the Baltic States plus Poland, with 857 of these troops coming from the United States.\(^{867}\) Russia maintains a complex integrated air defense system (IADS) focused around its S-400 and S-300V4 surface-to-air missiles (SAM’s) that make it difficult for NATO to gain control of the skies in the opening stages of a conflict.\(^{868}\) This, in


\(^{867}\) The Military Balance 2020, 65.

turn, makes it harder for US and NATO troops to operate on the ground in a conflict or even enter a conflict zone in the Baltic States or elsewhere in Russia’s near abroad.

To match this, the United States would need to implement a commitment of land and air forces far greater than its current 23,750 ground troops in Germany and its two fighter wings at Spangdahlem and Aviano air bases respectively.\textsuperscript{869} Luis Simón argues that matching the Russian conventional threat would require “a more permanent and sizable allied military presence in Central and Eastern Europe.”\textsuperscript{870} Yet, the Russian capability to threaten its immediate neighbors is only growing thanks to investments in long-range strike assets, improved C4ISR, and greater deployability in its armed forces.\textsuperscript{871} Russia could also engage in hybrid warfare that uses insurgent tactics to divide a state on its border and then quickly overrun an area to “restore order” or “liberate” a Russian ethnic minority, similar to what happened in Crimea.\textsuperscript{872} To try to match Russia at all levels of conventional conflict in Eastern Europe would prove costly to the United States. The opportunity costs associated with the increased defense spending to maintain a large conventional force in Eastern Europe would outrun the benefits conferred by this force. In addition, it would send an aggressive signal to Russia, possibly raising the risk of war, and the cost of a great power war would far exceed any momentary security benefit.

Therefore, the United States should focus on having its NATO European allies build one option for conventional escalation. In response to a Russian \textit{fait accompli} attempt, they could create a force of seven brigades, most of them armored, to deny Russia a quick victory in the

\textsuperscript{869} The Military Balance 2020, 58-59.


\textsuperscript{872} Lanoszka, 2016.
As noted earlier, the United States’ NATO allies in Western Europe have ample capability to provide this level of military force. They can serve as a substitute for the military power that the US currently brings to bear in the region. The United States can also have a “managed withdrawal,” providing military assistance to strengthen European forces as it leaves Western Europe over a period of five to ten years.

In the western Pacific, the US faces a growing challenge from China, but the United States still has the capability to provide meaningful options for escalation at a reasonable cost. Investments in ballistic and cruise missiles give China the capability to render US air bases in Japan and South Korea inoperable in the opening weeks of a conflict over Taiwan. China’s anti-ship ballistic missiles (ASBM’s) and growing submarine threat will cause US surface ships to operate farther from the Chinese mainland, decreasing American power projection capability. On top of this, China enjoys a geographic advantage; it has 39 air bases within 800 km of Taiwan, while the United States has 2. In any engagement over Taiwan, “PLA forces will become more capable of establishing temporary local air and naval superiority at the outset of a conflict,” and “the United States will probably not have the resources to prevent all further erosion of the balance of military power over the next decade.” However, the United States would likely still win a protracted conventional war over Taiwan, meaning that the US should not fully abandon it. Rather, it should utilize its advantage in attacking Chinese air bases to make any conflict over Taiwan costly to China. The US can also give military assistance to Taiwan to help it defend

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874 Heginbotham et. al., 2015, xxxi.

875 Ibid, 150-151.
itself in the opening phases of a war and rely on sending forces from the United States to beat back Chinese forces in long war.  

In a flashpoint with a major power far away from China’s territory, the United States military will encounter less challenges to operate. It is within US capacity to bring to bear superior conventional options in the South China Sea at the outset of a conflict. China poses a formidable challenge in the South China Sea. Its Southern Theater Navy maintains 18 attack submarines, two of which are nuclear-powered, 11 destroyers, 19 frigates, 11 corvettes, three amphibious transport docks (LPD), and ten tank landing ships (LST). This is enough for China to have superiority over all of its regional neighbors in Southeast Asia. In addition to these surface ships, the PLA’s forward bases on the islands in the South China Sea give it advanced C4ISR capabilities in the South China Sea, which are critical to the operation of its mainland-based weapons platforms. The involvement of the United States changes this equation. The Seventh Fleet stationed in Yokosuka, Japan has 1 aircraft carrier, 2 guided missile cruisers, 11 guided missile destroyers, 1 amphibious command ship, 1 LPD, 1 amphibious assault ship, 2 dock landing ships, and 4 mine countermeasure ships (MCO). It would also likely use around 8 nuclear-powered attack submarines in a campaign against Chinese surface ships.

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876 This is similar to the “active denial” that Heginbotham and Samuels (2018) advocates for Japan.


880 Heginbotham et. al., 2015.
The US can meet the Chinese threat with only a modest increase in its naval and air capabilities in the western Pacific. One reason is that issue at dispute in the South China Sea is whether it will be open to free navigation for the international community. The United States can underscore the international openness of the South China Sea through daily presence and frequent Freedom-of-Navigation Operations (FONOPS). Such presence and operations are clearly within US capacity to provide and would not require a large increase in defense spending. In addition, the United States currently has an advantage in anti-surface warfare against the PLA Navy (PLAN) due to its superiority in submarine capabilities, and it can gain air superiority in a conflict in the South China Sea. The United States can keep these advantages in the South China Sea with modest increases in its capabilities in East Asia over time. Thus, in the South China Sea, US conventional capabilities can provide a security benefit, and providing the requisite capabilities would not place an undue burden on American society.

In sum, conventional options for escalation provide a benefit in the global commons, Eastern Europe, and against China in the western Pacific. In the global commons and the western Pacific, investing in those conventional options is within US means and will not come with high opportunity costs. This is not the case for Eastern Europe, where Russia has a formidable geographic advantage that will prove costly for the United States to try to match.

What force posture does this analysis lead to? It suggests that the United States should continue to deploy its naval and air assets around the world in order to defend its command over the global commons and to push back against any attempted Chinese revisionism in the South China Sea, Taiwan, or East China Sea. This will require investment in the Navy and Air Force

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882 Heginbotham et. al., 2015, pp. xxiii-xxvi.
that are congruent with current levels of spending.\textsuperscript{883} The United States should reduce its ground troop presence abroad, especially in Europe and the Middle East. In the area where it is potentially helpful, Eastern Europe, the requirements for gaining a conventional advantage are too high to justify the benefits. Instead, the United States should lean on its NATO allies to provide the forces necessary to prevent a quick Russian victory in any conflict in Eastern Europe. This force posture of forward-deployed naval and air assets with little ground presence shares more in common with deep engagement than with a grand strategy of restraint. The implications of my research are that forward-deployed conventional forces provide a security benefit, and these forces are still a net benefit to the United States in certain areas. However, restrainers are right to point to the domestic burdens of defense spending. This is why I propose a grand strategy I call “deep engagement with a light boot print.” Such a grand strategy would keep the opportunity costs of defense spending manageable, allowing for US conventional military power to provide a net benefit to American well-being.

\textbf{Conclusion: Extended Deterrence, Escalation, and the Role of Conventional Power}

Major powers armed with nuclear weapons continue to invest in conventional capabilities and place value on having conventional military superiority in any conflict with their nuclear-armed rivals. This is despite the unprecedented power of nuclear weapons and the effect they have of making great power war, even at the conventional level, highly unlikely. States can utilize the destructive potential of nuclear weapons to ensure their survival and territorial integrity as well as deter aggression against allies or valuable areas of the world. However, brandishing the nuclear sword to achieve a security goal beyond survival or territorial integrity

\textsuperscript{883} Though with a reduced forward ground presence, the part of the USAF budget that goes towards platforms for close air support, such as the A-10 “Warthog,” could be cut, leading to reduced spending on the Air Force if there are no spending increases on other platforms.

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brings up a problem of credibility. How do you make an adversary believe the nuclear threat? How will an adversary respond to your nuclear threats? Would they be willing to engage in a conventional conflict? If so, could that conflict stay conventional? If it could, would it help to have a backup option in case deterrence failed?

The logic of escalation articulated by the theory of the nuclear revolution (TNR) predicts that states can make “threats that leave something to chance,” or a threat to use force which would start a process that may get out of control. This threat takes advantage of the possibility of uncontrolled, automatic warfare that nuclear weapons introduce to deter even limited forms of conventional conflict. I argue that states operate according to an alternative theory of escalation, one which posits that “a threat that leaves something to chance” is variable in its effectiveness depending on the type of objective over which it is made. Over certain objectives, conventional conflict may be possible, and you want to be prepared for that by building conventional options for escalation. These options are made by having “portfolio superiority,” or superior conventional capabilities across a range of potential military missions. By making these preparations and actually using conventional force, you could put your adversary into a “resolve-capability” gap where it must make the choice between escalating past its level of resolve in the crisis or back down. Conventional options for escalation can make it costly for adversaries to challenge a state’s interests, encouraging them to back off from any armed aggression or coercive threat. This logic operates most in the periphery of the threat space where the credibility of nuclear deterrence is lower.

States are uncertain of where the next crisis will erupt, and they calculate that having portfolio superiority in these disputes will give them a bargaining advantage. This incentivizes states to maintain a large, diversified, and forward-deployed military force, or a comprehensive
variety of conventional capabilities. A state with a high variety of conventional capabilities possesses a military force that has several different types of weapons platforms, is qualitatively and quantitatively competitive in the global balance within those platforms, has an ability to rapidly send troops into a conflict area, and stations troops around the globe. This presents a paradox of conventional military power in the nuclear age wherein states invest more in their power projection capabilities to capture a smaller benefit of conventional superiority than it conferred in the pre-nuclear era.

Nevertheless, these peripheral interests are only peripheral in relation to the goals of survival and territorial integrity. These objectives can still be important. This means that states can use their conventional options for escalation to accomplish important security goals, as seen in the Second Taiwan Strait Crisis, the Gulf War, and the Kargil War. Moreover, when defending a core interest but facing an adversary that is defending a peripheral interest, a state may decide to use their conventional options in order to lower the risk of nuclear escalation while maintaining a bargaining advantage. As this final chapter shows, there are still areas where the benefits of superiority in conventional options outweighs the costs of gaining and maintaining that superiority.

This theory can explain two phenomena in the post-Cold War era. First, it can explain why the United States perceives a benefit for aggregate conventional military preponderance. It allows it to put conventional capabilities in place around the world such that it can have an advantage in the number of military missions it can perform in almost any conflict. Under unipolarity, when the US was the unquestioned sole great power, the United States could do this without putting an undue burden on itself. Now, as Chinese and Russian military capabilities grow, unipolarity and America’s conventional advantage are eroding. The US is trying to
maintain its conventional edge in different areas around the world, but it is finding it increasingly
difficult to do this. This gets to the second phenomenon of the “targeted” conventional arms race
between the United States and its major adversaries, China and Russia. Both sides are building
anti-access, area denial (A2/AD) capabilities to thwart US power in certain geographic spaces.
These capabilities are also targeted at lower points along the escalation ladder as well. By
making it difficult to conduct air combat missions or for aircraft carriers to operate, these
capabilities prevent the United States from keeping a conflict low on the escalation ladder. They
are forcing the US to consider longer, more intense conflicts in the defense of objectives in
Eastern Europe and the western Pacific.

The behavior of states with nuclear weapons has been one of the dominant questions in
international security scholarship since World War II. This study has identified and attempted to
explain one aspect of that behavior: the interest in gaining conventional military superiority and
the interest of one state, the United States, in maintaining conventional power preponderance.
More research can be done on the role of conventional weapons in the nuclear age. For instance,
do policymakers derive a psychological benefit from knowing they have conventional options?
Do they deter the onset of crises? In addition, more research can be done on what drives states’
decisions to arm. What part of that motivation is explained by security competition? How much
are bureaucratic or domestic politics responsible for the growth of the military? As scholars
attempt to answer these questions, it is the job of policymakers to recognize where conventional
military power could be helpful and then bring investment in conventional capabilities into
congruence with the benefits they provide.
Appendix: Crisis Summaries, Coding Decisions, and Supplemental Tables

Crisis Summaries

Berlin Crisis, 1961

Note: This entry refers to the entire 1958-1961 episode of the Berlin Crisis, but it focuses on the military balance in 1961, when the second ultimatum for a peace treaty with East Germany was issued and then allowed to lapse.

Issue in dispute: Soviet Premier Nikita Khrushchev issued two ultimatums, one in November 1958 and the other in June 1961, declaring that the forces of the Western powers, US, UK, and France, must exit the city and make West Berlin a “free city” in six months. At the end of that six months, the USSR would sign a peace treaty with East Germany and hand over all duties of determining rights of access to its East German ally. The ultimatum itself raised three issues: the status of West Berlin as a part of West Germany, the position of NATO forces in West Berlin, the official recognition of East Germany as a state, and the ability of East Germany to control emigration flows out of its country. Because compromising over the status of West Berlin would anger the West Germans, the Soviet ultimatum brought into question the fate of West Germany within the NATO alliance. For the United States, the cohesion of NATO was at stake. The Soviet Union was also attempting to use Berlin as a lever to convince the United States to not allow the proliferation of nuclear weapons to West Germany.

Primary goals: For the US, the primary objective was to maintain the status of West Berlin as part of West Germany, keep NATO troops in the city, and continue to not officially recognize East Germany. For the Soviets, the primary goal was to change the status of West Berlin into a free city, obtain official recognition of East Germany, halt the refugee flow out of the GDR, and prevent nuclear proliferation to West Germany.

Secondary goals: For the United States, the secondary objectives were resisting setting the boundaries of East Germany, not moving towards 

[de facto recognition of East Germany, and the having Soviets man the checkpoints into West Berlin/West Germany. For the Soviet Union, the secondary goals were getting agreement on the boundaries of East Germany and obtaining some form of 

[de facto recognition of the GDR.

Variety balance: By 1961, the Soviet Union held a slight advantage in the variety of conventional capabilities in Europe as a whole, and this advantage was greater in the immediate area around Berlin. In terms of number of troops and armor, the Warsaw Pact held a 2:1 quantitative advantage while being similar in quality, but this is offset by NATO’s qualitative advantage in tactical air power, air transport, and naval power. The net result is NATO being slightly weaker in conventional terms than the Warsaw Pact in Europe. However, because West Berlin was

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surrounded by East German territory, the Soviet Union possessed a bigger advantage in the area around the city. This made the US and its allies vulnerable to the Soviet Union’s ultimatums.

Outcome: In both 1959 and late 1961, Khrushchev declared that the deadlines for signing a peace treaty would lapse on the promise of continued negotiations over the status of West Berlin. In both cases, the negotiations left the status quo intact, with Western troops remaining in the city, West Berlin remaining part of West Germany, and no recognition for East Germany’s sovereignty. In August 1961 the Soviets and the East Germans built the Berlin Wall, solving the East German emigration problem in the Soviets’ favor. In addition, the Kennedy administration agreed to not let West Germany acquire nuclear weapons, which was also to the Soviets’ liking. However, this may have occurred as a result of a change in defense policy from the Eisenhower administration and not as a result of Soviet pressure. Overall, the maintenance of the status quo in West Berlin meant that the US achieved more of its primary goals than the Soviet Union, with the latter having attained a “minimum objective.” This is coded as a win for the United States and a loss for the Soviet Union.

Cuban Missile Crisis, 1962

Issue in dispute: In the summer of 1962, Khrushchev ordered the Soviet military to start transporting nuclear warheads, intermediate-range ballistic missiles (IRBM’s), medium-range missiles (MRBM’s), ground troops, air defenses, and naval power to Cuba as part of Operation Anadyr. The United States discovered the surreptitious installation of the nuclear missiles on October 15, 1962. This began a 13-day standoff between the two superpowers over whether or not the missiles and their warheads would stay in Cuba.

For the United States, the missiles in Cuba could do serious harm to its national security, as it would them much more vulnerable to a Soviet nuclear attack. It would also damage its prestige by sending a message that the US could not respond to an affront in its own backyard. For the Soviet Union, the withdrawal of the missiles would hamper its ability to accomplish several foreign policy goals, as it would prevent them from equalizing the nuclear balance and from that even position negotiate deals on Berlin, disarmament, nuclear testing, etc. However, Cuba lies in an area that is well inside the Soviet Union’s geographic periphery. A threat to the missile bases alone or the Castro regime could not turn into a threat against the Soviet Union’s territorial integrity or survival. The Soviet Union has a core interest in keeping its missiles in Cuba, as it was connected to negotiations over matters such as Berlin, nuclear testing, etc. What is not captured in a dichotomous measure is that Cuba lies in the Soviet periphery, perhaps making it less of a core interest than what the United States had at stake. I explore this possibility and its implications in my case studies.

Primary goals: For the United States, the primary objective was to secure the removal of the Soviet missiles in Cuba. For the Soviet Union, the primary goal was to keep their missiles stationed in Cuba.

Secondary goals: For the United States, keeping the Jupiter missiles in Turkey was a secondary objective. For the Soviet Union, the secondary goals were to protect Cuba from an American invasion and to convince the US to remove its Jupiter missiles from Turkey.
Variety balance: The United States held a preponderance of conventional military power in the Caribbean, giving them many options for the use of conventional force. The Second Fleet could overwhelm the four Soviet submarines in the area. Close to 250,000 ground troops could swamp the 42,000 Soviet troops in Cuba. Finally, the US would be able to gain air superiority over the Soviets and their Cuban allies.

Outcome: On the night of October 27 (early morning of October 28), Khrushchev decided to withdraw the missiles and their warheads from Cuba along with almost all Soviet personnel and military equipment. In exchange, the United States made a public pledge to not invade Cuba, and President Kennedy gave a private assurance, through his brother, the Attorney General Robert Kennedy, that the US would remove its Jupiter missiles from Turkey. This balance of concessions favored the United States. They settled the main issue in dispute in their favor, thereby solving a grave problem to its security, in exchange for concessions on secondary issues. Meanwhile, the Soviets achieved their secondary goals in the crisis at the expense of their primary objective. Thus, I code this as a win for the United States and a loss for the Soviet Union.

*Congo Crisis, 1964*

Issue in dispute: The dispute occurred in the midst of the Simba rebellion (Communist insurgency) against the government of Moshe Tshombe (anti-Communist). In November 1964, Simba rebels rounded up the remaining white population in the city of Stanleyville and held them hostage at the Victoria Hotel. This presented the US with two objectives: to free the hostages and help the Congolese government break the communist rebellion. The Soviet Union supported the Simba rebels and wanted to see them take over the government in Leopoldville (Kinshasa). For both superpowers, the issue at stake was peripheral.

Primary goals: For the United States, the main goal was to free the hostages in the Victoria Hotel and to keep the Tshombe government in power. For the Soviet Union, the primary objective was to help the Simba rebels take over the government in Kinshasa.

Secondary goals: this category does not apply to this crisis, as the US and USSR did not link other, more minor issues to this already peripheral dispute.

Military balance: Neither the United States nor the Soviet Union had any ground or air strength in the area around the Democratic Republic of the Congo. The United States, however, had unrivaled naval strength in the Atlantic Ocean thanks to the Second Fleet. It also had a superior air transport capability than the Soviet Union. Overall, this meant that the US had a far greater variety of capabilities than the Soviet Union possessed in the dispute.

Outcome: On November 24, Belgian paratroopers dropped into Stanleyville using American C-130 Hercules aircraft to commence Operation Dragon Rouge. They were able to take control of the airfield, free most of the hostages, and escort them to the airfield for escape. Some hostages were killed by the Simba rebels. The success of this operation ended up further weakening the

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Simba rebellion, which had already lost ground to the government. The Soviet Union became concerned that this would lead to the end of the rebellion, but they were not able to prevent its ultimate defeat in 1965. The US, with the aid of the Belgian military, were able to achieve both of their goals, while the Soviet Union did not accomplish its main objective. I code this as a victory for the US and a defeat for the Soviet Union.

*Sino-Soviet War, 1969*

Issue in dispute: On March 2, 1969, Chinese forces attacked Soviet forces across the Ussuri River for control of Zhenbao Island. Soviet troops counterattacked on March 15 in response in an effort to retake the island. While these clashes were inconclusive, they initiated a months-long conflict over the fate of the proper border between the Soviet Union and China. For the latter, the goal of initiating the crisis was to show Chinese resolve and thereby deter any future Soviet attacks against its territory. The Soviets’ goal in the conflict was to bring Chinese Premier Mao Zedong to the negotiating table and give up using force as a means to resolve the border dispute. The fighting over Zhenbao Island was a lever to open bargaining over larger issues. For the PRC, the issue of future Soviet intervention was a core issue, though the particular issue of showing resolve and increasing its prestige by defeating Soviet forces in battle was peripheral. In the end, the primary threat to China and the USSR was one to a piece of territory that was peripheral to both of them. Whoever controlled Zhenbao Island could not then threaten the survival or territorial integrity of the other side over the long-term. Thus, I code this as a peripheral dispute.

Primary goals: For the Soviet Union, the primary goal was to bring Mao to the negotiating table and to convince the PRC to not use force to redress border issues. For China, the main objective was to deter the Soviet Union from using force to redress border issues.

Secondary goals: For Soviet Union, the secondary goal was to keep control over Zhenbao Island. For PRC, the secondary objective was to wrest control over Zhenbao Island and to increase its prestige/status in the eyes of other communist countries.

Military balance: The Soviet Union held a decisive advantage in terms of conventional variety. While the PRC had more troops and aircraft, Soviet aircraft was of better quality, and the Soviet Union possessed more tanks, more air transport, and far more naval power. The Soviet Union thus had more options for conventional escalation at its disposal than did China.

Outcome: The outcome of the armed confrontations around the Ussuri River were inconclusive. The Chinese resisted Soviet demands to negotiate for months, even as Soviet threats to use nuclear weapons escalated. After American CIA Director Richard Helms told the press in August that the Soviet Union was contemplating a nuclear attack on China, Mao took Soviet nuclear

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threats more seriously. He even put Chinese nuclear forces on alert on October 18. He finally agreed to go to the negotiating table on October 20, 1969. China did not deter any Soviet belligerence, and the Soviet Union was able to get Mao to agree to negotiate over border issues. China did show resolve against Soviet forces and held onto Zhenbao Island for a few months, but it ultimately ended up back in Soviet hands. Nevertheless, the Soviet Union accomplished its main objectives while China did not. I count this as a victory for the Soviets and a defeat for China.

_Cienfuegos Dispute, 1970_

Issue in dispute: During the summer of 1970, the Soviet Union attempted to build a naval base in Cuba at the port of Cienfuegos. This base would be used to support submarines that were travelling in the area. The United States discovered the construction of naval base facilities via U-2 overflights in August. On September 25, in a press leak and a subsequent press conference, the United States demanded that the Soviet Union honor their commitment under the deal to end the Cuban Missile Crisis and cease work on the base at Cienfuegos.\(^{889}\) For the United States, this was a threat to their military power in their own backyard, but the Soviet Union could not use a small submarine base in Cuba as a way to threaten the United States’ territorial integrity or survival. It therefore does not rise to the level of a core interest for the US For the Soviet Union, this was a threat to their power projection capability and alliance relationship with Cuba, which I count as a peripheral issue.

Primary goals: For the United States, the primary goal was to convince the Soviets to not establish a submarine base in Cuba. For the Soviet Union, the primary objective was to set up a submarine base at Cienfuegos.

Secondary goals: Neither side linked other issues to the dispute, so this category does not apply here.

Military balance: Similar to 1962, the United States had clear superiority in conventional military power in the Caribbean. This predominance gave the United States several options for conventional escalation should the Soviets proceed with work on the naval base. The Soviets would have had no recourse to conventional military options to counter American moves. Indeed, they had less conventional strength in the area during this dispute than they had in the Cuban Missile Crisis.

Outcome: On October 6, Soviet Ambassador to the United States and Central Committee member Anatoly Dobrynin told Henry Kissinger that the Soviet Union would not be building a naval base in Cuba. A week later, a report in the Soviet newspaper TASS denied that the USSR had any intention of building a naval base at Cienfuegos.\(^{890}\) The US was able to get the USSR to

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quickly back down on the key issue of whether or not they would construct a submarine base in Cuba. I count this as a victory for the United States and a loss for the Soviet Union.

War of Attrition, 1969-1970

Issue in dispute: The dispute began as a conflict between Israel and Egypt when the latter started shelling Israeli defensive positions in the Sinai known as the Bar-Lev Line. By early 1970, Israeli air raids into Egyptian territory were wearing down the Egyptian military and undermining Gamel Abdel Nasser’s authority. The “nuclear” phase of the crisis began in March 1970 when the Soviet Union deployed an air defense system (along with the troops to operate it) to its Egyptian ally. This pitted two nuclear powers, Israel and the Soviet Union, against each other. The issue at stake here was whether the Egyptian military would stop Israeli air raids into its territory and whether it would be able to destroy the fortifications along the Bar-Lev Line. For Israel, the key objectives were defending the Bar-Lev Line and continuing air raids to degrade Egypt’s military capability. For the Soviet Union, this was a peripheral issue, but it was a core issue for Israel, as the success of the Egyptian military could jeopardize its survival and territorial integrity.

Primary goals: For Israel, the primary goals were to maintain its control over the Sinai, preserve the Bar-Lev Line, and keep the ability to conduct air raids into Egyptian territory. For the Soviet Union, the primary goal was to help Egypt retake the Sinai, prevent Israeli air raids into Egyptian territory, and destroy fortifications along the Bar-Lev line.

Secondary goals: The crisis actors did not link other minor issues to the primary issues listed above. One secondary goal could be the destruction and removal of some fortifications for the Soviet Union. For Israel, a secondary goal could be the maintenance of the territorial status quo frozen for a specific time period.

Military Balance: The balance of variety in this case was about even. In terms of land and air warfare, Israel was superior. It had over 75,000 troops compared to the 17,500 the Soviets had deployed, and it possessed tanks and armored vehicles while the Soviet contingent did not. It also had at least twice as many tactical aircraft as did the Soviet troops. However, the Soviet Union possessed far more transport aircraft for sending more supplies to the area, and it had an extensive naval capability in the form of the Black Sea Fleet that it could deploy to the Eastern Mediterranean. This balances out to slight Israeli superiority or slight Soviet superiority depending on how you code the exact number of tactical fighters.

Outcome: On August 7, 1970, US Secretary of State William Rogers brokered a ceasefire which froze hostilities and kept each side’s positions in place. This left the deeper issue of control over

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892 There is some ambiguity as to how many troops the Soviets deployed to Egypt.
the Sinai unresolved. It represented a compromise for both sides in terms of immediate goals. The Israeli fortifications remained intact, but they could no longer conduct air raids into Egypt. Egypt was safe from Israeli raids, as the Soviet Union desired, but it could no longer shell the Bar-Lev Line, jeopardizing its ability to undermine Israeli control over the Sinai. This ceasefire kept tensions at a low simmer until the Yom Kippur War of 1973. For Israel, this deal froze the status quo but kept open the possibility of Egyptian attacks in the near future, accomplishing a secondary goal but not its primary ones. For the Soviet Union, this deal protected Egypt from Israeli air raids but prevented from attacking Israel and retaking parts of the Sinai in the short term. This partially accomplished one primary goal at the expense of others. Due to the ambiguous nature of the ceasefire’s effects, I code this a draw for both the Soviet Union and Israel.

_Yom Kippur War Confrontation, 1973_

Issue in dispute: The Yom Kippur War was a conflict in October 1973 between Israel on one side and Egypt and Syria on the other. The Soviet Union supported Egypt and its Syrian ally in the conflict while the United States backed Israel. The dispute in this dataset refers to the confrontation the US and the Soviets had in the Mediterranean during the conflict. On October 24, in a bid to save its beleaguered Egyptian ally, the Soviet Union deployed its Black Sea Fleet into the Mediterranean Sea and readied 7 airborne divisions for intervention into the conflict. The United States responded by having the Sixth Fleet confront the Soviet vessels and by readying its nuclear forces to DEFCON 3. The United States also pressured Israel to agree to a ceasefire that would freeze its gains in the Six Day War in 1967. The United States wanted to prevent Soviet intervention in the Middle East and get the two sides to cease hostilities. The Soviet Union wanted to intervene in the conflict while also saving its Egyptian ally from further harm. For both sides, the outcome would not harm survival or territorial integrity in the future, making it a peripheral dispute.

Primary goals: For the United States, the primary goals were to prevent Soviet intervention in the Yom Kippur War and to obtain a ceasefire to end the war. For the Soviet Union, the primary goal was to intervene in the Yom Kippur War to defend Egypt.

Secondary goals: For the Soviet Union, the secondary goal was to obtain a ceasefire that left Egyptian military power intact. The United States did not link other issues or state any secondary goals.

Military Balance: The balance in conventional variety slightly favored the United States, mostly due to its superior naval strength in the Mediterranean. The Americans also had better air transport capabilities for deploying troops to the region if the need arose. The Soviets countered this with a quantitative advantage in tactical air power and land power. The latter, however, was

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not that relevant to the crisis. Overall, this made for a small advantage for the United States in terms of conventional options for escalation.

Outcome: On October 26, 1973, the US and the USSR spearheaded a ceasefire resolution through the UN Security Council, halting the war. This prevented the Soviet Union from intervening in the conflict and kept the Egyptian Third Army, which had been encircled by Israeli forces, from being overrun. It also led to Israel respecting the post-1967 boundaries. The United States managed to prevent Soviet intervention and obtain a ceasefire that ended the war. The Soviet Union was unable to accomplish its main objective of intervening in the crisis, but it was able to protect the Egyptian military from further destruction. The United States accomplished all of its primary goals, while the Soviet Union accomplished a secondary goal at the expense of a primary one. Considering the balance of outcomes, I code this as a victory for the US and a loss for the USSR.

War in Angola, 1975

Issue in dispute: After independence in January 1975, Angola quickly broke down into civil war between three factions, the FNLA, the MPLA, and UNITA. My entry in the dataset refers to the dispute between the Soviet Union and the United States over which faction would win the civil war and control the government of Angola. The United States wanted the FNLA to emerge victorious, but the Soviet Union supported the communist-leaning MPLA. For both countries, the issue in dispute was peripheral.

Primary goals: For the United States, the main goal was to secure victory for the FNLA. For the Soviet Union, the main objective was to have the MPLA gain control over the government in Luanda.

Secondary goals: There are none for this crisis because neither crisis actors linked other minor goals to this already peripheral dispute.

Military balance: At the time the civil war started, the United States had superiority in terms of conventional options in the area around Angola. This is only because the US had a naval presence in the Atlantic where the Soviets did not. Neither of the superpowers had any land or air power deployed to sub-Saharan Africa. However, it is good to note that the Soviet Union sent a lot of military equipment to the MPLA during the civil war and eventually sent a small naval force to the Angolan coast. The United States provided military aid to Zaire that it would then use to support the FNLA.

Outcome: On December 19, 1975, the US Congress declined to give aid to Zaire or the FNLA. NATO declined to give aid as well. Meanwhile, the Soviet Union, along with its Cuban ally, continued to give military assistance to the MPLA. By February 1976, UNITA and the FNLA called a retreat and a strategy of guerilla warfare, cementing the MPLA as the legitimate government of Angola. The United States failed to bring about an FNLA victory, while the Soviet Union successfully aided the MPLA. I count this as a victory for the Soviet Union and a loss for the United States.

Soviet Invasion of Afghanistan, 1979
Issue in dispute: The dispute here refers to the invasion of Afghanistan by Soviet troops in December 1979 and the immediate diplomatic aftermath between the USSR and the US. On December 24, 1979, Soviet troops entered Kabul in order to depose the problematic communist Afghani President Hafizullah Amin and replace him with a more compliant leader, Babrak Karmal. This triggered a crisis for the United States, as they feared that the Soviet Union could turn Afghanistan into another satellite state, creating a springboard for the Soviet military to launch other adventures in the Middle East. The Soviet Union’s primary goal was to keep troops in the country to defeat the Afghan insurgency and stabilize the new Karmal regime. Its secondary interests were to enhance its prestige in South Asia and the Middle East. The United States wanted the Soviet Union to withdraw forces from Afghanistan so that it could not threaten the Persian Gulf or Pakistan. Its secondary priorities were to limit the growth of Soviet influence in the Middle East. For the Soviet Union, the fate of Afghanistan was important, but a threat to its survival or territorial integrity would be hard-pressed to arrive through there. It does not rise to the level of a core interest, making it a peripheral dispute. The presence of Soviet troops was a peripheral interest for the US.

Primary goals: For the United States, the main objective was to convince the Soviet Union to remove its troops from Afghanistan. For the Soviet Union the primary goals were to overthrow the Amin regime and to keep its forces in Afghanistan.

Secondary goals: For the United States, the secondary goal was to brand the Soviet intervention as illegitimate in the eyes of the international community and limit the growth of Soviet power and prestige in the Middle East and South Asia. For the Soviet Union, the secondary goal was to increase its power position and status in the Middle East and South Asia.

Military balance: The Soviet Union had notable superiority in the number of conventional options in the area around Afghanistan. In the Southern Military District in 1979, the Soviet Union had over 240,000 troops, 650 combat aircraft, and 6000 main battle tanks. The United States had none of these in South Asia or the Gulf region at this time. The US offset this with better transport aircraft and a modest naval presence, but that was not nearly enough to compensate for Soviet dominance in land and tactical air power.

Outcome: The Soviet Union was able to install Karmal as the new leader of Afghanistan and establish a large troop presence in the country. However, this did not translate into greater prestige in the region. The United States was unable to convince the Soviet Union to withdraw from Afghanistan despite whipping up intense international diplomatic pressure. The United States did, however, marshal countries in the region to resist the Soviet intervention. Because the Soviet Union accomplished its primary objective in the short term while the United States did

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not, I label the outcome a Soviet victory and an American loss despite the US achieving a secondary objective.\textsuperscript{897}

\textit{Able Archer Incident, 1983}

Issue in dispute: Between November 2 and 11, 1983, NATO conducted a theater-wide exercise designed to simulate a nuclear first strike against the Soviet Union in response to a Soviet conventional invasion of Western Europe. The Soviet Union misperceived this exercise as a smokescreen for preparing for a surprise first strike. The KGB informed its agents in Western Europe to be on high alert for any evidence that a nuclear attack was about to start.\textsuperscript{898} The Soviet Union also put its nuclear forces on high alert on November 8-9 in preparation for an attack. The Soviet Union wanted to prevent a nuclear attack by the US and its NATO allies. The United States wanted to stop the Soviets from launching its nuclear arsenal based on a total misperception. Due to the potentially serious nature of the Soviet miscalculation that could have threatened the survival of the US and the USSR, I code this a core issue at stake for both sides.

Primary goal: For the United States, the primary objective was to prevent the Soviets from launching a nuclear strike based on a misperception. For the Soviet Union, their main goal was to prevent a nuclear first strike from the United States.

Secondary goal: There was little to no diplomacy during this crisis, meaning the crisis actors did not have the opportunity to link other issues to the primary objectives.

Military balance: The conventional balance was one of rough equivalence in the number of conventional options. The US and NATO had increased the number of troops, main battle tanks, and combat aircraft stationed in Western Europe relative to the Warsaw Pact and the Soviet Union. The latter still had superiority in all those categories, however. NATO had superiority in transport aircraft, surface combatants, and was tied in submarines. This translated into a rough stalemate in terms of conventional options, with the Soviets having land superiority but naval inferiority, while a stalemate held in the air. The ambiguity of the conventional balance is reflected in the debate over NATO conventional war strategy at the time.\textsuperscript{899}

Outcome: The war scare fizzled out once the exercise ended on November 11. Because the United States was never actually planning any imminent nuclear strike, there was effectively nothing to dispute over in the end. The only scare came from a Soviet misperception. Neither

\textsuperscript{897} Of course, over the long-term course of the war, the Soviets were unable to crush the insurgency and had to withdraw from Afghanistan in defeat in 1989.


side launched nuclear weapons, fulfilling each country’s main objectives. I therefore label this ultimate outcome a draw for both sides.

**Kashmir Dispute, 1990**

Issue in dispute: In the late 1980’s, Pakistan started giving more military and financial support to Kashmiri rebels fighting for independence from India. This triggered a dispute with India after Indian forces killed 50 pro-independence protestors on January 13. Over the next four months, each side escalated their rhetoric and mobilized troops along the Indo-Pakistani border, particularly along the Line of Control (LOC). India mobilized 200,000 troops while Pakistan mobilized 100,000. India wanted to coerce Pakistan into ceasing its support for the Kashmiri insurgency and prevent a Pakistani attack across the LOC. Pakistan wanted to deter an Indian attack onto Pakistani territory. Kashmir is important for both sides, but control over the province would not give one side the ability to threaten the survival or territorial integrity of the other. I code this as a peripheral interest that does not quite rise to the level of a core interest.

Primary goals: For India and Pakistan, the main issue in dispute was whether the current Line of Control would remain in place.

Secondary goals: For India, the secondary goal was to have Pakistan halt its aid to insurgent groups in Indian Kashmir. For Pakistan, the secondary objective was to be able to continue its support to anti-Indian forces in the Indian-controlled portion of Kashmir.

Military balance: India held just more than a 2:1 advantage in terms of conventional capabilities. India had a little over 1.2 million troops in its military, with Pakistan having slightly less than 600,000. This ratio was similar in combat aircraft (760 to 440), main battle tanks (3150 to 1850), and principal surface combatants (27 to 13). India was dominant in transport air. This translated into more conventional options for escalation for India.

Outcome: On May 20-21, Deputy Director of the CIA Robert Gates and the National Security Council aide for South Asia, Richard Haass, went to India and Pakistan to convince both sides to back down from their mobilization. Their diplomacy worked. Pakistan agreed to shut down their training camps for Kashmiri militants and pull their troops back from the border. India agreed to withdraw their troops as well and invited a US military attaché to visit Kashmir to see that an Indian invasion was not imminent. However, Pakistani support for the insurgency continued in other ways, leaving the larger conflict unresolved. This meant that both sides achieved their primary objective of keeping the territorial status quo intact. Both countries also had mixed success on their secondary objectives. Due to the mutual nature of de-escalation around the LoC and the unresolved nature of the overall dispute regarding Pakistani support for insurgents, I code this outcome as a draw for both sides.

**Third Taiwan Strait Crisis, 1995-1996**

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Issue in dispute: On May 22, 1995, the US issued a personal travel visa for Taiwanese President Lee Teng-hui to visit the country. This angered China, which argued that it threatened Chinese sovereignty and cross-strait relations. China retaliated by holding a series of military exercises and missile tests in and near the Taiwan Strait, the first one occurring in July 1995 and continuing through March 1996. The goal for China was to undermine the authority of the Nationalist and pro-independence Lee Teng-hui in the hopes that he would lose the 1996 presidential election (Taiwan’s first). The United States responded to China’s provocative military actions by sending the USS Nimitz, an aircraft carrier, into the Taiwan Strait in December 1995 and a full carrier strike group through the Strait in March 1996 on the eve of the election. The US goal was to shield Taiwan from Chinese coercion, protect the integrity of its election, and convince China to stop conducting its missile tests. I code this as a core interest for China and a peripheral one for the United States.

Primary goals: For the United States, the main objective was to stop Chinese missile tests in and near the Taiwan Strait and to support an environment in which the Taiwanese elections could go forth. For China, the main goal was to create an atmosphere in which the Taiwanese elections either could not occur or Lee Teng-hui lost.

Secondary goals: No minor issues were linked to this dispute by the crisis actors, making this category not applicable.

Military balance: The United States held a large qualitative advantage over the Chinese military, especially in air and naval power. The US had less troops in the area, with China having over 225,000 in its Eastern and Southern Military Districts and the US having 90,000 in Japan, South Korea, and the Seventh Fleet combined. The US had over 400 combat aircraft to the PLAAF’s 900, but the US planes were much newer and their pilots better trained. Most importantly, the US had over 34 principal surface combatants that it could deploy to the area, while the PLAN had 28, and the American ships were much more advanced. The US also had an advantage in anti-submarine warfare.

Outcome: The Taiwanese election went on smoothly on March 23, 1996, with President Lee Teng-hui winning. Chinese military exercises finished on March 25, as scheduled. This outcome cemented Taiwan as an independent entity apart from Mainland China (though not as an independent country in its own right). It also marked the transition of Taiwan from an autocracy into a democracy. The United States accomplished its primary goals while China did not. I code this outcome as a loss for China and a victory for the United States.

Indian and Pakistani Nuclear Tests, 1998

Issue in dispute: On May 11 and 13, 1998, India conducted five nuclear tests as a way of showing its overt nuclear capacity to its main rival, Pakistan, and the rest of the world. This triggered a crisis for both countries, as pressure mounted on both sides from the international community and each other to not conduct any further nuclear tests. Due to the threat to survival that a mutual overt nuclear capability represented to each side, I code this as a core issue for both India and Pakistan.
Primary goal: The primary goal for India was to use the pressure generated by its nuclear tests to get Pakistan to agree to a no first-use agreement and to prevent them from testing their own nuclear weapons. For Pakistan, the primary objective was to have India not test any further nuclear weapons.

Secondary goal: A secondary objective was to have a temporary pause in nuclear testing for both sides.

Military balance: India held an advantage in the variety of conventional capabilities. While the numbers of troops, tanks, aircraft, and surface combatants were slightly different, they were not systematically different from those in 1990. India still held a roughly 2:1 advantage in overall capabilities, giving it superiority in the variety balance.

Outcome: On May 21, India publicly proposed a mutual no first-use agreement with Pakistan as a way of defusing pressure. This did not work, as Pakistan conducted six underground nuclear tests of its own on May 28 and May 30. On June 11, Pakistan announced that it would start a moratorium on nuclear testing, and it invited other countries, namely India, to formalize this arrangement. Both sides were able to test their nuclear weapons during the crisis and were able to agree to a moratorium on testing to end it. India failed to accomplish its main objective of preventing Pakistani nuclear tests and getting a no first-use agreement. Pakistan failed to stop India from testing its second nuclear weapon on May 13. However, both sides agreed to a testing moratorium that accomplished their secondary goal. I count this as a draw for both countries.

*Kargil War, 1999*

Issue in dispute: In late 1998 or early 1999, Pakistani forces of the Northern Light Infantry (NLI) began infiltrating into Indian territory across the Line of Control (LoC) in the Kargil-Dras sector of Kashmir.  

902 By early May, they had captured a 150-km swath of territory that overlooked the main highway linking Kashmir’s capital, Srinagar, with the rest of India (National Highway 1-A, or NH1-A). Pakistan did this in the hopes of taking some territory in Kashmir away from India and attracting international mediation that would broker a deal that revised the status quo in Kashmir by setting a new LoC.  

903 India wanted to maintain the integrity of the LoC by pushing Pakistani troops back across it. The territory in question, while important, was not a major piece of land to either side that would then shift the balance of power decisively in India or Pakistan’s favor. I therefore regard the stakes involved as peripheral interests for both sides that do not quite reach the level of core interests.

Primary goal: For India, the primary objective was to eject Pakistani forces from the Indian portion of Kashmir. For Pakistan, the primary goal was to revise the territorial status quo in its favor by gaining control over a portion of Indian Kashmir.

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902 Kapur, 2007, 120.

903 Ibid, 122-125.
Secondary goal: For India, a secondary goal could be getting a pledge from Pakistan to not conduct future incursions across the LoC. For Pakistan, a secondary objective could be a smaller revision to the territorial status quo than it was hoping for.

Military balance: Similar to 1990 and 1998, India held about a 2:1 advantage in overall capabilities. India possessed 1.187 million troops to Pakistan’s 587,000, 733 combat aircraft to Pakistan’s 305, 3400 battle tanks to Pakistan’s 2300, 230 transport aircraft to 19 for Pakistan, 26 surface combatants (including one aircraft carrier) to 10 for Pakistan (no aircraft carrier), and 16 submarines to Pakistan’s 9. This gave India greater conventional variety in the Kargil War.

Outcome: India faced hard fighting up steep mountain slopes to dislodge the Pakistani forces, and Indian leaders chose not to cross the LoC during the war in a bid to keep the support of international public opinion. This led to slow progress and the threat of military failure. However, on June 20, Indian forces, with the help of air support, regained the highest point in the Kargil sector, the Tololing Ridge. By early July, Indian forces had taken back many key posts and were inflicting heavy losses on Pakistani forces. Under pressure from the deteriorating military situation, the United States, and the international community, Pakistani President Nawaz Sharif announced in a speech on July 12 that all Pakistani troops would retreat back across on the LoC. They finished doing so on July 26, formally ending the Kargil War. India accomplished its main objective of defending the territorial status quo and expelling Pakistani troops out of Indian Kashmir. Pakistan failed to accomplish its primary goal of taking territory in Indian Kashmir and revising the LoC. I code this outcome as a win for India and a loss for Pakistan.

Indian Parliament Terrorist Attack and Operation Parakram, 2001-02

Issue in dispute: On December 13, 2001, jihadist terrorists attacked the Indian Parliament and killed five Indian security guards before getting killed themselves. In response, India launched Operation Parakram, a mobilization of more than half a million troops along the India-Pakistan border in Kashmir, Punjab, and Rajasthan. The goal of this operation was to compel Pakistan to renounce terrorism, release twenty criminals suspected of being in Pakistan, shut down terrorist training camps in Pakistan, and stop militant infiltration from Pakistan into Kashmir. Pakistan wanted to maintain its strategy of using terrorist proxies to harm India and undermine its control over Kashmir. It also wanted to force new negotiations over the issue of Kashmir. Pakistan responded to Parakram with its own mobilization of troops to the border. The Indian Parliament attacks thus sparked a tense, months-long standoff between two sides over thorny, open-ended issues. The presence of hundreds of thousands of troops on either side of the Indo-Pakistani represented a threat to survival and territorial integrity, constituting a core interest for both sides.

Primary goals: For India, the main objective of the crisis was to coerce Pakistan into halting its support for terrorist groups in India and Kashmir. For Pakistan, the main objective was to continue supporting terrorist groups’ activities in India.

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904 Ibid, 121.
905 Ibid.
Secondary goals: For India, the secondary goals were to secure the release of criminals suspected of hiding in Pakistan and to show resolve against Pakistan in the wake of a terrorist attack. For Pakistan, the secondary objectives were to show resolve against India in the wake of the Indian Army’s mobilization.

Military balance: The conventional balance remained largely unchanged from 1999 to 2001-02, with India holding a 2:1 advantage in overall strength. This translated into superiority in conventional options for India.

Outcome: In January 2002, Pakistan’s President Pervez Musharraf publicly declared that he would ban the jihadist groups responsible for the Parliament attack, Lashkar-e-Taiba and Jaish-e-Mohammad. The troops of both sides remained mobilized, however, and the other issues India identified remained unresolved. On May 14, 2002, another intense phase of the crisis began as jihadist terrorists from Pakistan launched an attack on Indian troops at Kaluchak in Jammu, killing 32 people. The mounting tensions prompted US involvement. In early June, American Deputy Secretary of State Richard Armitage secured a promise from Musharraf to not allow militants across the border in Kashmir. In October, both sides started demobilizing and withdrawing from the border. The underlying situation in Kashmir remained unresolved, and despite Pakistan’s pledge, it appears that they did not act to stop insurgents from crossing the LoC. India received a pledge from Pakistan to stop supporting terrorist groups and allowing militants to cross the LoC in Kashmir, but this was only a partial fix to the problem of Pakistani support for terrorist activity in India. Pakistan had to renounce its ties to terrorist groups publicly, but it appears that it maintained some ties to militant groups after the crisis. This is also an ambiguous and partial achievement of its primary objectives. Due to the unresolved nature of the issues in dispute, I label the outcome a draw for both India and Pakistan.

Russian-Georgian War, 2008

Issue in dispute: Russia and Georgia fought a military conflict over the fate of South Ossetia. That province, along with Abkhazia and Adzharia, are internationally recognized as belonging to Georgia yet want to break away and become a part of Russia. This triggered a conflict between Georgia and the three provinces, with the rebels in South Ossetia and Abkhazia being backed by Russia. On August 7, 2008, Georgian forces attacked South Ossetian separatist forces and Russian peacekeepers in an effort to take control over the breakaway province and reintegrate it into Georgia. A day later, Russian forces attacked Georgian troops in South Ossetia. The aim of Russia in this conflict was to establish further control over South Ossetia and Abkhazia and convince the United States and Europe that Georgia could not become integrated into NATO or the EU. The United States did not directly contest Russia, but it sought to convince Russia to restore the status-quo ante before the war with regards to the breakaway provinces. For Russia, the strength and foreign policy of a country directly on its border was important, but control over the breakaway provinces could not mutate into a threat to territorial integrity or survival.

meaning it does not quite rise to the level of a core interest. For the United States, this was a peripheral interest.

Primary goals: For the United States, the primary goal was to have Russian troops leave Georgia and restore the status quo in the breakaway provinces. For Russia, the primary goal was to gain further control over the breakaway provinces, effectively expanding Russian territory. It also aimed to show Georgia and other countries that they had little to gain from integration with NATO and other Western organizations.

Secondary goals: For the United States, a secondary goal could be continuing international recognition that Russia’s control over the breakaway provinces is illegitimate. For Russia, a secondary objective could be obtaining minor revisions to the status quo in the breakaway provinces.

Military balance: In the Caucasus and Southeast Europe, Russia held a conventional advantage. On land, it had troops and tanks stationed near Georgia while the United States had none. It was superior in the air as well, with more combat aircraft than the US had in the form of the fighter squadrons in the Sixth Fleet. The naval balance was roughly even with the US with the Americans having more submarines but less surface combatants. The United States’ surface combatants were of better quality, however. The United States had superiority in air transport. Overall, Russia was the side with better conventional options.

Outcome: Over the course of five days, Russian forces handed the Georgian military a string of defeats and occupied major towns in South Ossetia. Russia and Georgia signed a ceasefire on August 15, ending the war. Russian forces remain stationed in the two provinces, and they successfully repulsed Western efforts at further integrating Georgia into the Western orbit. The international community did not recognize Russia’s territorial control over the breakaway provinces, treating Russian authority there as illegitimate. Russia therefore accomplished its main goal at the expense of a secondary one. The United States accomplished a secondary goal but did not accomplish its primary objective. I label this as a victory for Russia and a loss for the United States.

**Scarborough Shoal, 2012**

Issue in dispute: The Philippines and China dispute sovereignty over the Scarborough Shoal, an island in the South China Sea. On April 10, 2012, this disagreement boiled over into a militarized dispute when the Philippine Navy starting boarding Chinese fishing vessels and citing them for illegal fishing. In response, China asserted that it had sovereignty over the area and sent two maritime surveillance ships to protect the fishing vessels from arrest by Philippine forces. China’s goal was to assert control over the Scarborough Shoal and eventually bring it *de facto* into its jurisdiction. The goal of the United States was to defend the Philippines’ right to access

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907 Ibid.

908 ICB Crisis Summaries.
the shoal and buttress its claim to sovereignty over the island. Control over the shoal could not lead to a territorial or existential threat later, making it a peripheral interest for both sides.

Primary goal: For the United States, the main objective in the crisis was to prevent China from extending its authority further into the South China Sea and to preserve Filipino access to fishing around the shoal. For China, the main objective was to take control of the Scarborough Shoal and to assert greater control over the South China Sea as a whole.

Secondary goal: For the United States, the secondary goal was to keep the South China Sea an open waterway for navigation, delegitimizing China’s claims of sovereignty in the process. For China, a secondary goal was to deter US intervention into South China Sea disputes and to gain legitimacy for its authority in the South China Sea.

Military Balance: The United States had mild superiority in conventional variety in the area. China had more troops stationed nearby, but the United States had a similar number of combat aircraft that could reach the area. China held a quantitative advantage in surface combatants, but the US made up for this with a qualitative naval advantage. The US also had superiority transport aircraft. Overall, this gave the US slight superiority.

Outcome: In mid-May, a US submarine stopped in Subic Bay to underscore US-Philippine military ties. On June 15, the coming of monsoon season spurred both countries to agree to a US-backed agreement to pull their naval forces and fishing boats back from Scarborough Shoal. This left the main issue of sovereignty unresolved. However, in July, China placed a rope across the shoal’s water, effectively blocking Philippine access to it. By 2014, China was placing military vessels to reinforce the denial of access to outside powers. Though China has no internationally recognized claim to sovereignty of the island, it has been able to establish de facto control over it. This achieved China’s primary goals of taking control of the shoal and extending authority further into the South China Sea. China could not deter intervention by the United States into South China Sea disputes or gain legitimacy for its claims of authority, constituting a failure to achieve its secondary goals. The United States kept the South China Sea an open waterway and had the international community brand China’s claims to the South China Sea as illegitimate, constituting successful accomplishment of its secondary goals. However, it failed to achieve its primary goal of preventing Chinese authority over the Shoal. China accomplished a primary goal at the expense of a secondary goal, while the United States accomplished its secondary goals at the expense of its primary goal. I count this as a win for China and a loss for the United States.

North Korean Nuclear Test, 2013

Issue in dispute: This refers to a crisis between February and August 2013 triggered by a North Korean nuclear test on February 12 (which followed a long-range rocket test in December

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The United States moved to impose a fresh round of economic sanctions on North Korea via the UN. The goal of these sanctions was to bring North Korea to the negotiating table in the short-term and pressure it to give up its nuclear program in the long-term. North Korea sought to avoid negotiations over its nuclear program, maintain its nuclear program, and gain international recognition as a nuclear power. For the United States, this was a peripheral issue, as it pertained to a country on another continent that was mainly threatening its influence in the international system, though with a potential territorial threat to South Korea. For North Korea, this represented a core issue, as it related to a nuclear weapons program that could deter a conventional invasion from a much stronger power.

Primary goals: For the United States, the primary objective was to get North Korea to the bargaining table and pressure it to give up its nuclear arsenal. For North Korea, the objective was to avoid negotiations and gain acceptance as a nuclear power.

Secondary goals: For the United States, a secondary goal could be the halting of nuclear and missile tests by North Korea. For the DPRK, secondary objectives could be the continuation of missile and nuclear tests and the lifting of some economic sanctions.

Military balance: The US held an advantage in conventional variety if one counts South Korean forces as being on the American side in the crisis. North Korea held a quantitative advantage in troops, tanks, and submarines, while the US and South Korea held a quantitative advantage in transport aircraft, tactical combat aircraft, and surface combatants. The US and South Korea also held a qualitative advantage in all categories due to the obsolete technology in many North Korean weapons platforms. This gave the US and South Korea more conventional options for escalation in the crisis.

Outcome: North Korea defied pressure from the sanctions in the short-term, escalating the conflict by verbally revoking the 1953 Armistice to end the Korean War. The US and South Korea flew bombers over the Korean Peninsula two weeks later in a show of force against North Korea. North Korea withdrew its workers from the Kaesong Industrial Complex (KIC), its joint venture with South Korea and advised countries to evacuate their embassies in Pyongyang in April. On June 6, China pushed North Korea into negotiations with South Korea, and on August 14, the two sides agreed to reopen the KIC and ratchet down the recent hostility. Economic sanctions eventually brought North Korea to the negotiating table and helped ease tensions on the peninsula, but it failed to bring about any concessions from North Korea on its nuclear program. The sanctions remained in place and the larger issue of nuclear proliferation remained unresolved. Both the United States and North Korea partially accomplished their main objectives, with North Korea agreeing to talks but not taking steps to give up its nuclear arsenal. I code this outcome as a draw for both sides.

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911 ICB Crisis Summaries.

Crimea-Donbas War, 2014

Issue in dispute: This refers to the war between Russia and Ukraine over Crimea and the Donbas region that was triggered by the success of the Euromaidan protests in ousting pro-Russian president Viktor Yanukovych on February 22, 2014. Russia wanted to protect the Russian-speaking majorities in these two regions. It also feared that Ukraine would forge greater ties to the European Union, NATO, and the United States in the wake of the protests, moving away from Russia’s orbit. Annexing Crimea and the Donbas regions would accomplish both of those long-term goals. The United States sought to prevent Russia from adding the two regions and wanted to convince Russia to withdraw its military forces from Ukraine and stop supporting pro-Russian separatists in the Donbas after Crimea was formally annexed. For Russia, the political status of Ukraine, a large former Soviet republic right on its border, was important. However, the continued possession of Crimea and the Donbas by Ukraine would be unlikely to harm its territorial integrity or survival, meaning it does not quite rise to the level of a core interest for Russia. For the United States, this was peripheral, as it related to the condition of a non-ally.

Primary goals: For the United States, the main objective was to prevent the annexation of Crimea and the Donbas, help the Ukrainian military expel Russian soldiers from Ukraine, and quell Russian separatist movements. For Russia, the main goal was to annex territory in Crimea and the Donbas.

Secondary goals: For the United States, the secondary goal was to show Ukraine and other Eastern European countries that they could on the US and the West for assistance. For Russia, the secondary objective was to undermine the value of partnering with US and its allies, which would weaken NATO and the EU’s ability to expand.

Military balance: Russia held an advantage in the amount of conventional variety in the area immediately around Ukraine, though NATO and the US had an advantage at the all-European level. I use the former as a guide to the military balance. This gives Russia an advantage in number of troops, tanks, and combat aircraft. The naval balance is roughly even, with the US having a qualitative advantage. The balance in transport aircraft is also even, with the US having a qualitative edge as well. This translates overall to Russian superiority, though to a degree that is not overwhelming. Even still, Russia had more options for conventional escalation in the crisis.

Outcome: Russia moved in special operations forces without identifying marks, known as “little green men,” into Crimea and the Donbas to support pro-Russian separatist forces. It successfully annexed Crimea in March 2014. Fighting in the Donbas ran into a stalemate by early 2015. In February 2015, the Russia and Ukraine, with mediation by France and Germany, signed the Minsk II Agreement, agreeing to a ceasefire, withdrawal of heavy weaponry, and full Ukrainian control in the Donbas. However, it is not clear that this accord is being followed, as pro-

---


Russian forces, supported by Russia, continue to fight in the Donbas. Russia accomplished a main objective in taking Crimea and a secondary one in preventing Ukraine from integrating more fully with the West. The United States partially achieved a primary outcome in that the Donbas is not yet in firm Russian control. It failed to achieve a secondary goal. Overall, I label this outcome a win for Russia, as it was able to annex Crimea and creating a simmering conflict in the Donbas. This has prevented Ukraine from integrating more fully with the West. This is a loss for the United States, since it has been unable to change Russian policy with regards to support for pro-Russian separatists.

*Turkey-Russia Jet Incident, 2015*

Issue in dispute: On November 24, 2015, Turkish F-16 jets shot down a Russian Su-24 near the Turkey-Syria border that Turkey said violated its airspace. This incident was part of a larger dispute between Russia and Turkey over whether Russia would continue attacking Syrian Turkmen rebels fighting against Syrian President Bashar al-Assad that were stationed near the Turkey-Syria border.\(^915\) The entry here refers to a dispute between United States and Russia over whether the latter would violate Turkish airspace in the future.\(^916\) For the United States, this was a peripheral issue. For Russia, this was closer to a peripheral issue. It involved a dispute with a state in its regional neighborhood and the freedom of action for its military forces in an intervention in Syria, but a threat to its survival or territorial integrity could not arise through control over airspace in Syria and Turkey.

Primary goals: For the United States, the primary goal was to prevent further incursions by Russian into Turkey’s airspace near the Syrian border. For Russia, the primary goal was to prevent the use of force by Turkey against its forces acting in Syria.

Secondary goal: Neither side linked other issues to this dispute, making this category not applicable.

Military balance: The conventional balance was about even between NATO and Russian forces in the area. Russia had a slight superiority in troops, but it had a marked superiority in combat aircraft and tanks. NATO offset this with a large naval advantage. Both sides were close to even in transport aircraft. This balanced out to a rough draw in conventional variety, though the US and NATO are counted as “superior” in the indicator balance due to having an advantage of 0.52 to 0.48.

Outcome: Russia violated Turkish airspace only once until June 2016, when Russia and Turkey agreed to improve bilateral ties. By the metrics of dispute, this is a success for US and loss for Russia, as the Americans achieved their short-term goal. However, in the long-term, the thaw in Turkish-Russian relations that happened as a resolution to this crisis ended up harming US foreign policy and being a success for Russia. The United States achieved its primary goal, but


closer Russian-Turkish ties meant that Russia also accomplished its primary objective of preventing conflict between its forces and Turkey in Syria. Due to the mutual accomplishment of primary goals, I label this outcome a draw for both sides.

**Kerch Strait Bridge Incident, 2018**

Issue in dispute: On November 25, 2018, three Ukrainian vessels, a tugboat and two gunboats, were rammed and fired upon by Russian air and naval forces. The Ukrainian vessels were passing through the Kerch Strait, which separates Russia from Crimea, in order to reinforce a Ukrainian naval base on the Sea of Azov at Berdyansk.\(^{917}\) This triggered a dispute over whether Ukrainian naval vessels could travel into the Sea of Azov from the Black Sea and vice versa, who would control the Kerch Strait, and whether the detained ships and sailors would be turned over to Ukraine. The United States wanted freedom of travel for Ukrainian ships, less Russian control over the Kerch Strait, and the return of the sailors and ships. Russia wanted the opposite. This was a peripheral issue for the US and Russia, as keeping the Kerch Strait as an open waterway would not undermine Russia’s territorial integrity or survival.

Primary goals: For the United States, the primary objective was to keep Ukrainian travel access throughout the Sea of Azov and the Black Sea and prevent Russia from controlling the Kerch Strait. For Russia, the primary objective was to obtain control over the Kerch Strait and prevent Ukrainian naval vessels from traveling between the Sea of Azov and the Black Sea.

Secondary goals: For the United States, the secondary goal was to secure the release of Ukrainian sailors from Russian detention.

Military balance: Russia held a slight conventional advantage during the dispute. It had more troops, combat aircraft, and tanks in the area. However, it had a disadvantage in naval strength, which was important due to the nature of this dispute. Overall, this translated into a small advantage in the variety of conventional capabilities.

Outcome: Russia returned the sailors to Ukraine in September 2019 and the detained vessels back to it in November.\(^{918}\) Ukrainian ships can travel to Berdyansk. However, Russia still controls access through the Kerch Strait, increasing its influence in the Black Sea and its influence over Ukraine. This represents the accomplishment of a primary goal for Russia in the dispute, while the United States failed to accomplish its main objective of preventing further Russian control in the Black Sea and Sea of Azov. This is why I label it a Russian victory and a US loss.

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Appendix Tables

Table A1: Regression Results with Indicator Measure of Local Conventional Superiority

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*Note:* *p<0.1; **p<0.05; ***p<0.01
Table A2: Land Power as Sole Components of Conventional Power

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Note: *p<0.1; **p<0.05; ***p<0.01
### Table A3: Air Power as Sole Component of Conventional Power

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**N:** 42

*Note:* *p<0.1; **p<0.05; ***p<0.01
Table A4: Sea Power as Sole Component of Conventional Power

| Table A4: Sea-Based Measure of Local Military Power |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Nuclear Dispute Outcome (1) | Nuclear Dispute Outcome (2) | Nuclear Dispute Outcome (3) | Nuclear Dispute Outcome (4) | Nuclear Dispute Outcome (5) |
| Sea-Based Power | 1.076***          | 1.693***          | 0.112            | 0.103            | 0.079            | 0.056            |
|                 | (0.176)           | (0.344)           | (0.321)          | (0.540)          | (0.342)          | (0.676)          |
| Periphery       | 0.087             | 0.138             | 0.105            | (0.417)          | (0.262)          | (0.415)          |
|                 | (0.46)            | (0.44)            | (0.44)           |                  |                  |                  |
| Interaction     | −0.808*           | 0.001             | 0.019            |                  |                  |                  |
|                 | (0.446)           | (0.428)           | (0.446)          |                  |                  |                  |
| Nuclear Ratio   | 3.778***          | 3.780***          | 3.480***         | 3.518***         |                  |                  |
|                 | (0.457)           | (0.860)           | (0.605)          | (0.813)          |                  |                  |
| Violence        | 0.022             | −0.004            |                  |                  |                  |                  |
|                 | (0.200)           | (0.253)           |                  |                  |                  |                  |
| Regime          | 0.043**           | 0.041**           |                  |                  |                  |                  |
|                 | (0.016)           | (0.019)           |                  |                  |                  |                  |
| 2ndstrike       | 0.209             | 0.244             |                  |                  |                  |                  |
|                 | (0.386)           | (0.470)           |                  |                  |                  |                  |
| N               | 42               | 42               | 42              | 42              | 42              | 42              |

Note: *p<0.1; **p<0.05; ***p<0.01

F-Test Results

Linear hypothesis test

Hypothesis:
Land Power = 0
Air Power = 0
Sea Power = 0

Model 1: restricted model
Model 2: Outcome ~ Land Power + Air Power + Sea Power

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364
### Table A5: Results with GDP Substituting for Local Conventional Balance

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**Note:**

* \(p<0.1\); ** \(p<0.05\); *** \(p<0.01\)

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365
Table A6: GDP per capita as Substitute for Local Conventional Balance

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<td>-0.00002**</td>
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*Note:* *p<0.1; **p<0.05; ***p<0.01
Table A7: CINC Superiority as Substitute for Local Conventional Balance

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<td>(0.773)</td>
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<td>Violence</td>
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<td>(0.196)</td>
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<td>Regime</td>
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N       42  42  42  42  42  42

Note: *p<0.1; **p<0.05; ***p<0.01
Table A8: Results with Softer Technological Superiority Adjustment

Table A8: Using Alternative Tech Superiority Coding

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<td>Nuclear Ratio</td>
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<td>1.115***</td>
<td>1.107***</td>
<td>0.961***</td>
<td>0.987***</td>
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</tbody>
</table>

Note: *p<0.1; **p<0.05; ***p<0.01
### Table A9: Berlin Crisis Re-Coded as Soviet Victory

#### Table A9: Results with Berlin Crisis Re-Coded

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<td>Interaction</td>
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<td>(0.480)</td>
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<tr>
<td>2ndstrike</td>
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</table>

| N                   | 42         | 42         | 42         | 42         | 42         | 42         |

*Note:* *p<0.1; **p<0.05; ***p<0.01
### Table A10: Results with Clustered Robust Standard Errors at Country Level

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<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
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<td><strong>Local Balance</strong></td>
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<td>1.615***</td>
<td>1.001***</td>
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<td>(0.153)</td>
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<td><strong>Periphery</strong></td>
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<td>(0.154)</td>
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<tr>
<td><strong>Regime</strong></td>
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<td>0.062***</td>
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</tr>
<tr>
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<td>(0.005)</td>
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</tbody>
</table>

*Note:* *p<0.1; **p<0.05; ***p<0.01*
Qualitative/Technological Superiority Coding

Coding Rules

- Technological sophistication – Any time a country’s weapons systems in a given platform were, on average, 10 years or more newer than its adversary’s, I labelled this a technological advantage that warranted a coding of qualitative superiority for the country.

- Extra capability possession – Any time a country had a capability in a certain domain that its adversary did not, I code this as qualitative superiority for that country. The categories that were amenable to this were tanker/transport aircraft, surface combatants, and submarines. The extra capabilities are described below for each category:
  - Troops – none (qualitative/technological superiority not coded for this category)
  - Tanks – none (only technological basis used for qualitative superiority coding)
  - Tactical combat aircraft – none (only technological basis used for qualitative superiority coding)
  - Tanker/transport aircraft – the possession of heavy cargo aircraft by one side and not by another OR the possession of much more heavy cargo aircraft as a percentage of its transport force compared to the adversary; the possession of tanker aircraft for in-flight refueling when the adversary did not possess that
  - Surface combatants – the possession of an aircraft carrier while its adversary did not possess one in the area of a dispute
  - Submarines – the possession of nuclear-powered submarines while its adversary did not possess any OR the possession of a many more nuclear submarines as a percentage of the undersea force than the adversary; the possession of an “acoustic advantage” as noted by maritime historians

- Finally, all data on equipment comes from the *The Military Balance*.

Berlin Crisis, 1961

- Tactical air quality – The United States primarily deployed fighters from the “Century Series” of planes to Europe, in particular the F-100 Super Sabre and the F-105 Thunderchief, which came online in 1954 and 1958, respectively. The French used the F-84 and F-86, which came into service in the late 1940’s and the Mirage III, which came into service in 1961. The UK primarily used the Javelin fighter, which came into service in the early 1950’s, and West Germany used the F-84 and F-86. The majority of the Soviet tactical fighter force was made up of the MiG-17 fighter, which first came into service in 1950. The USSR also deployed the MiG-19 and MiG-21 fighters as well as the all-weather Yak-25 aircraft. The Century Series planes had greater range, speed, and payload than the MiG-17, -19, and -21, but not the other planes in NATO’s arsenal. Plus, US military leaders at the time did not see a decisive qualitative advantage in the air.919 This is why I put the qualitative balance as *even*, with 0.5 for both sides.

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919 “National Security Action Memorandum 109.” October 23, 1961. This document describes opposing strengths as “roughly comparable” in the air between NATO and Warsaw Pact forces.
• Tank quality – Most US units in Europe were equipped with the M48 tank, introduced in 1952. West German forces also used the M48 tanks. The British deployed the Centurion and Conqueror tanks, introduced in 1945 and 1955 respectively. French forces used the AMX-13 tank, introduced in 1952. The Soviets used the T54/55 tanks and T10, with the former being introduced in 1945 but having design modifications introduced throughout the 1950’s and the latter introduced in 1953. Neither of these tanks was decisively better or newer than the others, making the tank quality even, or 0.5 for both sides.

• Tanker/transport air quality – The United States used the KC-135 tanker for in-flight refueling and the C-124 Globemaster II and C-130 Hercules for military transport (both heavy cargo craft). The Soviets primarily used light and medium transports in the form of the CAB, COACH, CRATE, CAMP, and CUB aircraft (Li-2, Il-12, Il-14, An-8, An-12). The BEAR heavy bomber could be refitted into tankers. The greater range, carrying capacity, and in-flight refueling capability of the US transport force makes it qualitatively superior to the Soviet force. The US receives a value of 1 and the Soviets 0 here.

• Surface combatant quality – The US fielded a majority of destroyers, frigates, and cruisers built during WWII in the Atlantic fleet, but it included 17 newer guided-missile destroyers, the nuclear-powered Enterprise attack carrier, and attack carriers from the post-war Forrestal class. The Soviet navy also fielded some modern guided-missile destroyers, but it had no aircraft carriers in the European theater. This gives the US a qualitative edge over the Soviet force. I code it as 1 for the US and 0 for the Soviets here.

• Submarine quality – The US deployed 21 modern nuclear submarines in its naval forces overall, but the Soviets had introduced the H-class long-range nuclear submarine by this time. I code this as qualitative parity, with 0.5 for both sides.

Cuban Missile Crisis, 1962

• Tactical air quality – The United States fielded the Century Series fighter planes in its tactical air forces, while the Soviet Union deployed MiG-21’s and Il-28 light bombers. While the MiG-21 was a modern fighter plane, the Il-28’s were obsolete by 1962, and they made up half of the fighter contingent. I thus code the United States as being superior in this area, with a value of 1 for it and a value of 0 for the USSR.

• Tank quality – The Soviets deployed a mechanized infantry division to Cuba, consisting of four regiments, each with its own tank battalion. These battalions likely would have been equipped with T54/55 tanks. The United States STRAC forces were equipped with the M48 tanks and some M60’s. I count this as rough equality in the quality of the tank forces. This is coded 0.5 for both sides.

• Tanker/transport air quality – Similar to the Berlin Crisis entry, the United States had several KC-135 tanker aircraft and most of its transport aircraft were of the “heavy cargo” variety and could travel over long range. The Soviets had heavy bombers that could be refitted to serve as tankers and its transport fleet consisted of mostly light and medium aircraft that could not travel as far. I code this as 1 for the US and 0 for the USSR.
- Surface combatant quality – The Soviet Union did not deploy surface combatants to Cuba in 1962, which automatically gives them a 0 in the quality category and the US a 1.
- Submarine quality – The Soviets deployed 4 diesel-powered submarines of the Foxtrot class. These submarines needed to surface in order to recharge their batteries and receive radio communications from Moscow. They were also noisier than the American submarines in the Atlantic and Caribbean, giving the US an “acoustic advantage.” In addition, the US had some quieter nuclear-powered subs in the Atlantic that could be used in the crisis. For this reason, I code submarine quality as 0 for the Soviet Union and 1 for the United States.

Congo Crisis, 1964

- Tactical air quality – Neither the US nor the USSR had tactical air forces in the Democratic Republic of the Congo (DRC) or the area around it. I code this technological superiority variable as 0.5 for both by default.
- Tank quality – Similar to tactical air quality, neither side possessed tanks in the DRC or the area near it. I code this as 0.5 for both.
- Tanker/transport air quality – The United States possessed dedicated tanker aircraft for in-flight refueling and most of its transport aircraft were of the “heavy” variety. At this time, the Soviet Union still did not have a dedicated tanker aircraft, giving it limited in-flight refueling capability and most of its transport aircraft were “light” or “medium,” constraining its power projection capability. I code this as a qualitative advantage, or 1, for the US and 0 for the USSR.
- Surface combatant quality – I count the US Second Fleet as potentially being in the area near Congo and able to get to it quickly during the Congo Crisis. The Soviets had no such naval force near the Congo. By default, this is qualitative superiority for the US and inferiority for the Soviets.
- Submarine quality – There is no evidence that the Soviets had deployed their nuclear-powered submarines near the African west coast during the crisis. Plus, US submarines had an “acoustic advantage” over their Soviet counterparts during this time. I count this enough to give the US a qualitative advantage in the undersea balance in the crisis.

Sino-Soviet War, 1969

- Tactical air quality – The Soviet Union’s tactical air forces consisted primarily of MiG-17’s, MiG-19’s, and MiG-21’s, the latter of which being its primary high-performance aircraft. It had some high-performing Su-7’s for ground attack and the Yak-28 light bomber. China’s tactical air forces mostly consisted of older model MiG-15 and -17’s with a few MiG-19’s and -21’s. The Soviet Union’s planes, while not state of the art, were on average more technologically sophisticated and recently made than Chinese aircraft. I thus code the USSR as being qualitatively superior in terms of tactical air quality and China as inferior.
- Tank quality – The Soviet Red Army primarily used the T-62 and T-54/55 medium tanks and the T-10 heavy tank. The Chinese used the JS-2 heavy tank and the T-34 and T-54
medium tank. By this time, the JS-2 and T-34 tanks were obsolete tanks made in WWII. The Soviet Army’s tanks were, on average, more recently made and technologically advanced than the Chinese Army’s tanks. I code this as qualitative superiority for the Soviet Union in the armor balance and qualitative inferiority for China.

- Transport air quality – The USSR’s air transport fleet included around 1500 aircraft, mostly of the short- and medium-range variety. The primary aircraft were the twin-engine Il-14 and An-24 and the four-engine An-12 and Il-18. They also had some heavy bomber aircraft (Bear and Bison) that could serve as a tanker with in-flight refueling capability. The Chinese air transport fleet included An-2, II-14, and II-18 craft. On average, the Soviet fleet was newer and could carry more troops and cargo. I therefore code qualitative superiority for the Soviet Union in this area.

- Surface combatant quality – The Soviet surface fleet consisted mostly of Sverdlov-class cruisers, Krupny-class destroyers, and Kotlin-class destroyers. The former were made primarily in the early 1950’s, the latter in the mid-1950’s, and the middle two in the early 1960’s. It is not clear what type of destroyers and destroyer escorts the PLAN possessed at this time. For this reason, I do not code qualitative superiority for the Soviet Union despite it being likely. I put 0.5 for both in this category.

- Submarine quality – The Soviet Union had 320 conventional and 60 nuclear-powered submarines in 1969, with the latter being evenly split between the Arctic and Far East fleets. This means that Soviets had 30 or so nuclear-powered submarines in the Far East during the Sino-Soviet War. The PLAN possessed 33 submarines, none of them nuclear-powered. For this reason, I code the Soviets as being qualitatively superior in the undersea balance and the Chinese qualitatively inferior.

Cienfuegos, 1970

- Tactical air quality – The United States was the only side in this dispute that had tactical aircraft in the area, giving it qualitative superiority by default.

- Tank quality – The United States was the only state in the dispute with tanks in the area of the dispute. The Soviet Union had no armored divisions stationed in the Caribbean. This gives the US qualitative superiority by default.

- Tanker/transport air quality – The United States possessed 500 KC-135 tankers for in-flight refueling along with 315 heavy, long-range transport aircraft in the form of the C-133 and C-141. The Soviet Union had 50 heavy bombers that could serve as tanker aircraft. It also had many light and medium transport aircraft in the form of the twin-engined Il-14 and An-24 and the four-engined An-12 and Il-18. The US had a much greater ability for in-flight refueling and contained more heavy, long-range transport aircraft as a percentage of its transport force. I code this as qualitative superiority for the United States and inferiority for the Soviet Union.

- Surface combatant quality – The Soviet Union did not have any surface combatants in the Western Atlantic during the dispute while the United States did. This gives the US qualitative superiority by default.
Submarine quality – It is unclear if the Soviet Union had submarines near Cuba during the dispute. It is possible, but I have not found evidence of it. Regardless, the United States still held an acoustic advantage over Soviet submarines in this era. Both the probable lack of submarines in the area and the acoustic advantage gives the United States qualitative superiority in the submarine balance in this dispute.

**War of Attrition, 1970**

- Tactical air quality – The Soviet Union deployed its MiG-21 tactical fighter plane to help Egypt shore up its air defense. This was one of the high-performing aircraft in the Soviet air force. The A-4E Skyhawk and Mirage IIIC made up the majority of Israel’s tactical air force. Israel possessed a number of F-4E Phantoms, Mystère, and Ouragan aircraft. Neither the Israeli nor the Soviet planes were significantly newer, and none were clearly superior in quality. I code this as approximate in quality, or 0.5 for both sides.
- Tank quality – Soviet Union did not deploy tanks to the Middle East during the War of Attrition, giving Israel qualitative superiority by default.
- Tanker/transport air quality – The USSR possessed mostly light and medium transports in the form of the twin-engined Il-14 and An-24 and the four-engined An-12 and Il-18. Israel also possessed mostly medium transports in the form of the C-47, Noratlas, and Stratocruiser, with the latter being on the heavier side. I code this as approximate quality for both sides.
- Surface combatant quality – Most of the Soviet navy consisted of older Skory-class destroyers and 1950’s era Kotlin-class destroyers with old Sverdlov cruisers. The Soviets had deployed 9 modern Kresta- and Kynda-class, but this deployment was not in large enough numbers to make the Soviet Navy technologically advanced. It is unclear from The Military Balance what type of destroyer and frigate Israel deployed. Without this information and knowing that most of the Soviet surface combatants were more than 10 years old, I code the surface combatants for both sides as qualitative parity for both sides.
- Submarine quality – About a quarter of the Soviet submarine force was nuclear-powered in 1970, and I assume that this is the percentage of nuclear-powered submarines in the Black Sea Fleet in 1970. Israel possessed 4 submarines, none of which were nuclear-powered. I code this as qualitative superiority for the Soviet Union and qualitative inferiority for Israel.

**Yom Kippur War, 1973**

- Tactical air quality – The United States tactical air force in the area consisted of the naval combat aircraft stationed with the Sixth Fleet in the Mediterranean. In these attack squadrons were some fourth generation F-14A planes, but most were of the third- or second-generation F-4, F-8, A-4, A-6, and A-7 type. The Soviet Union in its deployment to Egypt, of which 1973 was the final year, contained third-generation MiG-21E planes. Because the American planes were not significantly newer on average, I code this as qualitative parity.
- Tank quality – Neither side had tanks in the area of the dispute, making this qualitative parity by default.
- Tanker/transport air quality – The US tanker force consisted of KC-135’s for in-flight refueling, and the transport air force consisted of mostly heavy transport craft in the form of the C-5A and C-141. The former was introduced in 1970. The Soviet Union possessed 50 Bison long-range bombers converted into tankers and its transport force was predominantly medium transports in the form of the Il-14, An-8, An-24, An-12, and Il-18. The US transport force was made up of far more heavy transports as a percentage of its total force and was newer on average. I code as qualitative superiority for the United States and qualitative inferiority for the Soviet Union.
- Surface combatant quality – The United States had 2 aircraft carriers in its Sixth Fleet along with 17 other surface combatants, though it is unclear of what type these combatants were. The Soviet Union had 0 aircraft carriers in its Black Sea Fleet, and it is not clear the exact composition of its 63 other surface combatants. Nevertheless, because the US had an aircraft carrier and the USSR did not, I code the US as having qualitative superiority in the naval surface balance.
- Submarine quality – Over 70% of the American attack submarine force was nuclear-powered in 1973, and I assume this ratio in its attack submarine force in the Mediterranean during the dispute. The Soviet attack submarine force consisted of around 15% nuclear subs, which I also assume to be the ratio in the attack submarine force the Soviets had during the crisis. Because of this discrepancy and the advantage the US had in ASW operations during this period of the Cold War, I code the US as having qualitative superiority and the USSR as having qualitative inferiority.

War in Angola

- Tactical air quality – Neither the Soviet Union nor the United States possessed tactical aircraft in Angola or southern Africa. This is qualitative parity by default.
- Tank quality – Neither the Soviet Union nor the United States possessed tanks in Angola or southern Africa. I code this as qualitative parity by default.
- Transport air quality – The United States possessed the KC-135 tanker aircraft for in-flight refueling and the C-5A and C-141 heavy transports for moving forces abroad. The Soviet Union possessed as a tanker some Bison aircraft that were converted from being long-range bombers. For transport aircraft, they possessed light Il-14, An-8, and An-24 aircraft as well as medium Il-18 and An-12 aircraft. The Soviets had some An-22 heavy transports, but this was a tiny portion of the air transport force (40 out of 1500 aircraft). I code this as qualitative superiority for the United States and inferiority for the Soviet Union.
- Surface combatant quality – I count the US Second Fleet as potentially being in the area near Congo and able to get to it quickly during the Congo Crisis. The Soviets had no such naval force near the Congo. By default, this is qualitative superiority for the US and inferiority for the Soviets.
Submarine quality – The submarine force attached to the Second Fleet may have been able to get to the southwest African coast quickly during the crisis, while the Soviets had no such undersea force in the Atlantic Ocean. I code this as American qualitative superiority by default.

Afghanistan, 1979

Tactical air quality – The United States did not possess any tactical fighter aircraft in Afghanistan, in SW Asia, or South Asia. The Soviet Union did possess fighters in Central Asia, giving the Soviets qualitative superiority by default.

Tank quality – The Soviets possessed tanks on its border with Afghanistan, while the United States did not possess any tanks in Southwest or South Asia. This gives the Soviets qualitative superiority by default.

Tanker/transport air quality – The United States possessed KC-135 tankers for aerial refueling and the heavy C-5A and C-141 aircraft for transport. The Soviet possessed converted Badger and Bison bombers as tanker aircraft with most of its transport craft being An-12’s, Il-14’s, and An-24’s. There were some modern Il-76 and An-22 craft, but not in large numbers. I code this as qualitative superiority for the United States due to the relative newness of American planes and more of the force being of the heavy transport type.

Surface combatant quality – The Soviet Union possessed naval forces as part of its Caspian Sea flotilla. The United States had no naval forces in the Persian Gulf, Arabian Sea, or Indian Ocean. I code this qualitative superiority for the Soviets by default.

Submarine quality – Neither sider possessed submarines in the Indian Ocean, Persian Gulf, or Arabian Sea, giving each qualitative parity by default.

Able Archer Incident, 1983

Tactical air quality – The United States possessed the F-111E, the A-10, the fourth-generation F-16, the F-4E, and F-4G aircraft in its air forces in Europe. Its NATO allies possessed the fourth-generation Tornado (UK) and Alpha Jet aircraft (FRG) along with the third-generation Jaguar, Buccaneer, Mirage IIIIE, F-104G, and F-4F. Meanwhile, the Soviet Union and its Warsaw Pact allies possessed mostly second- and third-generation aircraft, which included the second-gen MiG-21, the MiG-23, MiG-27, Su-7, Su-17, and Su-24. Due to the presence of fourth-generation fighters in the NATO air forces and their absence in the Warsaw Pact forces, I code qualitative superiority for the US and qualitative inferiority for the USSR.

Tank quality – The United States forces in Europe were equipped with M-48A5, M-60A1 and -A3, and some M-1 Abrams tanks. Its NATO allies possessed the Chieftain (UK), AMX-30 (France), M-48A2 (FRG), and Leopard 1 (FRG) tanks. The Soviet Union and its Warsaw Pact allies possessed the T-54/55/62 generation of tanks in the greatest number along with several newer T-64 and T-72/80 tanks. Neither the Warsaw Pact nor the NATO forces had significantly newer tanks in sufficient numbers to give one side a technological edge. I code this as qualitative parity in the armor balance.
• Tanker/transport air quality – The United States possessed the C-5A and C-141B planes for transport and the KC-135 tanker for in-flight refueling. The Soviet Union possess the An-12, Il-76, and An-22 as its primary transport aircraft, the latter of which were of the heavy type. They also possessed converted Bison and Badger aircraft for in-flight refueling. Due to the updating of the Soviet transport force to include the more modern Il-76 and to be more of the heavy type, I code qualitative parity in the tanker/transport force in 1983.

• Surface combatant quality – The United States possessed 5 aircraft carriers in its Atlantic Fleet and 1-2 carriers in the Mediterranean, with about a third of these being nuclear-powered. It had some nuclear-powered cruisers along with several guided-missile destroyers. The Soviet Union possessed 3 conventionally-powered aircraft carriers by this time with two of them in the Black Sea Fleet facing NATO. It also had one nuclear-powered cruiser and several guided-missile destroyers. Due to the inclusion of aircraft carriers in its naval forces as well as the capability to deploy nuclear-powered surface combatants, I code qualitative parity between the US and the USSR during this time. This is a conservative estimate, as one could argue that the US still had a naval edge at this time.

• Submarine quality – The United States’ submarine force in the Atlantic and Mediterranean was nuclear-powered by 1983. The Soviet Union’s attack and cruise-missile submarine force was about half nuclear-powered. Because both sides had nuclear-powered submarines in large numbers, I code this as qualitative parity.

Kashmir Crisis, 1990

• Tactical air quality – The Indian Air Force contained the MiG-21, MiG-23, MiG-27, and the Jaguar IS in the bulk of its tactical air force, most of these planes being introduced in the 1960’s or the early 1970’s. The Pakistani Air Force possessed mostly Q-5, J-6, Mirage 5 and IIIE, J-7, and F-16 aircraft in its tactical fighter force. This does include a 4th-generation aircraft in the F-16, but every other aircraft was introduced in the 1960’s or late 1950’s. I code this as neither side having a technological advantage and therefore qualitative parity.

• Tank quality – The Indian Army possessed the T-55, T-72, and Vijayanta tank in the greatest numbers. The Pakistani Army possessed the M-47/-48 and Type-59 tanks in the greatest quantity. The tanks in the Indian Army were newer on average but not so much so to give the Indian military a technological advantage. Because of this, I code qualitative parity in the armor balance.

• Tanker/transport air quality – India possessed mostly four-engine An-12 aircraft for medium transport and the twin-engine An-32 aircraft, introduced in the 1970’s, for light transport. The Pakistani transport force consisted of four-engine C-130E’s for medium transport. The Indian force was newer, but most of it was of the twin-engine light transport variety. I decided to code this as qualitative parity between the two sides.

• Surface combatant quality – India possessed 2 aircraft carriers in its naval force along with a few destroyers and several frigates. All of these craft were conventionally powered. Pakistan possessed no carriers, a few destroyers, and several frigates, all of
which were conventionally powered. Due to the presence of aircraft carriers in the Indian Navy, I coded this as qualitative superiority for India.

- **Submarine quality** – India’s submarine force mostly included diesel electric *Kilo* and *Foxtrot* class attack submarines with one cruise-missile, nuclear-powered *Charlie I* class submarines. Pakistan possessed all attack submarines of the French-made, diesel electric *Daphne* and *Agosta* class. The latter of which were the newest of the entire group, being made in the 1970’s. Pakistan’s submarine force was newer, but India possessed one nuclear-powered submarine. I code this as no technological advantage for either side and therefore qualitative parity.

**Third Taiwan Strait Crisis, 1995**

- **Tactical air quality** – The United States possessed mostly 4th-generation F-15 and F-16 aircraft in its tactical fighter forces in East Asia. China mostly possessed the Q-5, J-5/-6/-7 aircraft in its tactical air force, all of which were made in the 1950’s and 1960’s. This makes the US force significantly newer than the Chinese air force. I code this as qualitative superiority for the United States.
- **Tank quality** – The United States’ infantry divisions in South Korea were likely outfitted with the M-60 and M-1 *Abrams* tanks, the latter of which was introduced in the 1980’s. The PLA mostly possessed the Type 59 in its tank forces, which were introduced in the 1950’s. This makes the US forces much newer, which I code as qualitative superiority for the United States.
- **Tanker/transport quality** – The United States possessed KC-10A and KC-135 tankers for in-flight refueling. Its transport force mostly consisted of C-5, C-141, and C-17 heavy transports as well as C-130 for tactical airlift. The C-17 was introduced in 1991. The Chinese transport force primarily consisted of Li-2, Y-5, and Il-14 planes for light transport. The Chinese did have some Y-8 aircraft introduced in the 1980’s for medium transport, and they did use some of these as tankers. Nevertheless, the US tanker/transport force was by far more modern, giving the US qualitative superiority.
- **Surface combatant quality** – The United States possessed 1 aircraft carrier as well as some nuclear-powered guided-missile cruisers as well as modern *Arleigh-Burke* class destroyers in its Seventh Fleet. This was backed up by nuclear-powered carriers and other nuclear-powered surface combatants in the Pacific Fleet. The PLAN had *Luda* guided-missile destroyers and *Jianghu* frigates that were introduced in the 1970’s. However, these were all conventionally-powered, and the PLAN had no aircraft carrier. I code this as qualitative superiority for the US.
- **Submarine quality** – All of the attack and cruise-missile submarines in the Seventh and Third fleets were nuclear-powered. China’s attack submarines were mostly conventionally-powered with a few nuclear-powered *Han*-class submarines. Because of the disparity in the percentage of attack submarines being nuclear-powered in favor of the United States, I code American qualitative superiority here.

**India-Pakistan Nuclear Tests, 1998**
• Tactical air quality – The Indian Air Force possessed the MiG-21, -23, -27, and -29 in its tactical combat force, the latter of which was a 4th generation craft. From the French, the Indian Air Force had also purchased Jaguar S and Mirage 2000 aircraft, the latter of which was also a 4th generation plane. Both it and the MiG-29 represented a fraction of the tactical combat force in the IAF. The Pakistani Air Force possessed the Mirage IIIE and 5, the Q-5, J-6 and -7, and the F-16 in its tactical combat arsenal. The latter of which was also a 4th-generation plane that represented a fraction of the overall tactical aircraft force. I code this as qualitative parity between the Indians and Pakistanis, as neither tactical air force was substantially newer or more technologically advanced than the other.

• Tank quality – The Indian Army possessed the T-55, T-72, and Vijayanta tank in the greatest numbers. The Pakistani Army possessed the M-48A5 and Type-59 tanks in the greatest quantity. This means that the tanks in the Indian Army were newer on average but not so much so to give the Indian military a technological advantage. Because of this, I code qualitative parity in the armor balance.

• Tanker/transport air quality – The Indian Air Force possessed the twin-engine An-32 and Do-228 for light transport, some old BAe-748 and newer Il-76 aircraft for medium transport. Against this, Pakistan had C-130B and E variants for medium transport as over half of its small transport force. It possessed Boeing 707 and 737 aircraft as well as a couple jetliners for light transport. India possessed 6 Il-78 tankers for in-flight refueling, and Pakistan did not possess this capability. Because of this, I code qualitative superiority for India.

• Surface combatant quality – India possessed a number of surface combatants first introduced in the late 1950’s and 1960’s, including an old Hermes class carrier and Leander frigates from the UK. They also had Kashin destroyers and Petya frigates from the Soviet Union. These were the ships they had in the greatest numbers. The Pakistani Navy was mostly made up of US Gearing class destroyers from the 1940’s along with UK Amazon class frigates from the 1970’s. On average, the age of the ships was similar, but the Indian Navy included an aircraft carrier, a capability the Pakistani Navy did not possess. I code this as qualitative superiority for India.

• Submarine quality – Both countries’ submarine force remained close to the same as what they had in 1990. India’s submarine force mostly included diesel electric Kilo and Foxtrot class attack submarines but it had retired its nuclear-powered Charlie I. Pakistan possessed all attack submarines of the French-made, diesel electric Daphne and Agosta class. The latter of which were the newest of the entire group, being made in the 1970’s. Pakistan’s submarine force was newer, but India possessed one nuclear-powered submarine. I code this as no technological advantage for either side and therefore qualitative parity.

Kargil War, 1999

• Tactical air quality – India’s tactical air force had the same composition of planes as it did in 1998. Pakistan had roughly the same composition of tactical combat aircraft, but with less J-6 and the introduction of more modern Mirage IIIO in its place. This was not
enough to give Pakistan a technological advantage, so I continue to code this as qualitative parity.

- Tank quality – Both India and Pakistan possessed the same composition of tanks in 1999 as they did in 1998. I continue to code this as qualitative parity.
- Tanker/transport air quality – Both India and Pakistan possessed the same composition of transport aircraft in 1999 as they did in 1998. I continue to code this as qualitative superiority in India’s favor.
- Surface combatant quality – Compared to 1998, Pakistan had replaced its obsolete Gearing-class destroyers with two Amazon-class frigates from the UK. However, India had also modernized its fleet to some extent by having more Godavari-class frigates, introduced in the 1980’s, and less Petya-class frigates from the Soviet Union. I continue to code qualitative superiority for the Indian Navy here.
- Submarine quality – Compared to 1998, the Indian Navy had a couple more Kilo-class submarines (introduced in the 1980’s) to replace two Foxtrot-class submarines (introduced in the 1960’s), representing an upgrade. Pakistan continued to have the Agosta and Daphne submarines from France, but they introduced the Agosta 90B variant, made in the 1990’s. Due to a similar increase in quality from each side, I continue to code qualitative parity in the undersea balance between India and Pakistan.

**Indian Parliament Terrorist Attacks, 2001**

- Tactical air quality – India possessed a similar tactical combat air force to 1998/99, but it had replaced some MiG-21’s with Su-30K aircraft, representing an upgrade. Pakistan also possessed a similar force to what it had in 1998/99. It had retired some J-6 aircraft and put F-16’s in their place, also representing an upgrade. Due to the similar scale of upgrades for both sides, I continue to code qualitative parity here.
- Tank quality – Both sides possessed the same tank forces that they had in 1998 and 1999. I continue to code qualitative parity here.
- Tanker/transport air quality – Both sides had the same tanker and transport aircraft that they possessed in 1998 and 1999. I continue to code this as qualitative superiority for India.
- Surface combatant quality – India possessed a similar fleet of surface combatants as it did in 1999 but with one less Petya frigate and two more Delhi-class destroyers, which were introduced in the 1990’s. This represents a large upgrade. Pakistan possessed the same fleet that it did in 1999. Due to the larger upgrade for India, I continue to code this as qualitative superiority.
- Submarine quality – India possessed a similar submarine fleet as it did in 1999 but with one less Foxtrot class submarine and one more Kilo class, representing an upgrade. Pakistan possessed the same fleet as it did in 1999. The Indian upgrade was not enough to give it a decisive technological advantage or new capability that Pakistan did not have. As a result, I continue to code this as qualitative parity.

**Russia-Georgia War, 2008**

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• Tactical air quality – The United States possessed a naval air wing with the Sixth Fleet outfitted with the F/A-18C as well as a naval wing at Incirlik with F-16 and F-15E aircraft that may have been available for combat during the Russo-Georgian War. The Russians had in their North Caucasus Military District a tactical combat force that mainly consisted of Su-25, MiG-29, and Su-27 aircraft with some Su-24 light bombers, but the latter were being disbanded at the time of the war. Because both sides were deploying fourth-generation aircraft in the conflict, I code this as qualitative parity. I could include the forces the United States had in Iraq, but I choose not to do this because those forces were occupied in a conflict and would not be likely to be redirected to fight in the Caucasus.

• Tank quality – The United States had no tanks or ground troops deployed in Eastern Europe, Turkey, Iran, or the Caucasus at this time. This gives Russia qualitative superiority by default.

• Tanker/transport air quality – The United States possessed the C-17 as the bulk of its strategic transport force with some C-5, the former of which being introduced in the 1990’s. For tactical transport, the United States possessed the C-130 Hercules as well as its updated Super Hercules variant, which had been introduced in 1999. It possessed the KC-135 and KC-10A as tanker aircraft. Russia possessed the Il-76 as the bulk of its transport force with some An-124 and An-22’s. It possessed some Il-78 tanker aircraft for in-flight refueling. These transport aircraft were on average introduced in the 1970’s compared to the 1990’s for the American aircraft. As a result, I code qualitative superiority for the United States here.

• Surface combatant quality – The United States possessed in its Sixth Fleet in the Mediterranean 1 aircraft carrier as well as 6 guided-missile destroyers. The Russian Black Sea Fleet contained 2 cruisers (conventionally powered), 3 guided-missile destroyers, and 7 frigates. Because the US had an aircraft carrier and Russia did not in these forces, I code qualitative superiority for the US.

• Submarine quality – The United States possessed 3 nuclear-powered attack submarines of the Los Angeles class in its Sixth Fleet. Russia possessed 1 attack submarine of the Kilo class in the Black Sea Fleet. These submarines were of similar age, but because the US subs are nuclear-powered, this represents a technology not featured on the opposing Russian sub. I code this as qualitative superiority for the United States.

Scarborough Shoal, 2012

• Tactical air quality – The United States possessed the F/A-18 (C, E, and F variants) in the Seventh Fleet. Its air forces in Korea and Japan were outfitted with F-16C/D and A-10C aircraft. Opposing these forces, China possessed the J-7E and G, J-10, J-11, J-8H, and Su-30MKK aircraft. Both sides possessed fourth-generation fighters introduced in the 1980’s and 1990’s. It is arguable that American planes were of better quality, but no country had substantially newer planes. According to my coding rules, this is qualitative parity.

• Tank quality – The United States possessed the M1A1 and M1A2 tanks in its ground forces in South Korea, both of which were third-generation tanks. They were introduced
in the 1980’s and 1990’s, respectively. The majority of China’s tank force was composed of Cold War-era Type 59 tanks with the rest being Type 79, 88, 96, 96G, 98, and some 99/99A2. On average, the American tanks were much newer than the Chinese tanks. I code qualitative superiority for the United States here.

- **Tanker/transport air quality** – The United States possessed the KC-10A and KC-135R/T aircraft for aerial refueling. It possessed the C-5, C-17A, and C-130E/-H/-J for transport, all of which being medium or heavy types. China possessed one regiment of H-6U aircraft for aerial refueling. It possessed one regiment of Il-76 for heavy transport, three regiments of Y-7 for light transport, and three regiments of Y-8 aircraft for medium transport. Because a greater percentage of the American force was capable of medium and heavy transport than the Chinese force, I code this as qualitative superiority for the United States.

- **Surface combatant quality** – The United States Seventh Fleet had a nuclear-powered aircraft carrier, guided-missile cruisers with helicopter hangar facilities, and guided-missile destroyers, some with helicopter hangar facilities. In its South and East Sea Fleets, China possessed guided-missile destroyers with hangar facilities and guided-missile frigates, about half of them with hangar facilities. Because the United States had an aircraft carrier and China did not, this extra capability gives the US qualitative superiority.

- **Submarine quality** – The United States Seventh Fleet likely possessed Los Angeles-class attack submarines with perhaps some Virginia or modified Ohio class submarines, all of which were nuclear-powered. China possessed 36 attack submarines in its East and South Sea Fleets, only two of which were nuclear-powered. Because a much greater percentage of American submarines were nuclear-powered, I code this as qualitative superiority for the United States.

**North Korea Nuclear Testing, 2013**

- **Tactical air quality** – The United States possessed the F/A-18D in its naval air forces with the Seventh Fleet along with the F-16 C/D and A-10C in the air forces in South Korea. The South Korean tactical air forces were made up of F-4E, F-5E/F, F-15K, and F-16C/D aircraft. North Korea contained mostly 1960’s ear J-5/-6/-7 aircraft from China with a few regiments having more modern Su-25 and MiG-29 aircraft. Because the US and ROK forces were much newer, I code this as qualitative superiority for the United States.

- **Tank quality** – The United States deployed the M1 Abrams in its ground forces in Korea, and most of the Korean tank forces possessed the Korean variant of the M1 and M1A1 tanks. The North Korean forces possessed the WWII era T-34 tanks along with Cold War-era T-54/-55/-62 and Type 59 tanks. Because the US and South Korean forces were much newer, I code this as qualitative superiority for the United States.

- **Tanker/transport air quality** – The United States and South Korea possessed the C-5, C-17, and C-130 aircraft (both the Hercules and Super Hercules versions) for medium and heavy transport. The United States possessed the KC-10A and KC-135 R/T tanker aircraft for in-flight refueling. North Korea possessed Cold War-era An-24, Il-18, Il-62, Tu-134, and Tu-154 transport aircraft from the 1950’s and 60’s. Because the US and
South Korean aircraft were much newer and North Korea did not have any tanker aircraft, I code this as qualitative superiority for the United States.

- **Surface combatant quality** – The United States Seventh Fleet had 1 nuclear-powered aircraft carrier, 2 guided-missile cruisers with hangar facilities, and 7 guided-missile destroyers. South Korea added to this 2 cruisers, 6 guided-missile destroyers, and 12 frigates. North Korea possessed 3 frigates. Because the US and South Korea had several naval platforms that North Korea did not possess, I code this as qualitative superiority for the United States.

- **Submarine quality** – The United States possessed nuclear attack submarines of the *Los Angeles* class in the Seventh Fleet, and South Korea added some conventionally powered attack submarines mostly of the *Chang Bogo* type (introduced in the 1990’s). North Korea possessed conventionally-powered submarines of the *Golf* class that were introduced in the late 1950’s. Because the United States had nuclear-powered subs while North Korea did not and US/ROK subs were much newer, I code qualitative superiority in the undersea balance for the United States.

**Russia-Ukraine War, 2014**

- **Tactical air quality** – The United States possessed the F-15C/D, F-15E, F-16C/D, and A-10C aircraft in its Air Forces, Europe (USAFE). Russia possessed the MiG-29, MiG-31, Su-27, and Su-24M aircraft in the air forces in its Western Military District. All of these are fourth-generation planes, with neither being substantially newer. I code this as qualitative parity.

- **Tank quality** – The United States ground forces in Europe had the M1A1 and M1A2 tanks, which were introduced in the 1980’s and 1990’s. Russian ground forces possessed the T-72B, T-80BV/-U, and T-90/T-90A tanks, which were introduced in the 1980’s and 1990’s as well. Because of this, I code qualitative parity here despite the presence of an older original design in the T-72B.

- **Tanker/transport air quality** – The United States possessed the C-5, C-17A, and C-130 (E, H, and J variants) for strategic airlift, with the C-17’s and C-130J’s being introduced in the 1990’s. The United States also had the KC-10A and KC-135R/T aircraft for aerial refueling. Russia had the Il-78 aircraft for aerial refueling. Most of its transport was composed of Il-76 aircraft, introduced in the 1970’s. Russia also possessed a number of other aircraft, including the An-124 (introduced in the 1980’s), An-12/-24 (introduced in the 1950’s and 60’s), and Tu-134/-154 (introduced in the 1960’s). Because US aircraft were much newer on average, I code this as qualitative superiority for the United States.

- **Surface combatant quality** – The United States possessed 1 aircraft carrier, 2 guided-missile cruisers with helicopter hangar facilities, and 2 guided-missile destroyers with helicopter hangar facilities in its Mediterranean Sixth Fleet. Russia possessed an aircraft carrier, guided-missile cruisers, guided-missile destroyers (some with helicopter hangar facilities), and guided-missile frigates in its Black Sea and Baltic Fleets. With both sides having aircraft carriers, I code this as qualitative parity.

- **Submarine quality** – The United States possessed three attack submarines in the Sixth Fleet, most likely of the *Los Angeles* or *Virginia* class and all of them nuclear-powered.
Russia possessed four diesel-powered attack submarines across its Baltic and Black Sea Fleets. Because the United States’ submarines were nuclear-powered while Russia’s were not, I code this as qualitative superiority for the United States.

Turkey-Russia Jet Shootdown Incident, 2015

- Tactical air quality – The United States forces in the Middle East and eastern Mediterranean possessed the F-22A (one squadron), F-15C (one sqn), and F-15E (one sqn) aircraft. In the 5th and 6th fleets, the Navy possessed F-A18 aircraft of the C, E, and F variants. Russia, in its Southern, Western, and Central Military Districts, possessed the MiG-29, MiG-31, Su-24M/2, Su-27, Su-30, and Su-34 aircraft. The United States possessed a fifth-generation aircraft, but it is such a small fraction of the total air forces in the area (six out of 102 aircraft) that I do not count it as a significant new capability for US forces yet. For this reason, I continue to code qualitative parity.

- Tank quality – The United States armored brigade combat team in Kuwait possessed the M1A1 and M1A2 tanks. Russian ground forces in the south possessed the T-72BA, T-72B3, T-80BV/U, T-90, and T-90A tanks. The T-80 and T-90 tanks were third-generation tanks comparable to the M1 Abrams and M1A1/A2. The American tanks were not significantly newer than the Russian tanks overall, despite the presence of older T-72 in the Russian ground forces. Because of this, I code qualitative parity here.

- Tanker/transport air quality – The United States possessed a similar tanker/transport air force as it did in 2014, but they retired some C-130E and C-5A and replaced them with newer C-5M Super Galaxy. Russia possessed the same force as it did in 2014. Because the United States force modernized somewhat compared to the Russian force from 2014, I continue to code qualitative superiority for the United States.

- Surface combatant quality – Both Russia and the United States possessed the same type of naval forces that they possessed in 2014. I continue to code qualitative parity here.

- Submarine quality – Both Russia and the United States possessed the same type of submarine forces in the Mediterranean Seas in the 2014 that they did in 2015. Because of this, I continue to code qualitative superiority for the United States.

Kerch Strait Incident, 2018

- Tactical air quality – The United States possessed a squadron of A-10C’s in Turkey and the F-16C/D aircraft in Italy and Germany. This is similar to what the US had in 2014. The Russian air forces in the western and southern portions of the country possessed a similar force to what they had in 2015, but they replaced their Su-24M aircraft with newer Su-35S. These were not introduced in large enough numbers to make the Russian forces substantially newer than the American tactical aircraft forces. I code qualitative parity here.

- Tank quality – The United States ground forces in Germany still possessed the M1A1/A2 tanks. Russian forces continued to have a majority of the T-72B/BA and T-72B3 tanks in its armored forces. It also had a good number of T-80BV/U and T-90/90A tanks in its ground forces. Because this composition of tanks is similar to what each side in 2014 and 2015, I continue to code qualitative parity here.
• Tanker/transport air quality – The United States possessed a similar tanker/transport force that it did in 2015, but it continued to replace the C-130H’s with C-130J’s and had completely replaced its C-5A’s with C-5M’s. Russia possessed the same composition of tanker/transport forces as it did in 2015. Because the United States continued to modernize its forces while Russia’s remained the same, I continue to code qualitative superiority for the United States.

• Surface combatant quality – The United States possessed a guided-missile cruiser with hangar facilities and guided-missile destroyers in its Sixth Fleet. Russia possessed a guided-missile cruiser with hangar facilities, a guided-missile destroyer, and four guided-missile frigates, half of them with hangar facilities. Because neither side possessed aircraft carriers and had similar guided-missile and helicopter hangar capabilities, I code qualitative parity here.

• Submarine quality – The United States possessed nuclear-powered attack submarines in its Sixth Fleet, while Russia possessed diesel electric-powered attack submarines. Because the US subs were nuclear-powered ones for Russia were not, I code this as qualitative superiority for the United States.
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