UNIVERSITY OF CALIFORNIA

Los Angeles

The Logic of Diplomacy in International Disputes

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Political Science

by

Shuhei Kurizaki

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What is now proved was once only imagin'd.

– William Blake, 1790

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PREFACE

This dissertation is a belated answer to the question I had as a little kid. While walking in a crowd on a hot summer day in Hiroshima at the 40th anniversary of the thermonuclear bomb, I wondered why we had to use violence to achieve peace. This is the kind of questions that has never escaped from me. This dissertation, albeit imperfect, is dedicated to all of those who suffered from war.

* * *

For comments, suggestions, and patience, I am indebted to the members of my dissertation committee: Ken Schultz, Art Stein, Barry O'Neill, Michael Chwe and Leeat Yariv. Ken lured me with the art of modeling and tirelessly went through the models with me (including the ones I scraped). Barry showed me the beauty of rationalizing mysterious things in the wonderland of politics. Art taught me the importance of seeing both the wood and the trees. Michael is the coolest political scientist. Lee at patiently showed me the welfare analysis in the Bayesian environment among other things. For teaching me the basics and fun of game theory, I wish to thank George Tsebelis. Sitting in his class as his TA was the happiest time in my graduate training. For her encouragement and help to find a path to where I am now, I wish to thank Kuniko Inoguchi. For provoking my intellectual curiosity and aspirations, I am grateful to my college friends in Tokyo. My days in the grad school were truly wonderful thanks to many talented and funny friends in LA and my late night comrades of the computer room. My thanks also go to Glenda and Joseph for saving me from bureaucratic nightmares. The Santa Monica Mountains and the Pacific Ocean are acknowledged for giving me safe havens from insanity. Brad Mehldau and his trio are gratefully acknowledged for the great music and inspiration. I thank my parents for the chance to start writing this thing and Marisa and Hana for the reason to (gladly) finish it.

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ABSTRACT OF THE DISSERTATION

The Logic of Diplomacy in International Disputes

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This dissertation brings "diplomacy" back into the international relations literature by proposing a theoretical framework to analyze the role that diplomacy plays in international disputes. Drawing from an extensive literature on the historical development of diplomatic institutions, I describe how diplomacy has evolved as a collection of institutional arrangements and instruments for conflict resolution. Through the course of (mostly European) history of international politics dating back to antiquity, diplomacy has served as an alternative to military might and warfare. Although diplomacy is one of the oldest institutions in international politics, it has not been the subject of rigorous theoretical or systematic empirical analysis. Its traditional absence from the international relations literature is primarily due to the difficulty in empirical observation in conjunction with the rise of behavioralism and the prevalence of strategic (or military) studies during the Cold War.

This dissertation offers a series of theoretical models that specify empirically identifiable mechanisms of diplomacy that tell us how to begin to ask empirical questions about how and why diplomacy works in international disputes. Specifically, through reconstructing a natural history of diplomacy, I offer a stylization of three basic machineries of diplomacy: (i) diplomatic communication that reveals states' preferences so that they can identify whether their preferences overlap in order to avoid war; (ii) diplomatic negotiation, by which states sort through their preferences to reach an agreeable settlement in order to avoid an imposed settlement via coercion and force; and (iii) diplomatic manipulation that restructures state leaders' preference so that they find it easier to acquiesce to a coerced settlement, and hence expands the range of agreeable settlements, thereby reducing the risk of war.

I develop the strategic logic of each of these mechanisms by analyzing a series of game-theoretic models that build on the rationalist literature on the origins of war and crisis bargaining. Over all, diplomacy works because it minimizes political costs associated with an attempt to bring peace and hence diffuses the risk of unwarranted wars. Diplomacy therefore is a system for conflict resolution without military force. I find that such a characterization of diplomacy is embedded in various aspects of its institution.

CHAPTER 1

Introduction

If I have seen further, it is by standing on the shoulders of giants — Isaac Newton, Letter to Robert Hooke, February 5, 1675

1.1 Why Diplomacy? Or How Political Leaders Learned to Stop Worrying and Love the Bomb

During the 2004 Presidential campaign, the George W. Bush administration's decision to go to war with Iraq in 2003 dominated the presidential debates on the topic of foreign policy.¹ The heated exchange between President Bush and Senator John Kerry, the Democrat challenger in 2004, centered around whether or not President Bush's decision to go to war was appropriate and reasonable. Senator Kerry claimed that the Bush administration did not try to do everything it could do to avoid going to war. "And we know," he argued, "there were further diplomatic efforts under way. They just decided that the time for diplomacy is over and rushed to war." Senator Kerry said "I would have preferred that [the president] did more diplomacy..., he didn't go to war as a last resort" but arbitrarily cut off the diplomatic efforts.² In response, President Bush claimed

¹The scripts of the presidential debate may be obtained at the website of Commission on Presidential Debates (http://www/debates.org/) or at the American Presidency Project at University of California, Santa Barbara (http://www.presidency.ucsb.edu/).

²Notice that the 2004 presidential debates took place before it became public knowledge that the Iraqi government had not been involved in the 9/11 terrorist attacks against the United States. Hence, Senator Kerry did not deal with the validity and relevancy of Bush's Iraq War

that he exhausted diplomatic options before going to war: "We tried diplomacy. We did our best. [But] it was falling apart [as] Saddam Hussein was gaming the oil-for-food program to get rid of sanctions."

The question of whether and when to use diplomacy or military coercion in pursuing foreign policy goals is ubiquitous in public policy debates concerning foreign affairs. More recently, this recurring theme of diplomacy versus military reemerged when the Iraq Study Group, as mandated by the United States Congress, released its report, *The Iraq Study Group Report* (2007). The report recommends that the United States make a fundamental change in her current military operations, and calls for diplomatic efforts with neighboring states such as Syria and Iran that the Bush administration has essentially abandoned in dealing with hostilities in Iraq.

Aside from the policy debate among policymakers, the issue of diplomacy versus military coercion also arose spontaneously among ordinary citizens following the U.S. military campaign developed as a response to the horrendous attacks of 9/11. The epitome of the public's concerns about the issues of diplomacy versus military coercion was typically seen in the anti-war public outcry "War is not the answer" which was commonly witnessed on bumper stickers, website, and public demonstrations. While not always explicit, the anti-war public sentiment's claim was such that it was not "war" or military power but diplomacy that the United State government should use to deal with the question of Iraq.

The gist of the issues underlying the 2004 Presidential debates, the Iraq Report, and the antiwar movement in the wake of the American invasion of Iraq is the call for diplomacy as a policy instrument alternative to military coercion. The problem with these calls for diplomacy—whether they are advanced by the political opposition to the current course of American foreign policy toward Iraq as the military campaign of the United States against terrorism.

or by a bipartisan study group—is that they typically fail to provide an alternative solution with equally persuasive arguments that are substantiated with empirical and logical underpinnings. While Senator Kerry criticized President Bush for opting out of diplomacy and resorting to military coercion in dealing with Saddam Hussein, he failed to demonstrate how he envisioned diplomacy to solve the Iraq questions. While The Iraq Report spelled out an array of recommendations for the "diplomatic offensive" towards Iraq's neighboring countries, none of the diplomatic plans were taken up seriously by the administration partly because it was unclear if those recommendations would yield desired outcomes in the absence of the systematic empirical evidence that would corroborate their analysis. The public outcry of "war is not the answer" also soon met criticisms of the same sort. In a New Yorker article, Douglas J. Faith-former undersecretary of Defense in the Bush administration, who helped build the intellectual framework for the Bush administration's campaign against terrorism—reportedly said "What I was hearing from the antiwar movement ... were thoughts about how war is not the answer" (Goldberg 2005). "The kind of people" he continues "who put bumper stickers on their car that declare that 'war is not the answer,' are they making a serious comment?" Undersecretary Faith's frustration reflects the fundamental mistrust in diplomacy in the absence of clear ideas about what diplomacy can offer to replace military instruments. Hence, he asked, if "War is not the answer," then what is?

Part of the problem underlying the public distrust in diplomacy is that there is a serious lack of a solid knowledge base of diplomacy comparable to the military science underpinning the military profession.³ Ambassador Chas W. Freeman, Jr., a former U.S. career diplomat, notes that "Unlike the modern professions

 $^{^{3}}$ I must make it clear here that I am not arguing that there exists no diplomatic culture or what is sometimes called the "epistemic community" formed among professional diplomats (Haas 1992). To the contrary, they certainly do. For a descriptive study on the epistemic community among European diplomatic corps, see Davis (2006).

of the law and military science, diplomacy had not developed a case method of instruction. Nor has it matched other professions in the effort to derive principles from cases" (Freeman 1997, x). While the fundamental principles of war are by no means flawless on the battlefield, many members of the military profession nonetheless have attempted to accumulate the essentials of the art of war. In contrast, when Freeman entered the profession of diplomacy, he lamented that he did not find something similar on international statecraft and diplomacy (Freeman 1997, ix-x). To be sure, there are a number of prominent writings on how to conduct diplomacy. Yet, most of them are outdated, and indeed some of the most renowned works were written three centuries ago. As Richard H. Solomon, the President of the United States Institute of Peace, notes, there is need for an updated manual on the practice of statecraft by diplomacy (Solomon 1997, v). Further, few if any attempt to establish principles and mechanics of diplomacy and fewer yet to consider the role of diplomacy in conflict resolution.

Not surprisingly, underlying this alleged lack of an established body of principles and mechanics in the modern profession of diplomacy is the absence of the accumulation of systematic research on diplomacy and its role in international disputes. In a sharp contrast, the profession of political science has established two distinctive streams of research that has created, accumulated, and disseminated a body of knowledge on military affairs. In particular, strategic studies and the scientific study of international processes are two of the most distinctive subfields within international relations that address questions on the role that military coercion plays in conflict resolution and escalation dynamics.

In contrast to military affairs, diplomacy and its institutions have not been subject to the contemporary rigorous analysis of social science. Although diplomacy is routinely cited as an alternative to military power as a policy instrument, it is difficult to find explanations of exactly how diplomacy works or in what way

diplomacy affects the outcome of international disputes. This is because few if any works have defined a specific, empirically identifiable mechanism by which diplomacy works. As a consequence, political scientists have not even asked such simple questions as why some international crises are resolved through diplomatic negotiations while others require military coercion that entails risking war in order to avoid war. This is partly responsible for why political scientists do not have much to say about the aforementioned policy debates in a theoretically sound and empirically grounded fashion.

Rather, as a brief review of various existing literatures below will demonstrate, students of diplomacy have stressed the extreme variability of diplomacy rather than specifying empirically identifiable mechanisms of diplomacy. Consequently, our current understanding of diplomacy remains very vague, leaving the working of diplomacy "too uncertain and unpredictable" (Steiner 2004, 493). This view of "vague" diplomacy is widely shared among contemporary theorists of international politics. John Mearsheimer, for example, casts blame on "vagaries of diplomacy" for causing the instability of coalitions among states under multipolar systems (Mearsheimer 1992, 226; see also Steiner 2004). Because of the vague and ambiguous understanding of diplomacy and its roles in international disputes, the field of international relations in general is severely hampered with respect to its ability to contribute to the public policy debate.

To fulfill this gap, this dissertation develops the strategic logic of diplomacy by explicating specific, empirically identifiable mechanisms and identifying when and how diplomacy works effectively and helps to solve international disputes short of war. In particular, I offer three classes of theoretical models of diplomacy—diplomatic communication, diplomatic manipulation, and diplomatic negotiation—in international disputes and explore each of these key machineries of diplomacy. In doing so, I seek to bring "diplomacy" back into the IR literature.

In the remainder of Chapter 1, I develop the context and issues of this study on diplomacy and its role in the prevention of war and conflict resolution. In doing so, I take three steps. First, in the next section, I present a theoretical motivation for why diplomacy matters in international disputes. I argue that understanding how diplomacy works is crucial to understanding the most fundamental puzzle of international politics: why war occurs. Despite the importance of diplomacy, however, our understanding of diplomacy is very limited and we as political scientists do not know very much about diplomacy and its mechanics in international disputes. Hence, as the second step, to delineate the horizon of our knowledge on the issue, I provide a brief sketch of three lines of research in the international relations literature that are relevant to the issues of diplomacy. This brief literature review should help to illuminate what we need to know about diplomacy and how to best approach this task. Third, I explain and justify the theoretical orientation, analytical perspective, and methodology that I employ in this study, followed by a road map for the rest of my dissertation.

1.2 Diplomacy and War: The Puzzle

Besides the policy relevance, why is it important to understand how diplomacy works? What theoretical advance in international relations can we expect from improving our understanding of diplomacy? In this section, I offer a theoretical motivation for the study of diplomacy by demonstrating that a satisfactory (rationalist) explanation for war must also explain why state leaders abandon diplomacy and resort to military coercion in international disputes.

Puzzle of war: A fundamental question in the study of international relations is *why wars occur*. One of the most promising approaches to the study of the causes of war is the so-called *rationalist* approach, which tries to under-

stand war as the outcome of instrumentally rational decision making in particular strategic environments.⁴ The rationalist approach has proven fruitful especially due to its success at establishing the microfoundation of the causes of war using the bargaining framework (Powell 2002).⁵ The rationalist approach, pioneered by James D. Fearon (1995), addresses this fundamental question by asking why state leaders fail to achieve a peaceful settlement of disputes that all parties prefer to costly fighting. Because war almost always destroys resources and deprives human lives, all parties to the dispute are strictly better off if they agree to a negotiated settlement, provided that none of them enjoys fighting itself. Therefore, because of the cost and risk associated with fighting a war, state leaders should have incentives to reach peaceful settlements that all parties to a dispute would prefer to war. This implies that in principle the *ex post* inefficiency of war opens up the bargaining range that is efficient *ex ante*, meaning that a peaceful solution to a dispute must always exist as long as war is *Pareto* inefficient (i.e., socially undesirable). Given the Pareto inefficiency of war and the existence of peaceful settlements, the occurrence and reoccurrence of war in the record of international history pose a serious *puzzle of inefficient wars*. Why are states unable to reach prewar (ex ante) negotiated settlements that all would prefer to inefficient wars?

Rationalist explanations for war: In explaining what prevents leaders from using negotiation and communication successfully to avoid inefficient fighting, rationalist explanations generally turn to the *credible revelation of commitments* in crisis bargaining as the key to understanding this puzzle. This problem of credible revelation of commitments typically takes one of two general forms.⁶

⁴See Lake and Powell (1999) for the methodological premise of this approach, or what they call "methodological bet."

⁵See Morrow (2000) for how game-theoretic models have contributed to the success of the rationalist approach. Because game-theoretic models have revised major theories of war in the process of explicating theoretical claims of those theories, Morrow called its collective contribution to the scientific study of war the "game-theoretic revolution."

⁶Although Fearon (1995) suggests three plausible rationalist explanations for war (i.e., informational problem, commitment problem, and issue-indivisibility problem), Powell (2006)

The first mechanism focuses on the information structure of an international dispute, in which rational leaders may be unable to locate a mutually preferable negotiated settlement due to *private information* about relative capabilities or resolve combined with states' *incentives to misrepresent* such information. Hence, war may result from strategic uncertainty. The second mechanism takes a form of the so-called *credible commitment* problem, in which rational leaders may be unable to attain negotiated settlements that all prefer to inefficient fighting because of the adversary's incentives (or the lack thereof) to renege on the agreement in the future. Hence, war may result because state leaders cannot commit credibly to agreed-upon peace.⁷

Facing the problems of private information and/or credible commitments, the conventional explanation suggests that, in order to achieve credible revelation of commitments, one must take actions that generate a real risk of war (e.g., Fearon 1995, 381). This is why a war is almost always preceded by a period of crisis bargaining involving military coercion, in which state leaders are trying to learn about their adversary and influence the beliefs and behavior of the adversary in an attempt to locate the range of peaceful settlements that both parties can agree to. For this reason, in many instances in the record of international history, wars result from one or more states' attempt to influence the adversary's strategic calculations and decisions through military coercion in crisis bargaining. Accordingly, the rationalist approach helps us explain not only how a rational leader can optimally go to inefficient war (e.g., Morrow 1989b; Fearon 1995) but also why rational leaders tend to take risky and provocative actions in crisis bargaining ing (typically in signaling models, e.g., Fearon 1994a, 1997) and why an optimal demand in crisis bargaining carries risk of war (typically in bargaining models,

demonstrates that the second class of explanations subsumes the third.

⁷Each of these mechanisms offer a general causal mechanism that operate in more specific contexts of international disputes.

e.g., Fearon 1995; Powell 1996a).

Paradox: Observe that the discussion above also points to the fact that bargaining tactics that state leaders employ in crises are a double-edged sword. Bargaining behavior that state leaders take to achieve the credible revelation of credibility helps to resolve a conflict short of war can also increase the risk of war. That is, the very action that state leaders take in order to resolve the conflict short of war increases the *ex ante* risk of unwanted war. As Schultz (2001, 43) notes, "the cure can often be as dangerous as the disease." While this by itself is an important theoretical result, it still poses a puzzle.⁸ Why do state leaders want to take costly and risky actions in an attempt to settle a dispute short of war if doing so eventually increases the very outcome that they seek to avoid (i.e., costly war)?

Some might argue that this is not a "paradox"; rather it is how international politics works and this double-edged sword simply captures the fundamental dilemma underlying the strategic interactions in international relations. At the more abstract level, this dilemma is ubiquitous across any situation involving costly signaling, where one must take costly actions in order to convey a message about one's private information. The message sent through costly signaling can be thought of as playing a dual role in the bargaining process, namely a *substantive* role in directly affecting the payoffs of both players, as well as an *informational* role in occasionally affecting the receivers' beliefs about the

⁸To be sure, this "paradox" has long been well-recognized by scholars, and its intellectual origin is the issue of credibility and signaling in nuclear brinkmanship. See, for example, Nalebuff (1991), Fearon (1995), and Schultz (2001a). For a canonical work, see Schelling (1960). For a discussion of this "paradox" in the context of the democratic peace hypothesis, see Kurizaki (2005). Jervis (1989, 183) makes a similar observation in the context of the rational deterrence debate:

In international politics we are particularly interested in when threats protect the state and when, by contrast, they set off a spiral of counterthreats that leave both sides worse off than they would have been had the state adopted an alternative policy.

sender's true type.⁹ Hence, under a certain condition, these dual roles will induce a tension in the sender's strategic choice, in that a message that is preferable on informative grounds (e.g., reducing uncertainty) may be less so on substantive ground (e.g., escalating the risk of Pareto inferior outcomes).¹⁰

On the other hand, one may also argue that apart from the abstract construct this paradox points to a substantively important implication. Namely, the original inefficiency puzzle of war is not fully solved by the conventional rationalist explanation. If rationalist explanations for war invoke costly military coercion to solve the question of why rational leaders cannot avoid fighting a costly unwanted war, then this logic brings us around full circle and back to the *original puzzle* of war because one is still left with the question of why rational leaders cannot avoid costly military coercion in the first place.

This last point is signified by the fact that during crisis bargaining states must pay in advance some of their expected costs of fighting an eventual war.¹¹ Observe that in a standard rationalist model, sinking expected costs of war through preparatory military operations during crisis bargaining preceding the outbreak of war will alter the *ex ante* bargaining environment. This is because in the standard model, the set of negotiated settlements that both parties prefer to war is determined by the expected costs of war (e.g., Fearon 1995; Powell 2002). Hence,

⁹The qualification "occasionally" here refers to the situation where the sender's types and each type's choice of message are uncorrelated, or a pooling case, wherein the receiver cannot infer the sender's true type from messages.

¹⁰See Banks (1991) for a more complete treatment of signaling games in political science as well as a more detailed discussion of the dual role of costly signals. See Kurizaki (2007c) for a detailed analysis of the dual roles of information transmission in crisis bargaining.

¹¹Fearon (1994a) introduces three classes of costs of coercive bargaining in crises using military instruments. The first class is the sunk costs that state leaders must pay upfront in order to get coercive bargaining going. In particular, this class of costs includes financial and organizational costs of mobilizing and deploying troops. The second class of costs concerns risks of inefficient war that are generated by crisis escalation. Military mobilizations in crisis bargaining can bring about tying-hands mechanism which essentially generates risks of war (Slantchev 2005). The third class of costs is known as "audience costs" which is also generated through the tying-hands mechanism. Chapter 6 analyzes this class of costs.

if some fraction of the expected costs of war such as the costs of military mobilization is paid in the course of military maneuvers in crisis bargaining, then the remaining costs of fighting has diminished and then the set of preferred-to-war negotiated settlements will be diminished. In other words, the use of military coercion in crises as a bargaining instrument may diminish the bargaining range and hence increase the *ex ante* risk of war (e.g., Rector 2003).

This claim—that the use of military instruments has adverse effects—suggests that the conventional rationalist explanation of war essentially brings us back to the very original puzzle of inefficient wars because it does not explain why state leaders rationally resort to "inefficient" military coercion in crisis bargaining in the first place. That is, by passing over the bargaining consequence of the use of military coercion, the conventional explanation falls short of fully capturing the origins of war and peace. The existing answer, thus, begs a further question: Why cannot state leaders avoid using costly military coercion if it is ex post inefficient? The original question of why state leaders fail to locate a peaceful settlement through negotiation is still left unanswered.

Theoretical example: To support this claim, let us consider a common bargaining model of war advanced by Fearon (1995) and Powell (1996a,b), which underlies the standard rationalist explanations. Two states, state 1 and state 2 are involved in a dispute over a divisible good whose value to both is normalized to one. Each state's preference over the issue is defined by the bargaining space $X \in [0, 1]$, where the ideal resolution of state 1 and 2 can be located at 0 and 1, respectively. The two sides can either peacefully reach an agreement on an allocation of the good, or they can fight a war to try to impose their ideal settlement. In the event of war, state 1 wins with probability $p \in [0, 1]$, and the winner gets to choose its favorite resolution in the bargaining space (typically the winner is

assumed to obtain the entire good).¹² Moreover, war is costly in the rationalist literature on war, so I assume that the cost of war is strictly greater than zero for both sides, $c_1 > 0$ and $c_2 > 0$. Then, the challenger's expected payoff from war is $p(1) + (1-p)(0) - c_1 = p - c_1$. Similarly, the defender's expected utility from war is $1 - p - c_2 = 1 - (p + c_2)$. This is the common formalization of a war outcome as the "costly lottery."¹³ Figure 1.1*a*, which is drawn from Fearon (1995) and (Powell 2002), illustrates a simplified version of the bargaining model of war.¹⁴

Notice that at the onset of crisis bargaining, a negotiated settlement is possible in the range $[p - c_1, p + c_2]$, which is determined by both states' cost of war. Now suppose that S_1 and S_2 engage in bargaining using military coercion in order to communicate to each other in an attempt to identify the bargaining range. Each state, S_i , pays m_i units for t periods of military maneuvers. Hence, as the bottom portion of Figure 1.1 illustrates, after t periods with military coercion, the expected cost of war for S_i is diminished by m_i and the bargaining range is reduced accordingly. While a negotiated settlement is possible in the interval $[p - c_1, p + c_2]$ before coercive bargaining with mobilization, it is attainable only in the interval $[p - (c_1 - m_1), p + (c_2 - m_2)]$ after t periods of coercive bargaining.

In short, the quick inspection of the standard bargaining model of war reveals that because the use of military coercion sinks some of the expected cost of war,

¹²In the literature, some authors employ closed boundary to define the range of $p \in (0, 1)$, but the choice of closed or open boundaries in defining the probability that state *i* prevails is immaterial in this particular model studied in this paper.

¹³I should note that c_i reflects state *i*'s costs for war *relative* to any possible benefits, so that c_i captures not only the states' values for the costs of war but also the value they place on winning or losing on the issues at stake. For similar discussion, see Fearon (1995) and Schultz (1998).

¹⁴The "bargaining approach to war" and "bargaining models of war" are probably not the best suited label for what these models actually capture. This is because in these models a war outcome is typically a game-ending point rather than a bargaining process, and because these models capture crisis bargaining preceding to the outbreak of war rather than war bargaining following the outbreak of war. The label "bargaining models of war" is more suited for a class of models that explicitly formalize the process of war as bargaining (e.g., Slantchev 2003b).

(a) At the outset of crisis



Reduced bargaining range

Figure 1.1: Bargaining Range Before and After Military Mobilization. Note: Panel (a) depicts the bargaining range at the outset of a crisis, and panel (b) depicts the reduced bargaining range after some period of coercive bargaining with military mobilization. The ranges with a bold segment in panel (b) indicate the cost m_i for S_i sunk by military mobilization in the course of coercive bargaining. For the full analysis of the adverse effect of mobilization, see Rector (2003). the remaining expected costs of war in period t is diminished. This reduction in the remaining cost of war essentially shrinks the range of negotiated settlements that both parties prefer to war. Because the remaining bargaining range is now narrowed, the probability of a peaceful settlement goes down, increasing the probability of bargaining failure (i.e., war) in period t.

Historical example: To illustrate this claim, let us briefly consider the role that military mobilization of the July Crisis played in bringing about the war in 1914. The July Crisis is one the well-documented diplomatic crises in the modern history, and diplomatic historians disagree on whether the Russian and German civilian leaders understood the nature of interlocking mobilization system and whether the civilian leaders were able to make orders for mobilization independently of the influence of military generals (see Trachtenberg 1990). Nevertheless, what remains undisputable is the effect of mobilization on the course of the July Crisis. While political leaders well understood the likely consequence of military mobilization, their attempt of political maneuvers through mobilization and other associated military operations made negotiated settlement of the crisis even more difficult than before they had started maneuvering.

At the onset of the Crisis, both Austria and Russia attempted to end the crisis in its favor using military coercion. The Austrians believed that, along with the German commitment of military aid, a military threat against Serbia—in the form of an ultimatum backed up with mobilization against Serbia—would deter Russia. On the other hand, the Russians also believed that a credible demonstration of its commitment to the pan-Slav movement, via partial mobilization against Austria and its preparatory measures, would both compel Austria-Hungary to revoke its provocative diplomatic demands and deter Germany from getting involved in the Austrian coercive diplomacy against Serbia. Yet, both cases of political maneuvering using military mobilization in the end served only to deteriorate the situation and escalate the crisis. All three countries—Germany, Austria and Russia—were faced with the military consequences of their actions.

Immediately after the Austrian declaration of war against Serbia on July 28, Russia issued orders for partial mobilization against Austria as a political maneuver with the aforementioned goal.¹⁵ The Russians did not wait for an actual Austrian invasion of Serbia partly because Russia needed to move early due to their immense territory and inadequate transport system (Rich 1992). A series of Russian military operations starting from her preliminary preparations for mobilization to partial mobilization and further precautionary actions provoked Germany and escalated the situation (see Trachtenberg 1990). For example, on the evening of July 29, the German ambassador called on Sergei Sazonov, Russian Foreign Minister, and showed him a telegram from Theobald von Bethmann Hollweg, the German Chancellor, which read:

Kindly impress on M. Sozonov very seriously that further progress of Russian mobilization measures would compel us to mobilize and that European war could scarcely be prevented. (Karl Kautsky, Graf Max Montgelas, and Walter Schücking eds., *Die deutschen Dokumente zum Kriegausbruch*, Vol. II, No. 342, p. 59, quoted in Joll 1992, pp. 19-20)

Upon receiving the news about the degeneration of the situation, Tsar, after a long delay, ordered full mobilization as the Russian leadership understood that war with Germany was unavoidable at this point of escalation. Once the Tsar ordered the Russian general mobilization on July 30, it prompted the German reaction who issued the proclamation of the "state of imminent danger of war" on the next day (Joll 1992, 32).

¹⁵Before partial mobilization, Russia had already initiated preliminary preparations for mobilization on the morning of July 25 with the understanding that partial mobilization against Austria would begin as soon as Austria moves against Serbia.

The driving force behind this spiral of escalation process in the July Crisis was the provocative nature of military instruments in crisis bargaining as a means of political maneuver. Schelling (1966, 227) describes the provocative and volatile situations generated through coercive bargaining in crisis as follows: "The degree of readiness, the extent of mobilization, the high alert status of strategic forces and a sense of 'confrontation' will make the situation tense and expectant and hostile in appearance." Further, the provocative nature of mutual mobilizations in 1914 made it not feasible to mobilize the armies and keep them poised on the brink indefinitely without taking action (Joll 1992, 24).

Barry O'Neill (1992, 461) makes a similar observation with regard to the Persian Gulf War: "As George Bush tried to pressure Iraq out of Kuwait, the deployment of 430,000 troops seemed like an effective strategy of bridge-burning. The move involved a large expenditure and a political commitment, and as many commentators pointed out, Saddam should realize that these troops cannot simply go home." Beyond the intentions of state leaders, the military coercion can sometimes be a precursor to the eventual outcome that no one wanted: war.

Perhaps, this too was the case in 1914 in Europe. Marc Trachtenberg (1990, 122-22) convincingly argues that both Russian and German decisions to initiate their mobilization process in the July Crisis should be seen as the opening phase of the war of 1914 because both military and civilian leaders of both countries well understood the nature and mechanics of the system of interlocking mobilization (and their strategic implications) in advance. That is, a decision for general mobilization, as Trachtenberg argues, was quite consciously a decision for war.

Puzzle of diplomacy: These historical episodes suggest that the use of military coercion as a means of political maneuvering not only diminishes the bargaining range and increases the risk of the very outcome (i.e., unwanted war) state leaders seek to avoid, but also is essentially equivalent to starting a war. If

Number of territorial disputes settled by:				
Diplomacy	Military coercion			
196	152			
(56%)	(44%)			

Table 1.1: Number of Territorial Disputes Settled by Diplomacy, 1919-1995. *Source*: Huth and Allee (2002a).

Number of disputes where:			
Diplomacy preceded coercion	No attempt of diplomacy		
91	61		
(60%)	(40%)		

Table 1.2: Number of Territorial Disputes where Diplomacy Preceded Military Coercion, 1919-1995. *Source*: Huth and Allee (2002a).

so, because the logic of the rationalist explanations for war commonly turn to military coercion as the key to credible revelation of commitments, the conventional explanation brings us exactly back to the original puzzle of war: If costly military coercion increases the risk of bargaining breaking-down into inefficient wars, and hence eventually diminishes the set of feasible negotiated settlements that both parties prefer, why do leaders rationally choose to resort to military coercion in an attempt to locate the range of peaceful settlements? It should follow that the risk and costs associated with military coercion should outweigh the benefits of bargaining leverage gained from coercive pressure in crisis bargaining. In principle, *ex post* inefficiency associated with military coercion opens up an *ex ante* bargaining range through accommodative diplomacy, which makes diplomatic instruments preferable to military instruments in a crisis. So the question is: *what does prevent state leaders from utilizing normal forms of diplomacy so that they could avoid using military instruments and coercive diplomacy that raise the risk of war*?

Coercion	Use of force	Full-scale war	
996	1,230	105	
(43%)	(53%)	(4%)	

Number of militarized disputes with various actions:

Table 1.3: Coercion, Use of Force and War in MIDs, 1816-2001. Source: Ghosn, Palmer and Bremer (2004) and Jones, Bremer and Singer (1996).

In fact, just as wars are typically preceded by a period of coercive bargaining (*i.e.*, crisis bargaining involving military coercion), the resort to military instruments is also typically preceded by a period of diplomacy in crisis bargaining. The record of international history shows that states usually do not resort to military coercion as a bargaining instrument from the outset of international disputes, but instead they first conduct diplomatic negotiation. According to a data set of 348 territorial dispute from 1919 through 1995 compiled by Paul K. Huth and Todd L. Allee (2002), in 56% of the disputes (196 cases) states did not even resort to military coercion to settle their disputes (see Table 1.1). Further, Table 1.2 shows that diplomatic negotiation preceded the resort to military coercion in nearly 60% (91 cases) of 152 territorial disputes that eventually involved (at least) military coercion. Moreover, in about 38% (58 cases) of the disputes involving military instruments, states had attempted diplomacy for more than five years before resorting to military coercion. And yet, very few militarized international disputes become wars. As Table 1.3 shows, according to the Militarized Interstate Dispute (MID) data set, among 2,331 disputes in the 1816 - 2001period, 1,230 cases (53%) involved the use of force and 105 cases (4.5%) ended up in a full-scale war (Ghosn, Palmer and Bremer 2004; Jones, Bremer and Singer 1996).¹⁶ War, therefore, can be seen as failure of diplomacy, and the logic of

¹⁶Note that the figure for the "use of force" does not follow the MID data set's definition. It excludes some forms of "coercive" military actions such as blockade or seizure because MID's definition of the "use of force" category is misleading, as it fails to distinguish what Thomas Schelling (1966) terms "brute force" from "coercion." These types of military operations are

success and failure of diplomacy in international disputes is at the core of our understanding of the origins of war and peace.

The fundamental puzzle about the origins of war and peace, therefore, becomes the puzzle of why diplomacy sometimes fails to reach a peaceful settlement that (presumably) all the parties to a dispute would prefer to the game of military coercion. Why do political leaders frequently rely on military coercion that entails a risk of war in seeking a peaceful settlement of a dispute? In other words, why can peace not be sought peacefully rather than forcefully? Until this puzzle of diplomacy is adequately addressed, the puzzle of war cannot be fully solved.

Furthermore, the fact that about 56% of territorial disputes in the 20th century did not involve military coercion in their settlements (Table 1.1) cannot be adequately explained by the conventional rationalist account of war and crisis bargaining, which suggests that leaders take costly actions (typically publicly demonstrated military operations) and make demands that carry risks of war in attempts to settle a dispute. That is, yet another puzzle is that *the recorded history of successful diplomacy is also left unexplained*. Until this question is satisfactorily answered in a theoretically sound and empirically grounded manner, we would not be able to understand more substantive questions such as why the Bush Administration decided to resort to military coercion in dealing with the Iraqi questions, while pursuing peaceful negotiations vis-à-vis North Korea.

As I will discuss in a greater detail below, there is no widely shared answer or an accepted framework to properly address this puzzle of diplomacy. Hence, one of the goals of this dissertation is to develop a framework for analyzing these questions, to provide some tentative answers, and to outline future areas for rarely meant to fulfill "threat to hurt" by inflicting a pain, and hence must be qualitatively differentiated from "brute force."

research.¹⁷

1.3 What We (Think We) Know About Diplomacy

What do we know about diplomacy and its role in resolving international disputes? How do scholars conceptualize diplomacy? What questions have scholars addressed about diplomacy, its institutions, and its effects on international disputes? What place does diplomacy occupy in various international relations literatures?

The term diplomacy is one of the most undefined concepts in the international relations literature in spite of its frequent mention in the ordinary language. Diplomacy can be spotted in the literature in various guises but is often mixed with a myriad of other social behavior and activities. In particular, as a British diplomat Harold Nicolson pointed out, diplomacy can take many different forms such as communication, negotiation, ceremonial protocol, peaceful means among others: "Of all the branches of human endeavor, diplomacy is the most protean" (quoted in Steiner 2004). To add to the confusion, as Nicolson (1963, 3-5) also noted over several decades ago, the terms "diplomacy" and "foreign policy" are often used interchangeably, and perhaps the most (in)famous example of this interchangeable use of the term is by Henry Kissinger in his book titled *Diplomacy* (1994).¹⁸ Our current understanding of diplomacy reflects this confusion, and it seems almost meaningless to try to identify a common denominator for all the proposed definitions.¹⁹ This is indicative of how little disciplinary interest there has been (Wiseman 2005, 411; see also Jönsson 2002).

¹⁷This particular question will be taken up in chapters 4 and ??.

¹⁸The interchangeable use of the terms "diplomacy" and "foreign policy" is a frequent topic in the writing on diplomacy. See Bátora (2003), Davis (2006), Watson (1984), Wiseman (2005).

¹⁹I take up this issue in Chapter 2. Instead of providing a "common ground" definition of what is diplomacy and what is not, I propose three diplomacy games, each of which represents the machinery of the basic functions of diplomacy.

Nevertheless, there are primarily three distinctive literatures (or subfields) that address the issues on diplomacy, including the rationalist literature on crisis bargaining, coercive diplomacy and deterrence, and the English school. As we shall see, the conventional wisdom that emerges from these literatures—that diplomacy by itself is ineffective and secondary to military might—is almost certainly wrong. Although each of these literatures addresses the subject on diplomacy to some extent, each one of them is so theoretically flawed and empirically weak as to call their findings about diplomacy falls short of grasping how and why diplomacy works and facilitates conflict resolution. Before summarizing what each of these three literatures has to say about diplomacy, I first sketch the declining importance of diplomacy in the field of international relations during the Cold War.

The Declining Importance of Diplomacy in the Study of International Security

Or, How Political Scientists Learned to Stop Worrying and Love the Bomb

What is the role of diplomacy in international disputes? At first glance, the answer to this question seems trivial since our common-sense understanding is that diplomacy is meant to play a vital role in settling conflicts of interest between states. A striking fact about the study of international relations, however, is that there has been so little interest in diplomacy and its roles in international disputes (Moore 2005; Sartori 2005). Despite the importance of the problems of diplomacy, few if any theories in international relations address or answer the questions of whether and how diplomacy can resolve disputes short of war. Rather, the study of diplomacy has remained "marginal to and almost disconnected from the rest of the field" (Sharp 1999, 34) and most of the main theoretical and empirical traditions in the study of international relations (*i.e.*, realism, liberalism, constructivism, and their variants) have excluded diplomacy from their efforts to construct comprehensive international relations theories.

However, throughout the history of international politics since the birth of modern diplomacy in the Italian Renaissance, state leaders have utilized diplomacy in conflict resolution as much as they have utilized military coercion and warfare.²⁰ As Hans Morgenthau (1973, 549) observes, "When nations have used diplomacy for the purpose of preventing war, they have often succeeded." Nevertheless, their use of diplomacy has seldom been accompanied by any systematic empirical analysis, and little has been written explicitly and rigorously about the workings of diplomacy and its institution. As a consequence, while dynamics of military coercion in international disputes are well articulated, the role of diplomacy in conflict resolution has been understood only implicitly (see also Wiseman 2005, 412).²¹ Barry Steiner (2004) also share this sentiment, noting that "Diplomacy has long been neglected as a preoccupation of international theory. No area of world politics has reflected a greater gap between experience and theory than diplomatic statecraft" (p, 493).

Although diplomacy is understudied in the contemporary literature on international relations, it is not true that the scholars of international relations have completely neglected questions about diplomacy as a policy instrument in pursuing (inter)national security. During the first decade (1945-1955) after World War II, national security was seen as something to be pursued by both military and non-military instruments of statecraft and cautions against overreliance on

 $^{^{20}\}mathrm{A}$ sketch of the historical evolution of diplomacy and its institutions is provided in Chapter 2.

²¹Wiseman (2005, 410) observes that although the level of interests in the study of diplomacy is generally higher in countries of small and middle powers such as the Nordic counties, Canada, and Australia, American scholarship in international relations generally has paid only little attention to diplomacy.
military coercion were common (see for example, Lasswell 1950).²² For example, Hans Morgenthau (1973 [1948]) devoted the last two chapters of his monumental work, *Politics Among Nations*, to the discussion of the potential of diplomacy to maintain peace through accommodation and the cause of the depreciation of diplomacy during the Cold War (see also Steiner 2004). Recognizing the "paramount importance of diplomacy as an element of national power" (p. 519), Morgenthau (1973 [1948], 549) regarded diplomatic statecraft as "the best means of preserving peace which a society of sovereign nations has to offer." Despite the generally perceived inclination of the realism tradition towards the superiority of military capabilities, Morgenthau (1973 [1948], 532-550) argues for the revival of the accommodating processes of diplomacy that mitigates power politics and minimize the risk of conflict. A few years after the publication of *Politics Among Nations*, Lassell (1950, 75) also argues against the confusion of security policy with armament and argues for the balance between military and non-military foreign policy instruments including diplomacy and economics in the pursuit of national security (see also Baldwin 1995, 130). This sort of wariness against the overreliance on "naked force" is also shared by Wolfers (1952, 502), who notes that although military instruments are often relevant, there are some strategic environments that require "greater reliance on means other than coercive power."

Unfortunately, the field of (inter)national security has taken a rather dramatic turn away from diplomacy and other non-military instruments for a number of theoretical and substantive reasons, especially since the "golden age" (Walt 1991) of security studies in the second decade (1955-1965) after World War II.²³ The advent of the nuclear weaponry and the doctrine of massive retaliation in the mid 1950s ushered in the nuclear revolution, which has tremendously influenced

 $^{^{22}}$ My discussion on the evolution of the field of security studies heavily draws on essays by David A. Baldwin (1995) and Stephen M. Walt (1991).

²³As I will argue below, the "behavioral revolution" may well have contributed to the decline of interests among political scientists in the study of diplomacy.

the study of (inter)national security and strategic thought. The nuclear revolution generated the idea that the threat of nuclear war can be used as military instruments in pursuit of policy goals, and this idea "went well beyond deterring the use of nuclear weapons by an adversary" and the notion that states could exploit the threat of escalation become widely influential in shaping American strategic thought during this period (Trachtenberg 1989, 302). The field of international security, especially the study of coercive diplomacy, has long been associated with the concerns about nuclear strategies in the midst of the Cold War confrontations with the Soviet Union (Byman and Waxman 2002, 14-18). Since the "golden age" of security studies in the 1950's and 1960's, this field of study has become largely preoccupied with the use of military instruments to cope with military threats.²⁴ Stephen Walt (1991, 215) notes, since the golden age, the literature has tended to overemphasize the military instruments in the pursuit of national security, while paying little attention to the potential role of accommodative diplomacy (see also Baldwin 1995).²⁵ Hedley Bull (1968, 599-600) also notes that "No doubt strategists are inclined to think too readily in terms of military solutions to the problems of foreign policy and to lose sight of the other instruments that are available." In short, this unfortunate intellectual shift away from diplomacy and toward the primacy of military instruments was a by-product of the Soviet-American Cold War.

Increased interests in *grand strategy* in the 1980's brought diplomacy back into the literature, and stacked diplomatic instruments of statecraft against militarybased instruments. As David Baldwin (1985) nicely articulates, although the

²⁴For the relationship between American nuclear strategies and the intellectual trend in the field of security studies, see Walt (1991), Baldwin (1995) and Byman and Waxman (2002). For a discussion on how the formal (mostly game-theoretic) literature on deterrence is influenced by the policy discourse and American nuclear strategies, see O'Neill (1992).

²⁵The overemphasis on military instruments has continuously characterized the field since the golden age, Stephen Walt (1991) then defines the field as "the study of the threat, use, and control of military force."

instruments of statecraft that states possess to achieve foreign-policy goals such as national security, economic prosperity, and political prestige—generally include military coercion, economic coercion, and diplomacy, the study of international security has become to "conceive of statecraft fairly narrowly, primarily as a problem involving the relationship between military instruments and military objectives" (Mastanduno 1998; see also Baldwin 1995; Rosecrance and Stein 1993).²⁶ Despite Baldwin's (1985) calls for the syntectic analysis of the military, economic and diplomatic options within a common framework, subsequent work in the study of international relations has focused primarily on military and economic coercion, while the prominence of diplomatic statecraft and its role were largely neglected.

In sum, the declining importance of the study of diplomacy in security studies is primarily a by-product of the subfield's success, which has reflected the Cold War and its implications for nuclear deterrence strategies.

The similar tendency of bias towards the importance of military instruments can also be found in another major subfield of international security: the quantitative study of international conflict. Scholars in this tradition typically employ various statistical data sets from the Correlates of War (COW) project and the International Crisis Behavior (ICB) project among others. In particular, the former has conducted a massive data-collection project, which resulted in several data sets on militarized interstate disputes, international wars, and alliances, and so on. Among others, the Militarized Interstate Disputes (MID) data from the COW project set (Gochman and Maoz 1984; Jones, Bremer and Singer 1996; Ghosn, Palmer and Bremer 2004), and ICB data have become the standard in the quantitative literature.

²⁶Baldwin (1985, 8) defines *statecraft* as "the art of conducting state affairs [which] refers to the selection of means for the pursuit of foreign policy goals" (see also Mastanduno 1998).

This prevalence and standardization of these data sets in the study of the causes of war and peace has unintended consequences. In his recent article "A Problem with Peace Science: The Dark Side of COW," Will Moore (2005) argues that as these COW data sets become widely used by scholars in the peace science community, the quantitative literature tends to privilege certain research questions of one type at the expense of many others worthy of investigation, and one such less privileged question concerns diplomacy. As a consequence, as Moore suggests, this practice among quantitatively oriented peace researchers is likely to introduce fundamental selection bias into their empirical investigations.

Selection bias can arise when the process of selecting into the sample is nonrandom, where, for example, the states and international disputes that appear in the sample of the MID (or ICB) data set are not representative of all states and disputes in the true population. This can certainly be the case with the MID data set. A MID is defined as "a set of interactions between or among states involving threats to use military force, displays of military force, or actual uses of force. To be included, these acts must be explicit, overt, nonaccidental, and government sanctioned" (Gochman and Maoz 1984, 586). Similarly, an International crisis is defined as "an increase in the intensity of disruptive, that is, hostile verbal or physical, interactions between two or more states, with a high probability of military hostilities; that, in turn, ... destabilizes their relationship and challenges the structure of an international system (Brecher and Wilkenfeld 1997, 4-5). These definitions imply that the selection process, through which the states and disputes (or crises) are selected into the sample of the MID or ICB data set, is not random; the only cases that are recorded in these respective data sets are the ones where governments—consciously or not—have abandoned accommodative diplomacy in settling disputes and decided to use military coercion (at least threats to use force).

We must await until systematic evaluation are being conducted before we conclude whether there actually exists implicit biases inherent in many common approaches and standard operating procedures in quantitative research on war and peace. Yet, what we know for certain is that diplomacy is systematically excluded from these samples.²⁷ As a result, the quantitative study of conflict and peace degenerates into the study on the militarized actions in international disputes, and the role played by diplomacy in international disputes has been left out from the scientific and systematic inquiry of international disputes.

The problem of selection bias due to the limited observability might be exacerbated by the imperatives to be "scientific." Although the limited observability of diplomacy often leads researchers to ask how we can actually use available data to study the role of diplomacy, the norms and standards of "scientific" research in political science have created a strong temptation to address phenomena that are readily observable and manipulable for empirical research (see Walt 1991 for the similar tendency in security studies).²⁸ While this claim is necessarily speculative, the indirect evidence of this claim is that the level of interest in the study of diplomacy is generally high in countries where the influence of the behavioral

²⁷Paul Huth and Todd Allee have collected data on diplomatic negotiation and talks in territorial disputes from 1919 through 1995. Faten Ghosn also has collected data on precrisis behavior. Recognizing this shortcoming, Patrick James has been exploring a data collection project on states' behavior in precrisis incidents, entitled "Near Crises in American Foreign Policy".

²⁸The underlying cause of this tendency is the "behavioral revolution," which simply means the controversies invoked by the introduction of the behavioral approach to the study of politics in the 1960's. The behavioral approach is nothing more than the use of statistical methods to analyze quantitative data about human (or political in this context) behavior. Yet, the sweeping popularity won by the behavioral approach through this "revolution" essentially hijacked what it means to be scientific in political science. Although it is not relevant here to discuss this issue generally, two comments are warranted in this regard. First, the way the term "science" is interpreted in the Northern American scholarship in political science contributed to the confusion of the meaning of "scientific explanation" with the particular way the term is used in statistics (see also Wagner 2001). Second, and more importantly here, the overemphasis on the quantitative approach skewed Northern American political science towards overly empirical and inductive, downplaying theoretical and deductive work. This has led to the notorious demand for the data availability in choosing the subject of study.

revolution in political science is not as great as in the United States, including the U.K., Nordic countries, Australia, Canada, and Japan (see also Wiseman 2005, 410).

While the lack of data on diplomacy makes inferences about diplomacy virtually impossible, the existing data sets' focus on militarized actions is due to the fact that diplomatic activity is inherently less public and hence less observable. This is so especially in cases where diplomacy is successful: diplomatic activities are not made public especially when diplomacy succeeds, while failed diplomacy is easier to observe as such a case will usually turn into a militarized dispute. As an American career diplomat laments, "successful diplomacy ... is not much publicized" (Freeman 1994, 283) and such an achievement often is not recorded in history.

* * *

Nevertheless, the field of international relations as a whole has not been completely mute about diplomacy, and in what follows I will consider three literatures that address the issues on diplomacy in one way or another. These literatures are (1) rationalist literature on war and crisis bargaining, (2) coercive diplomacy and deterrence, and (3) the English School.

Discussed at length below, the only viable literature that has actively produced writings on diplomacy and its institution is the English School and its derivative lines of research. Steiner (2004, 493) argues that the depreciation of diplomacy in the study of international relations in general is due to the fact that the majority of work on diplomacy fails to provide theoretically oriented analyses. He suggests that because scholars of diplomacy such as Harold Nicolson have "stressed its extreme variability, and consequently the difficulty of reaching empirical generalizations" rather than providing the microfoundation for the understanding macro-level phenomena such as the diplomatic institution, recent theorists of international relations such as John Mearsheimer have abandoned theoretical analysis of diplomacy on the ground that diplomacy is too uncertain and unpredictable. Indeed, as I will argue below, the methodological tradition of the English School and its neighbors is not suitable for investigating empirically identifiable causal mechanisms of diplomacy.

RATIONALIST LITERATURE ON WAR AND CRISIS BARGAINING

As I mentioned above (Section 1.2), the rationalist literature on war and crisis bargaining has been at center stage of the theoretical study of war and peace. This literature originates in part in a reaction to, as well as as an improvement on, the formal literature on nuclear deterrence (Nalebuff 1986, 1988, 1991; Powell 1987, 1988, 1989a,b,c, 1990), wherein the war outcome is thought of as a catastrophic nuclear exchange, and where the probability of such a war autonomously increases as a brinkmanship crisis progresses (and escalates).²⁹ War, therefore, only results from an accident in this class of models because nuclear revolution made it impossible to deliberately launch nuclear warfare (e.g., Brodie 1956; ?; Powell 1990). That is, state leaders never consciously choose to fight in equilibrium; rather, war can occur only as a result of a brinkmanship crisis going out of control and accidentally ending up in a general nuclear exchange.

While useful in shedding light on nuclear deterrence, this class of models is not well suited to explaining the occurrence of conventional conflicts, where state leaders *can* and *do* start to fight. This concern gave rise to a series of models in which war results from the deliberate decisions of state leaders in crisis bargaining (Bueno de Mesquita and Lalman 1992; Morrow 1989b; Fearon 1992, 1994a).

²⁹Although states in brinkmanship diplomacy can manipulate this autonomous risk of disaster, the sanction of going over the "brink" is exogenous to the states' control. Schelling (1966) conceptualizes this as the "threat that leaves something to chance".

This new class of models conceptualizes war as a consequence of a bargaining failure under incomplete information, conceptualizes crisis bargaining as a communication process between bargainers using military instruments (such as troop mobilization and public threat to use force), and explains how and why bargainers succeed or fail to reach a bargaining settlement short of war.³⁰ In other words, the rationalist literature of war has developed as an effort to bring the decision for war from "chance" to "rational hands." It is in this context that Fearon (1995) proposes the inefficiency puzzle of war and offers three plausible rationalist explanations for the puzzle (see Section 1.2). Hence, the rationalist literature on war and crisis bargaining seeks to explain, among other classes of phenomena, why state leaders rationally decide to go to war, why leaders use military threats, troop mobilizations, and other military instruments, and why state leaders cause public crises and provoke dramatic confrontations (e.g., Bueno de Mesquita and Lalman 1990, 1992; Bueno de Mesquita et al. 1999; Bueno de Mesquita, Morrow and Zorick 1997; Fearon 1994a, 1995, 1997; Kydd 2003; Morrow 1989a,b; Powell 1996a,b, 1999; Schultz 1998, 1999, 2001a,b; Slantchev 2005; Smith 1998a).³¹

How does the rationalist literature on war and crisis bargaining address the issues of diplomacy? Since these models developed to explain how and why bargaining breaks down in war and the role of military coercion in crises, their explanations typically focus on the role of threats to use force and other forms of military coercion (Fearon 1995; Schultz 2001a). Because of this focus, the

³¹I exclude models of intra-war bargaining from this review (Filson and Werner 2002; Powell 2004b; Slantchev 2003b; Smith and Stam 2004).

³⁰Morrow (1989b) finds that it is residual uncertainty or "noisy signaling" by military coercion that rationalizes the outbreak of war in equilibrium. Bueno de Mesquita and Lalman (1992) study a model similar to Morrow (1989b) in which private information is about the level of domestic opposition to fighting a war, which determines the resolve level of state leaders. Fearon (1992, 1994a) shows an alternative mechanism in which leaders send signals by generating audience costs that can create a condition under which leaders prefer starting a war to backing down. This mechanism can essentially be coined as the tying-hands mechanism (Schelling 1966). Similarly, Powell (1996a, 1999) formulated the risk-return trade-off as a common mechanism of how war arises in bargaining under incomplete information.

process of diplomacy often remains implicit in the course of crisis bargaining. While implicit, political maneuvers of military coercion are conceptualized as a primary form of diplomacy in this class of models, and hence these models often do not distinguish between coercion and negotiation explicitly in the bargaining processes. As a result, one of the critical features of diplomacy—peaceful means (Morgenthau 1973; Bull 1977), which makes it distinctive from military coercion, does not come into the picture in this literature.³²

In part due to its inadequate attention to the diplomatic process, as Sartori (2005) correctly points out, the main implication about diplomacy from the conventional rationalist approach to war and crisis bargaining is that diplomacy is ineffective and secondary to military might in international relations. A typical argument in this regard is that normal diplomacy is ineffective since it is not informative because diplomacy is essentially "cheap talk." Sartori (2005, 10) notes that "Diplomacy is the epitome of cheap talk; it includes speeches, communiqués, and diplomatic notes." Hence, one of the most frequently cited articles in the theoretical study of international security argues that states' intrinsic incentives for strategic misrepresentation makes normal forms of diplomacy incapable of locating mutually preferable peaceful settlements in international disputes; rather the only feasible way to avoid war is to take actions that produce a real risk of inefficient war:³³

The problem ... is that states can also have strong incentives to misrepresent their willingness to fight in order to gain a better deal. Given

³³For the seminal work of states' incentives for strategic misrepresentation of their private information, see Jervis (1970, 88-102).

 $^{^{32}}$ To some extent, this is simply an artifact of the model specification regarding the initial move in the model. If the first move is a choice from a continuous offer (or demand) space, then diplomatic negotiation is implied (or one could interpret it in that way); if the first move is a discrete choice to make a challenge, it appears as an ultimatum backed up with a military *fait accompli*. One could claim that the former is a model of negotiation, while the latter is a model of coercive threats; but again, diplomacy is implicit here and not well articulated.

these incentives, quite diplomatic exchanges may be rendered uninformative about a state's preferences.... States in a dispute thus face a dilemma. They have strong incentives to learn whether there are agreements both would prefer to the use of force, but their incentives to misrepresent mean that normal forms of diplomatic communication may be worthless.... States resort to the risky and provocative actions ... because less-public diplomacy may not allow them credibly to reveal their own preferences concerning international interests or to learn those of others (Fearon 1994a, 578; see also Fearon 1995, 400 for the same argument).

This pessimistic conclusion about diplomacy however rests on the reliance on Spence's (1973) costly signaling model, in which signals must be costly to convey meaningful information in the incomplete information environment (as is often the case in crisis bargaining), and cheap talk always lacks the informational efficacy.³⁴ The immediate implication here is that it is straightforward to construct an equilibrium in a cheap-talk game, in which cheap talk can matter in international outcomes.³⁵ And this result is widely known.³⁶

With this insight—that diplomacy is cheap talk—the recent formal literature on international disputes has begun to address the issue of diplomacy, and there have recently been noticeable developments advanced within the rationalist approach to war and crisis bargaining. Guisinger and Smith (2002), Ramsay (2004), and Sartori (2002, 2005) all commonly conceptualize diplomacy as pre-crisis announcements by political leaders, and identifies the conditions under which cheap

 $^{^{34}}$ The informational efficacy of signals in incomplete information games is formally defined in Chapters 3 and 5.

³⁵The application of cheap-talk models to international relations includes Kydd (2003), Kydd (2006a), Morrow (1994), Ramsay (2004), and Smith (1998a).

³⁶The canonical work is by Crawford and Sobel (1982), which essentially established a selfcontained research program (e.g., Austen-Smith and Banks 2000, 2002; Battaglini 2002; Farrell and Gibbons 1989b,a). For a recent review, see Farrell and Rabin (1996).

talk diplomacy can be effective in crisis bargaining. Although it is not always apparent, their analysis shows that some particular aspect of the diplomatic institution makes cheap-talk pre-crisis announcement informative, where such an announcement would be inconsequential in the absence of diplomatic institutions (as is the case in Fearon's 1995 model). As I elaborate in Chapter 3, this growing body of models suggests a plausible answer to the question of why the international system has maintained the current form of diplomatic institutions at least since the Renaissance; in fact, diplomacy is one of the oldest political institutions designed to preserve security and stability among states.

The hidden assumption common to the cheap-talk conceptualization of diplomacy and the recent formal work on pre-crisis diplomatic announcements is that all of these studies focus exclusively on the information role of diplomacy. Similarly, an empirical study on the role of diplomacy in third-party intervention/mediation also focuses on the information role of diplomacy (Regan and Aydin 2006).³⁷ This focus on informational role, however, poses two problems, although it does not mean this assumption is wrong.

First, as I detail in the next chapter, the information transmission, or communication more generally, is only one of the three key functions of diplomacy in international disputes. A quick reading of history reveals that there are other ways in which diplomacy can play a crucial role in international disputes, such as diplomatic negotiations (e.g., alternating-offers) and diplomatic manipulations (e.g., secrecy and ceremonial protocols).³⁸ Without subjecting these other dimen-

³⁷Slantchev (2003b) analyzes wartime diplomatic negotiation, but the main focus of the analysis is the comparison of information-revelation mechanisms between fighting on the battlefields and diplomacy at negotiation tables. I should add that, as it turns out (interestingly), bargaining at the negotiation table is more informative than fighting on the battle field.

³⁸The other, minor problem is that an actual diplomatic action in Sartori's (1998, 2005) model is a *threat to use forces*, and so what the model actually ends up showing is not conceptually different from the conventional crisis bargaining games where the issue centers around the credibility of threats to use force.

sions of diplomatic instruments to the systematic analysis, it would be misleading to solely base our analysis of diplomacy on its informational efficacy. Second, although the conventional argument—that diplomacy is ineffective—is based on the observation that diplomacy lacks the informational efficacy, I demonstrate in Chapter 5 that a more normal form of diplomacy can be equally effective as military coercion in crisis diplomacy. Hence, the informational inefficacy of diplomacy does not directly translate into the ineffectiveness of diplomacy; diplomacy can be very successful even if it does not convey the same amount of information as military coercion does.³⁹ So, in a sense, the rationalist literature's conventional conclusion about the role and effectiveness of diplomacy is essentially wrong because they ask the wrong question about diplomacy.

In sum, the existing rationalist literature on war and crisis bargaining only looks at the informational role of diplomacy in crisis bargaining, and this limited focus hampers the literature from capturing the whole picture of the role of diplomacy in international disputes.

COERCIVE DIPLOMACY AND DETERRENCE

Coercive diplomacy and rational deterrence theories were borne out of the renaissance of security studies in the late 1970s and 1980s (Walt 1991). In particular, Alexander George and his associates have coined the phrase "coercive diplomacy" to denote the use of threats and limited force as instruments of forceful persuasion in deterrence and compellence. Contrary to the appearance of "diplomacy" that the term "coercive diplomacy" carries, its focus is primarily on how military coercion can be effectively utilized in statecraft. Coercive diplomacy therefore is typically defined as the art of coercion through threats of force to influence

³⁹I demonstrate this mechanism without utilizing the cheap-talk paradigm. I propose a standard costly signaling game, in which a "costless" signal can be an effective bargaining tool albeit of limited informational efficacy, and improves Pareto efficiency.

calculations and behavior of an adversary in persuading the adversary to alter its behavior (e.g., Art and Cronin 2003, 6-10, George 1984, 225, George, Hall and Simons 1971, 18). In doing so, coercive diplomacy "seeks to erode an opponent's motivation by exploiting the capacity to inflict damage" (Lauren 1972, 135). That is, coercive diplomacy is based on the "power to hurt" (Schelling 1966, 3).

The nature of coercive diplomacy is eloquently articulated in the opening pages of the seminal work on coercive diplomacy by Thomas Schelling, "The Diplomacy of Violence." Coercive diplomacy relies so much on military force in the conduct of foreign policy that the concept of diplomacy in this literature is indistinguishable from statecraft though military instruments:

Diplomacy is bargaining... The bargaining can be polite or rude, entail threats as well as offers... The power to hurt can be counted among the most impressive attributes of military force... The only purpose ... must be to influence somebody's behavior, to coerce his decision or choice. To be coercive, violence has to be anticipated. And it has to be avoidable by accommodation. The power to hurt is bargaining power. To exploit it is diplomacy—vicious diplomacy, but diplomacy. (Schelling 1966, 1-2)

Hence, coercive diplomacy marks a sharp contrast to the hallmark of diplomacy peaceful instruments (Morgenthau 1973; Bull 1977). That is, although its peaceful nature makes diplomacy distinctive from other statecraft instruments such as military and economic coercion (Baldwin 1985), the literature on coercive diplomacy does not observe this difference.⁴⁰

 $^{^{40}}$ Gunboat diplomacy is one of the forms of coercive diplomacy that are frequently observed in the history, in which state leaders use the threat, show, and use of limited military force, especially naval power, in order to secure advantage, or to avert loss, in conducting diplomatic

Instead, one of the main implication about diplomacy in this literature is that diplomacy is ineffective by itself and secondary to military might. In it, this literature captures a folklore commonly referred to as "carrot-and-stick" strategies that are often advocated by the policymakers. By "diplomacy" scholars and policymakers alike typically refer to a set of positive inducements and assurances (George 1991). The common argument is that diplomacy, or positive inducements as carrot, works only if it is coupled with military force. According to George (1991, 11), the "carrot" (i.e., diplomacy) in complementing coercive threats can take a variety of forms that yield positive payoffs for the adversary including a concession of a face saving character and a concession with a genuine guid pro guo, and an example of this "carrot" includes John F. Kennedy's secret concession at the end of the Cuban Missile crisis. George (1991, 75) notes that "Kennedy offered substantial carrots as well as making threats in order to secure compliance with his demands." The "carrot-and-stick" or the combination of the intimidation that results from coercive threats and the reassurance yielded through positive inducements creates complementarities that state leaders cannot achieve with either one alone (Jentleson and Whytock 2006, 52). That is, the only type of sensible use of diplomacy is coercive diplomacy, and therefore diplomacy cannot be effective on its own: rather, it complements coercive military measures (George 1984; Stevenson 1997).

The "carrot-and-stick" approach as a way to understand the role of diplomacy was also employed by empirical deterrence scholars such as Huth (1988) and Leng (1993). These scholars have given attention to the role of positive inducements in combination with coercive threats as a means to turn diplomactic/political status quo more attractive to potential attackers without resorting to actual military

negotiation (Cable 1970; see also Mandel 1986). A typical example of gunboat diplomacy is the Agadir (Second Moroccan) Crisis in 1911, in which Germany placed a gunship, *Panther*, in the Agadir harbor of southern Morocco in an attempt to remove the French colonial control in the region (Snyder and Diesing 1977, Ch.3).

confrontations. Partly because Huth (1988) and Leng (1993) are substantively interested in bargaining styles as one of the determinants of successful deterrence, they see "diplomacy" as one of broad styles of bargaining which utilizes positive inducements as opposed to coercive pressure via military might.

The fundamental problem with the literature on coercive diplomacy as well as rational deterrence is that, because of its substantive interests in the art of (military) coercion in the statecraft in general and the efficacy of threats in particular, it effectively *presumes military coercion as a form of diplomacy* and fails to explore the role of normal forms of diplomacy. For this reason, analytical frameworks or empirical scholarship developed in this literature are not helpful in answering questions such as why leaders abandon diplomacy and resort to military coercion in the first place.

ENGLISH SCHOOL

Scholars associated with the English school and other European scholars have produced a large volume of writings on the reflection of the history of diplomatic practice and institutions, rather than work of diplomatic history per se.

The English school envisions that world order exists in the international system in the form of the international society, despite the anarchical nature of the system. This view is prominently articulated in Hedley Bull's (1977) well-known argument about order of world politics in the anarchical society. Given this, the main thrust of the English school is to uncover the nature and function of the international society and to trace its history and evolution (Buzan 1999, 4).⁴¹

According to Hedley Bull (1977), there are a handful of key institutions that maintain order in the anarchical society. Diplomacy is one such institution along

⁴¹A complete review of the English school is not the purpose here. For the recent treatment, see Linklater and Suganami (2006).

with war, sovereignty, the balance of power, power hierarchy, and international law among others. It is institutionalization of these shared norms, rules, interests, and identity that create and maintain the international society. It is in this context that diplomacy has long been a subject of study in this tradition because of this school's substantive interests in the evolution and practice of the international society and diplomacy is understood as one of the institutions in the international system whose evolution and expansion of the practice and norms have defined the international society.⁴² Scholars in the English school, in particular, among others Hedley Bull (1977), Herbert Butterfield (1953), James Der Derian (1987), Adam Watson (1984), and Martin Wight (1977), have written about the history of diplomatic practice and its institutions.

The common denominator for the English school's understanding of diplomacy is also well articulated by Bull (1977): diplomacy is conceptualized as an institution of the same kind as war and military coercion, and basic functions of diplomacy consists of intelligence (or information-gathering), communication among political leaders, negotiating agreements, and diplomatic manipulation to minimize fraction.⁴³

The institutionalization of these functions of diplomacy and the common practices did not occur instantly at a particular period of history; rather they were developed over centuries concurrently with the evolution of the international society, giving rise to the social and political practices of official representatives of states (e.g., the diplomatic corps) in a range of diplomatic institutional settings as well as a distinctive code of conduct involving ceremonial and diplomatic pro-

 $^{^{42}}$ Note that diplomacy itself is not the main concern of the English school. Rather, there are many different strands of work that comprise the English school's outlook, and the overall interest in diplomacy has been only modest, and has declined.

 $^{^{43}}$ As I will sketch out in the next chapter, intelligence (or information-gathering) has been separated into a different political organ, and hence in the modern diplomatic institutions the three other functions remain as the key mechanisms of diplomacy. For a theoretical inquiry into the determinants of the level of intelligence gathering, see Kirpichevsky (N.d.) dissertation.

tocols and privileges (Wiseman 2005, 412). In chapter 2, I provide a brief sketch of the historical evolution of diplomatic functions and their institutions.

Because one of the intellectual traits of the English school is its willingness to accept and embrace history and an interpretative approach, the work in the English school tradition not surprisingly tends to be a "thick description" of historical details of diplomacy rather than addressing questions about its causality in the same way that is dominant in positivist political science. Hence, despite its rich documentation of the story of diplomacy and its particular emergence in international society over the last five millennia, the studies in the English school lack a coherent analytical framework and hence are not well conducive to developing a scientific explanation of the mechanism of diplomacy.

Furthermore, reflecting the English school's substantive interests in describing the international society in the historical perspective, its analysis of diplomacy is rarely grounded in key insights about why states go to war. It simply does not address the questions regarding how and why diplomacy works in international disputes. For this reason, historical narratives or descriptive exploration of the process and conduct of diplomacy are not particularly helpful in facilitating our understanding of the puzzles of diplomacy and conflict resolution.

Lastly, I must add that, as Neumann (2001, 7) points out, it is not just the English school that has contributed to the historical description of diplomatic institutions. The recent contributions of the historical approach to diplomacy have been made by other European scholars who are not associated with (indeed some of them are critical of) the English school—such as Anderson (1993), Berridge (2002), and Hamilton and Langhorne (1995).⁴⁴ However, aside from the school territoriality or sectarian strife, the European scholarship on diplomacy in gen-

⁴⁴While it is not a recent contribution, we should not underestimate the significance of the work by Mattingly (1955).

eral has the same methodological and intellectual traits that are distinctive from most other mainstream theories of international relations.

SUMMARY OF THE LITERATURE REVIEW

The brief review of the various literatures jointly suggests that we are left with a gap between theoretical expectations and the empirical facts about diplomacy. The mainstream literatures on international security (i.e., the rationalist literature and the literature on coercive diplomacy) were carefully designed to explain a different set of phenomena than diplomacy. Nonetheless, their analysis commonly implies that international peace can be achieved most effectively through military commitments, implicitly downplaying the role of normal forms of diplomacy such as diplomatic communication, negotiations, and manipulations. This common theoretical implication, however, begs a further empirical question: if it is irrelevant to international relations, why is it that diplomacy as an institution existed for many centuries? In fact, the empirical literature (e.g., the English school) consistently suggests that diplomacy is one of the oldest international institutions of conflict resolution (or preventing) mechanisms, and as a prominent student of international politics observes, the diplomatic system is the master-institution of international relations (Wight 1978, 113). Historically, modern diplomatic institutions were created as a stable communication system by Italian city-states during the period of Renaissance in response to the security dilemma caused by uncertainty (Mattingly 1955, 51-76). Moreover, the empirical literature also provides anecdotal evidence suggesting that diplomacy plays some crucial role in settling international disputes short of war. At minimum, the existence of elaborated, long-standing, ubiquitous diplomatic institutions demands an explanation. As we shall see, the rationalist literature on war and crisis bargaining prove tremendously helpful in understanding how diplomacy works. But, as

it is, this literature has yet to enlighten us regarding why states have spent time and energy to create and maintain diplomacy and its institutions.

The aforementioned potential bias in the quantitative literature on international conflict suggests the underdevelopment of our understanding of diplomacy may be due to the empirical difficulty and limited observability of diplomatic activities, especially when diplomatic attempts are successful. Perhaps this asymmetrically distributed knowledge about diplomacy may account for why the firstrate observations about diplomacy and statecraft can be found, surprisingly, in reference manuals for professional diplomats (some of which are centuries old!) written by practitioners rather than historians or social scientists.⁴⁵ These authors draw on their personal experiences in diplomatic services and diplomatic missions that provide them with the lessons they have distilled from their own careers. To be sure, these authors seek to formulate a conceptual framework by epitomizing accumulated wisdom and lessons into their analyses of the profession of diplomacy. Yet, empirically identifiable causal mechanisms of diplomacy have seldom been systematically articulated by these practitioners; the more comprehensible, adequate social science treatment is much needed.

1.4 What We Need to Know About Diplomacy: Goals and Methodology

Arthur M. Schlesinger (1994) nicely summarizes what we need to know about diplomacy: our knowledge base of diplomacy "lacks a coherent analytical frame-

⁴⁵These writings include, among others, Thomas A. Bailey's *The Art of Diplomacy: The American Experience* (1986), François de Callières's *The Art of Diplomacy* ([1716] 1983), Jules M. Cambon's *The Diplomatist* ([1921] 1931), Harold Nicolson's *The Evolution of Diplomatic Method* (1954) and *Diplomacy* ([1939] 1963), Ernest Satow's A Guide to Diplomatic Practice (1922), Monteagle Stearns' *Talking to Strangers* (1996), and Abraham de Wicquefort's *The Embassador and His Functions* ([1681] 1997).

work. One wishes for more systematic answers to two questions: What are the criteria for successful diplomacy, and what were the occasions ... when successful diplomacy could have made a difference?" These are the issues that I address in this dissertation. That is, the ultimate goal of this dissertation is to establish a coherent and rigorous analytical framework that allows us to specify empirically identifiable mechanisms of diplomacy and its role in international disputes, so that we could interpret and analyze various historical and contemporary events as well as conduct empirically verifiable analysis of diplomatic affairs. Only through this process, can we offer "more systematic answers" to the questions that Schlesinger addresses.

BRINGING DIPLOMACY BACK INTO THE IR LITERATURE

Given the status of the current literature on diplomacy, achieving this goal involves establishing the study of what is considered as "normal diplomacy" (as opposed to coercive diplomacy) as a full-blown social science literature. As Charles Cameron pointed out, there are many ways to contribute to establishing a social scientific literature on diplomacy: "Those who assemble data, those who conduct case studies, those who analyze others' data, those who produce creative insights, ... those who build theoretical models all make valuable contributions" (Cameron 2000, 69). At minimum, we must seek to develop explanatory propositions about causal mechanisms of diplomacy in international disputes that capture a certain class of empirical cases rather than illuminate only a handful of cases. These theoretical propositions must be subject to empirical tests against a scientifically collected (or selected) body of empirical evidence. Empirical tests allow us to verify, falsify and critically evaluate competing theories.

The problem in this endeavor, however, is not that the international relations literature does not already have well defined answers; rather, the real problem is the lack of well defined questions. As I alluded to in the literature review, part of the problem with explaining the role of diplomacy in international disputes (and conflict resolution) is the lack of attention to deriving precise testable hypotheses. Rather, there is the abundance of vague empirical descriptions (or folklore) about how and when diplomacy works. Making this kind of folklore explicit and providing analytical frameworks to empirically evaluating them is a key part of developing research on diplomacy and contributing to the *accumulation* of knowledge on the role of diplomacy and its institutional arrangements.

Methodology

Although there are many ways to do good social science, the absence of well defined questions therefore forces us to focus on the development of theoretical foundations for the study of diplomacy. This is because theoretical foundations would tell us how we should begin to think about empirical puzzles about diplomacy. One must begin with building models of phenomena he or she wishes to explain because, as E.H. (Carr 1961) forcefully argues, what a historian regards as "facts" depends on the models he or she might hold whether explicitly or implicitly (See McCubbins and Thies 1996 for a more recent argument in this line made by political scientists). This seems to be certainly the case in the very subject of this dissertation. For example, certain anomalous observations about less public diplomatic communication or private dealings in international disputes are widely known to political scientists and diplomatic historians alike. Yet, the most influential work in the rationalist literature on international disputes explicitly rejected such a class of phenomena as "exceptions" (Fearon 1994a, 1995).⁴⁶

 $^{^{46}}$ This also points to the importance of studying anomaly for scientific advancement. As Thomas S. Kuhn (1962) famously spelled out, studying what appears to be abnormal is crucial for scientific discovery because it usually follows the recognition of the gap between what the paradigm induces us to expect to observe and what we can actually observe in nature. After all, we can never observe nature in principle, except for nature itself (or whatever one wishes to define to that effect, or God as someone sometimes defines so).

A question still remains: Why theoretical models? Why not empirical generalization? The short answer is that a theoretical model is a tool of empirical discovery. Models force us to take a fresh look at the otherwise overlooked aspect of a phenomenon. In the process of addressing puzzles about diplomacy, theoretical models help us recognize the existence and importance of factors that we would otherwise have overlooked. Put differently, I construct models so that empirical observation will be possible. Just looking at diplomacy and its institutions with the naked eyes may not help us understand scientifically how diplomacy really functions. Or else, we may not even know if we are looking at the right thing. This is where models are extremely helpful and models help us identify what we should look for. As we shall see in Chapter 5, for example, in explaining the rationality of secret dealings prevailing in the conduct of diplomacy, the theoretical model helps us recognize the significance of the face-saving aspect of secrecy as well as the insignificance of the credibility and informational efficacy that are regularly thought of as necessary for effective diplomacy. In this way, a theoretical model can enlighten us about what aspect of the phenomenon we should pay attention to.

On the other hand, empirical induction to some extent presumes that observers are already knowledgeable about how they should look at the same phenomenon. Moreover, empirical generalization assumes that a social scientist believes that she can observe what she wants to observe. This is certainly not the case here given the current status of the literature. Diplomacy and its institutions, like many other social phenomena, are abstract and not tangible. Models make them tangible and allow us to visualize them. Explaining mechanisms through theoretical models is more relevant in international relations because there is no explicit rule or institutions underlying strategic interactions between states unlike, for example, the committee system in the American legislature. Models are more in need than in the case where rules of the game are explicit or observable. Theoretical models explicate analytical frameworks, which helps organize research on diplomacy because it helps us understand what empirical questions to ask.

This way of the instrumental use of models leads to the next important issue: making predictions about diplomacy is certainly not the primary purpose of this dissertation; it is secondary (See Morton 1999 for the technical details in this line of arguments). Instead the primary goal is to explicate the mechanism by providing a solid micro-foundation for the study of diplomacy, which should serve as the analytical framework that provides useful ways to organize the empirical and theoretical study of diplomacy.⁴⁷ That is, theoretical models produce more than hypotheses. They explicate the mechanism, which is precisely the gap we need to fill because explication of mechanisms allows us to visualize the otherwise unobservable processes. Further, models highlight exactly how strategic factors both international and domestic—influence the success and failure of diplomacy. The results often allow us to obtain empirically falsifiable comparative static hypotheses about how diplomacy works in international politics.

It is in this context that establishing a micro-foundation should help us develop more specific, empirically identifiable claims about when, why, and how diplomacy matters and helps to solve a dispute short of war because theoretical models can generate comparative static predictions even though comparative statics analysis is not the primary purpose. Beyond the particular empirical questions that I ask in the subsequent chapters, the analytical framework offered in this study should (hopefully) be both sufficiently rich and tractable so that others

⁴⁷This is not to underestimate the importance of predictions in social sciences and indeed many formal models in political science are developed precisely to generate predictions. But the study of diplomacy has not gotten there yet. Unlike coercive diplomacy and nuclear deterrence, for example the normal forms of diplomacy have been much less explored or developed, and there is the dearth of the knowledge accumulation. The status of research in general is remote from the one where one can make reliable and meaningful predictions.

can use parts of it to address new questions and generate other crisp empirical predictions based on comparative static analysis, for example, of the circumstances under which diplomatic statements are likely to help leaders avoid war in the subsequent crisis bargaining, the conditions under which peaceful settlements through diplomatic negotiations are likely, the nature of diplomatic offers (i.e., degree of concessions), and so on. Thus, models of diplomacy must be at the forefront of work on the empirical investigations of diplomacy. Clarke and Primo (2006) call this method of inquiry the "model-based approach" to political science.

How I GO About This Task

Although it is unclear what factors derive the success and failure of diplomacy in solving international disputes short of war, or under what conditions the causal mechanism can be at work, there are abundance of vague descriptions about how and when diplomacy works.

This dissertation therefore begins with the reconstruction of what can be termed as a natural history of diplomacy, in which I basically sketch a historical overview of institutional development of diplomacy based on the historical descriptions (in the form of either practitioners' experiences or folklore) documented in the empirical literature.

Through a brief narrative of a natural history of diplomacy, I establish a series of stylized facts about how diplomacy works and its machinery by abstracting away from overwhelming complexities of diplomatic activities. Stylization is a simplification that is informed by the historical record and practitioners' experience. Historical descriptions however do not constitute a stylization in a direct manner; rather, they enter a stylization by informing us of what is the essence of a strategic environment in which diplomacy operates. Through this process, a stylization brings this essence into a sharper focus.

Three key functions of diplomacy are extracted through this stylization process: (i) diplomacy as communication; (ii) diplomacy as negotiation; and (iii) diplomacy as manipulation. For each of these functions, I develop the strategic logic that explains how and why diplomacy works in conflict resolution. To do so, building on the rationalist literature on war and crisis bargaining, I formalize some abstracted characteristics of each of these functions of diplomacy and its strategic context that are defined by stylizations. In this sense, stylizations serve as a mold to shape models.

Formal modeling basically involves the explication of a set of conditions that must be logically true for these stylized facts to be observed. Put differently, I will ask what are the joint consequences (or the equilibrium logic) about diplomacy given the typical set of assumptions in the common rationalist model of international disputes.

The goal of formalization is to explicate the mechanism of how diplomacy works, and to enhance the logical consistency and clarity of the answer to the original question. Formalization also helps us to describe a general and unifying analytic perspective that will draw out and clarify the relationships among these different types of diplomacy. This perspective should provide a context in which empirical questions about diplomacy may be addressed more precisely and related more clearly to other questions about war and international disputes.

This unifying perspective emerges when diplomacy is seen as a conflict resolution mechanism of the same kind as military coercion and warfare. Throughout this dissertation, I assume that the role of diplomacy in international disputes can be understood by a natural extension of bargaining theories of war. Hence, I explain how diplomacy works *in the same way as the existing literature explains the logic of war and military coercion*. The strategic logic of diplomacy, developed through these processes of stylization and formalization, will then be empirically illustrated or evaluated through case studies as well as large-N studies.

1.5 A Brief Tour of What Follows

To establish factually that the diplomatic institution has been maintained by political leaders for quite a long time, it is necessary to examine the historical evolution of diplomatic institutions over time in some detail. The institutions and functions of diplomacy have continued to exhibit variation throughout the history and therefore these various forms need to be explicated prior to any systematic theorization of how they behaved. This requires that the first part of this dissertation be devoted to a detailed demonstration of the role and functions of diplomatic institutions and norms in international disputes. In Chapter 2 I present a "natural history" of what we know today as diplomacy and its institutions without bringing in much theory, and this historical sketch elucidates some clear and interesting patterns in the use of diplomacy in strategic interactions in the shadow of war. In doing so, I offer a taxonomy of diplomacy that identifies three types of commonly observed diplomatic practice according to their key functions in international disputes: (i) diplomacy as communication; (ii)diplomacy as negotiation; and (iii) and diplomacy as manipulation. To better understand how to begin to ask empirical questions on the role of diplomacy in international disputes, I then identify general ways in which diplomacy is pursued commonly in most international disputes, by mapping each of the three types of diplomacy into the dynamics (and the sequence) of international disputes. This exercise will provide not only a vocabulary for thinking about diplomacy and stylized models of diplomacy (which I will refer to as "diplomacy games"). In the following chapters, a series of game-theoretic models of diplomacy will be

developed based on these these stylizations, each of which offers an empirically identifiable mechanism of diplomacy as well as empirical puzzles that must be explained.

The following chapters 3 through 6 then develop the logic to explain how each of these diplomatic functions-communication, negotiation, and manipulationfacilitates conflict resolution short of costly fighting. Chapter 3 considers diplomatic communication.

Diplomatic communication is often characterized as cheap talk because compared to other statecraft instruments such as military and economic coercion, diplomatic communication does not carry a cost on both ends of communication. The rationalist literature has already begun to address a series of interesting theoretical issues on this communicative function of diplomacy. This chapter asks three issues: the theoretical origin of the need for diplomatic communication; the cheap-talk nature of pre-crisis diplomatic communication; and the role of diplomatic institutions through the examination of these seminal contributions. I first examine a simple ultimatum game to demonstrate how uncertainty gives rise to positive probability of war, followed by the analysis of why it is hard to convey meaningful information through diplomatic communication under anarchy. And then I demonstrate how diplomatic institutions help cheap talk communication alter the subsequent crisis behavior and its outcome, and mitigate the ex ante risk of war in a way it would not be able to in the absence of diplomatic institutions. In so doing, this chapter demonstrates that the conventional conclusion that diplomacy is ineffective in conflict resolution only refers to a very limited aspect of diplomacy: diplomatic communication in the absence of diplomatic institutions. It is only in the presence of some appropriate arrangement of diplomatic institutions that the cheap-talk nature of pre-crisis diplomatic communication becomes effective and helps states avoid unnecessary wars.

Chapter 4 focuses on diplomatic negotiations and explores when and why political leaders abandon diplomacy and resort to military coercion. This chapter asks why diplomatic negotiations sometimes fail to reach peaceful settlements that both sides would prefer to the gamble of military coercion. The conventional wisdom is that diplomacy is useless unless relying on forces. The history of diplomacy and international crises does not support this assertion. As Hans Morgenthau (1973, 519) observed, "When nations have used diplomacy for the purpose of preventing war, they have often succeeded." To answer this question, this chapter presents the second diplomacy game, in which two states conduct diplomatic negotiations to resolve an international dispute, following an infinitehorizon, alternating-offer bargaining protocol. This game explicitly distinguishes between bargaining and coercion in conflict resolution, by allowing each player to decide in turn whether to continue diplomacy or to "opt" out of diplomacy to launch a military coercion subgame. This model allows us to explore why diplomatic negotiations sometimes fail to reach peaceful settlements that both sides would prefer to the gamble of military coercion. The model is purported to connect two distinctive classes of models under one theoretical framework. Namely, this model subsumes both signaling and bargaining models of crisis bargaining.

Chapter 5 explores how secrecy serves as manipulative device during crisis diplomacy that allows leaders to avoid increasing the risk of inefficient outcomes of a crisis such as unwanted wars and costly diplomatic humiliations. To examine the role of secrecy, I ask when and why political leaders choose to communicate privately in crisis diplomacy. To do so, I present the third diplomacy game, where a challenger can make a threat either in public or in private in the presence of domestic audiences. When a threat is issued privately, the challenger cannot enhance its credibility by tying its hands because domestic audiences cannot observe the threat. I show that although private threats convey only limited credibility, it is rational to make them under certain conditions, because their rationality stems not from the informational efficacy but from their less provocative nature. Further, private threats improve efficiency by expanding the range of peaceful outcomes as long as a crisis takes place before multiple audiences because its credibility is derived from the defender's sensitivity to audience costs. These results suggest that secrecy works in diplomacy despite its informational inefficacy because it saves leaders' face with domestic audiences from costly diplomatic humiliations.

Chapter 6 presents a set of anecdotal evidence to the logic of efficient secrecy proposed in Chapter 5. To illustrate main theoretical propositions, Theodore Roosevelt's successful use of private threats in the Alaskan Border Disputes in 1903 is compared to Richard Nixon's unsuccessful use of secret nuclear alert in 1969 in a way to compel the Soviet Union to bring Ho Chi Min to Paris to end the Vietnam War.

Finally, the conclusion of this dissertation will tie together the preceding chapters by drawing more general implications in light of the critiques I have launched and the solutions I have proposed.

CHAPTER 2

A Natural History of Diplomacy

It is a capital mistake to theorize in advance of the facts. — Sherlock Holmes, "The Second Stain"¹

To better understand how to begin to ask empirical questions on the role of diplomacy in international disputes, this chapter reconstructs a natural history of diplomacy and then establishes three stylized models of diplomacy.² To do so, I draw from the empirical literature on the history of diplomacy, especially from the English school and other related European IR scholarship. The reconstruction of a natural history and stylization help us identify general ways in which diplomacy is pursued commonly in most international disputes. Because a natural history exhibits enormous complexity, stylization is the process of transforming this chapter attempts to (i) document some direct observations of diplomatic activities and its institutions without any specific theoretical conceptions and then (ii) classify these activities into taxonomic groups according to their functions. Note that it is not my purpose here to provide a comprehensive review on the development of diplomacy; rather, the immediate purpose of the natural history

¹A. Conan Doyle. 1904. "The Adventure of the Second Stain." *Strand Magazine* 28 (December): 1-16.

²The term "natural history" refers to the scientific study of things in the natural world, which can encompass the broad range of natural-scientific disciplines depending on the context and the historical period. Its methodology primarily involves direct observation and collection as well as classification of species into the taxonomic schema. Its lesser emphasis on theoretical foundations or analytical rigor is distinctive from *natural philosophy* which corresponds to the modern-day mainstream natural sciences.

here is to provide stylization of key machineries of diplomacy in international disputes and conflict resolution.³

This approach is somewhat unusual in modern political science since the identification of general patterns in the interested phenomena (or the dependent variable(s)) is typically done by the exploratory analysis of quantitative data in a search for some structure and the variation in the data as reliable patterns. Such an exploratory analysis can also be done by analyzing (or critically reviewing) a set of stylized facts already available in the relevant empirical literature. Yet, as I have argued in Chapter 1, because quantitative data on diplomatic activities are hard to come by and because the consensus over the definitions of diplomacy does not exist, none of these is a possibility. Therefore, in lieu of exploratory data analysis, I construct some stylized facts of how diplomacy works and search for some structure in those stylized facts in order to extract empirically identifiable patterns of diplomatic activities in the course of international disputes.

This approach also helps us establish factually that the diplomatic institution has been maintained by political leaders for quite a long time. This process is rather crucial given the fact that the IR literature as a whole has not paid adequate attention to the role of diplomacy. A brief narrative of a natural history of diplomacy will be helpful for those who are not familiar with the variations of the institutions and functions of diplomacy throughout history. This exercise will provide not only a vocabulary for thinking about diplomacy but also the empirical puzzles that must be explained.

This chapter proceeds as follows. First, I briefly overview the historical evolution of diplomatic institutions. Each account of the historical period identifies

³Hence, the natural history here omits many important aspects of diplomacy that are not directly relevant to international disputes or conflict resolution. For the comprehensive treatment of the historical evolution of diplomatic institutions and practices, see Anderson (1993), Hamilton and Langhorne (1995), Nicolson (1954), and Nicolson (1963). References for more detailed description of a specific historical stage are furnished in the relevant subsections below.

some significant inherited institutional feature(s) of modern diplomacy. It also describes a strategic problem—international, domestic or both—behind the emergence of each function. Second, I identify three key functions of what we know today as diplomacy: (i) diplomacy as communication; (ii) diplomacy as negotiation; and (iii) and diplomacy as manipulation. Finally, I present a stylized model for each of these functions of diplomacy. These stylizations are formalized in the following chapters of the dissertation.

2.1 Evolution of Diplomatic Institutions: A Historical Sketch

The style and functions of diplomacy have evolved as the development of human society. The changes in political order, economic environments, technological advancements have all had profound impacts on the way political leaders conducted diplomacy. For example, modern telecommunication techniques and the improved jetliners have drastically improved the mobility and altered the way actors behave in international politics. Reflecting on the experience of secret alliances involving the Triple Alliance and the Triple Entente and their roles in the expansion of World War I, the importance of transparency in diplomatic processes and democratic procedure in the collective decision making among states has become recognized since the end of the War. These two examples illustrate how political, economic, and technological changes may create the need for a particular institutional arrangement or function of diplomacy, which in turn may constitute the strategic logic for the creation of a given set of diplomatic institutions. Hence, it is important to consider how and why the existing diplomatic intuition and practice came forth in international relations.

While the history of diplomacy exhibits a great deal of variability, the basic

functions of diplomacy and their machinery have not changed. Indeed, the central features of diplomatic institutions have survived the fundamental shifts in the order and structure of international politics such as the surge of nationalism and democracy and the incorporation of non-European countries in the international system. They also survived catastrophic events such as the Great Wars and the wane and wax of hegemons. Writings by diplomatic theorists such as Richelieu, Callières, Wicquefort, Nicolson, and others, reveal that virtually nothing has changed over the last several centuries with regard to the basic functions of diplomacy-the maintenance of communication channels, the conduct of negotiation, the provision of political intelligence, and political manipulations behind the scene. Two decades ago, Hedley Bull (1977, 171) wrote: "The remarkable willingness of states of all regions, cultures, persuasions and stages of development to embrace often strange and archaic diplomatic procedures that arose in Europe in another age is today one of the few visible indications" of the relevance of diplomatic institutions. Because of its remarkable stability, the diplomatic system is sometimes referred to as the "master-institution of international relations" (Wight 1978, 113).

2.1.1 First Documented Diplomatic Practice: Amarna Diplomacy in Ancient Near East

While the norms and practice of modern diplomacy have taken shape between the period of Renaissance Italy (in the 15th century) and the creation of the Westphalian system (in the 17th century), the rudimentary form of what we know today as diplomacy existed ever since the first social communities and political collectives emerged and interacted with each other. As Nicolson (1963, 2) notes, "The origins of diplomacy lie buried in the darkness preceding what we call 'the dawn of history'," the available evidence suggests that the earliest recorded diplomatic activity took place about 3400 years ago between the Old Hittite Kingdom of Anatolia and the Eighteenth Dynasty of Egypt (New Kingdom).

A series of cuneiform clay tables, collectively called "Amarna Letters," were first discovered and unearthed by a local farmer in 1887 (and successively by archaeologists) at the ruin of dynastic capital, Tell el-Amarna, of the Ancient Egyptian New Kingdom (Cohen and Westbrook 2000, Ch.1).⁴ The archive contains numerous diplomatic correspondences between the Egyptian dynastic power and the neighboring powers in the ancient Near East for the thirty-year period beginning from final regnal years of Amenhotep III to the first regnal year of Tutankhamun in the 14th century BC. These diplomatic documents on cuneiform tables indicate that diplomatic negotiations were going on some 3400 years ago between the Egyptian kingdom and the Hittite kingdom as they had severe conflict of interests and they were competing for the control in the Near East region.

During the the nineteenth dynasty of the Egyptian dynasty, which was known for its military campaigns in the Near East, in an attempt to remove the influence of Hittite militarily to seize the control of the colonial territory of modern-day Syria, Pharaoh Ramesses II devastated King Muwatallis in Kadesh, a city on the frontier between the two rival kingdoms: This is one of the best documented battle in the Ancient Near East, called the Battle of Kadesh. Ramesses II and Muwatallis afterwards concluded a peace treaty in which they agreed on the exchange of political refugees and asylum seekers, mutual military assistant, the mutual territorial inviolability, and the inter-dynastic marriage of a daughter of Muwatallis and Ramesses II. This treaty is said to be the oldest recorded treaty in the history. Yet, the fact that this treaty was concluded about fifteen years after the Battle indicates the difficulty in reaching an agreement. It may also

⁴For the detailed discussion of the diplomatic activities between the great powers in the ancient Near East (known as *Amarna diplomacy*), see Cohen and Westbrook (2000) and essays therein as well as Lafont (2001).

probably suggests the great difficulty of communication with each other in the era when neither jetliners nor telecommunication was available. Not only does it take time for diplomatic envoys to travel, but also exchanging missions would have involved a great deal of uncertainty as to the safe reception of diplomatic messages. This later leads to the institutionalization of diplomatic agents and embassies as well as their special status such as diplomatic immunity. Sir. Harold Nicolson (1963, 6) wrote "From the very first, ..., it must have become apparent that such negotiations would be severely hampered if the emissary from one side were killed and eaten by other side before he had had time to deliver his message. The practice must therefore have become established even in the remotest times that it would be better to grant to such negotiators certain privileges and immunities which were denied to warriors." Hedley Bull (1977, 172) similarly wrote that "Before the advent of postal services, cables, radio and television, the herald or messenger was a *sine qua non* of communication between separate political communities."⁵

Furthermore, what the Amarna letters signify is that what we today call diplomatic missions were deployed by political leaders to conduct diplomatic negotiations from very beginning of the recorded history of international relations. Hence, as Berridge, Keens-Soper and Otte (2001, 108) note, "the practice of sending agents abroad for specific purposes, sometimes for lengthy periods, is as old as commerce, suspicion, rivalry and war, reaching back thousands of years to ancient Mesopotamia."

⁵For the discussion of (non-)existence of diplomatic immunity in the ancient Near East, see Elgavish (2000).

2.1.2 Beginning of Diplomacy: Ancient Greece

The origin of "diplomacy": Another root of modern-day diplomacy can be traced back to the Greek city-states. In particular, the English word "diplomacy" is derived from the Greek verb "diploun" which means "fold" in English and also from "diplomas" which means "folded documents" (Inoguchi 1989).⁶ This is because what we would now call diplomacy in the age of ancient Greece was the city-states' practice of mutually recognizing the safety of passage of their own citizens outside of the sphere of their influence. In the age of ancient Greece, travel documents, passes, and carriage bills were sealed on a metal plate, folded, and sewed up together in a peculiar way. Such a document on a metal plate was called "diplomas" and this term over time has become also to mean official documents. Nicolson notes that "res diplomatica", which initially meant the vocation that examines and interprets official documents, came to indicate what we now know as diplomacy, the management of inter-governmental affairs.⁷ This indicates that one of the fundamental functions of diplomacy is the medium of communication between government authorities via "diplomas" from the age of the ancient Greece.

Diplomatic practice: Since ancient Greek city-states were known for its democratic polities, their practice and procedure of diplomacy were also marked by the traits of their diplomatic governance. In particular, these traits include frequent exchanges of diplomatic envoys, the publicity and transparency in the conduct of diplomacy, and its use of the conference decision-making in diplomatic negotiation.

⁶Other studies that discuss the origins and uses of the term *diplomacy* include Constantinou (1996), Sharp (1999). For a a more detailed treatment of the diplomatic practice in the ancient Greece, see Cohen (2001), Hamilton and Langhorne (1995, Ch.1), Mosley (1971), Mosley (1973), Nicolson (1963), and Wolpert (2001).

⁷According to the Oxford English Dictionary, the term "diplomacy" was first used to mean the management of international relations in 1796.
The primary task of diplomatic envoys in the Greek city-states was not just to convey the message but to make a speech in person on behalf of its own city in front of the walls of the foreign city-states or to debate in person to justify the home city's position before the public assemblies (Adcock and Mosley 1975; Jönsson and Hall 2003; Nicolson 1963). Therefore, they "were not expected to acquire information regarding the countries which they visited or to write any reports on their return; all that was expected of them was that they should make a magnificent speech" (Nicolson 1963, 8). "It was rather" Hamilton and Langhorne (1995, 9-10) note, "as if the principal skill expected of a British ambassador to the United States was to produce a fine forensic performance before the Senate Committee on Foreign Relations." Therefore, the envoys were selected from those who had dignified attitude and appearance as well as loud voice, in addition to the ability to engage in logical and inventive argumentation.

Perhaps the most famous episode of envoys in ancient Greece pleading the cause of their city before the popular assemblies was Thucydides' account of "The Melian Dialogue" (Thucydides 1972). This is the story where the hegemonic city-state Athens demanded Melos (a colony of Sparta) to surrender. The Athenian envoys argued that Melos should submit to the demand because Melos is weaker not only than Athens who controls the sea but also weaker than other islanders. In response to a Realpolitik argument, the Melian commissioners, appealing to the justice and moral that are embodied in the Laws of Nations, argued that they should not be forced to surrender just because they are weak.⁸ Thucydides documented many other episodes and provided crucial information concerning the diplomatic practice in ancient Greece. Thucydides' story-telling indicates that diplomatic missions, such as the Athenian envoys to Melos, were dispatched

⁸Note that this dialogue actually took place at the closed-door meeting of the Council of the Melians despite the fact that diplomatic negotiation among Greek city-states were normally conducted publicly through the debate.

so frequently that their exchange of missions were fairly institutionalized.

While the Athenian "practice of choosing as their Ambassador the finest orators, the most plausible forensic advocates, that the community could produce" (Nicolson 1963, 7), seems to still remain intact today. Throughout the history of diplomacy from the ancient Near East and ancient Greece, diplomatic communication and negotiation are carried out with the power of reasons and language rather than naked force. We can also observe the remarkable similarity between the practice of diplomacy in antiquity and the one of today, and it seems obvious that the institutional development of diplomacy began in antiquity, and that it has developed continuously thereafter. However, one notable exception to linear progress in the history of the institutional development of diplomacy was the Roman empire.

2.1.3 Stasis of Diplomacy: Roman Empire

The Roman Empire stands out in many respects in the history of international politics. The most notable is its extended sphere of influence and its longevity in the hegemonic status. The Roman Empire also marks a turning point in the history of diplomacy in its lack of contribution to the development of diplomatic institutions and practice. The Roman Empire barely relied on diplomacy in the management of its international relations. In fact, the Roman Empire is one of the few leading states with the hegemonic status, which did not utilize diplomacy in the maintenance its supremacy.⁹ There are primarily two

⁹Two more superpowers that contributed little to the development of diplomacy are the United States of America and the Soviet Union. In Chapter 1, I discussed how scholars of international security have lost interest in diplomacy since the beginning of the Cold War. Below, I shall briefly show that the way diplomacy became less relevant in these two superpowers has the remarkable similarity with how Roma lost the institutional capacity to conduct diplomacy as the Senate was marginalized out of the decision-making process when Roma transformed from the republicanism to the dictatorship.

factors explaining the Roman Empire's lesser engagement in diplomacy.¹⁰

The first factor was the declining role of the Senate in the Roman Empire. While the Roman Empire metamorphosed from the Roman Republic, diplomatic procedures and practices that resembled those developed in Greece were used, and it was the Senate that was in charge of foreign affairs during the early phases of the Roman Republic. As the Roman Republic transformed into the Roman Empire, the Senate metamorphosed from the primary governing authority with the decision-making power¹¹ to an advisory council. Although the Senators continued enjoying their privileged status, the Senate was deprived of its power in the dictatorial decision making and marginalized to a mere symbolic role. And so too was its diplomacy, and the Roman empire did not establish the alternative procedures of diplomacy. As a result, the Roman Empire was not equipped with any other central institutions to manage its foreign affairs, and diplomatic transactions that took place were in response to the request from other countries on an *ad hoc* basis.

The second factor is due to the overwhelming reliance on the military and the "colonial" approach in the conduct of foreign policy. According to Nicolson (1963, 9-10), once the Roman Empire achieved its supremacy, its foreign relations with neighboring countries were "conducted from colonial and administrative point of view, rather than from the diplomatic point of view. [The Romans] did little, in fact, to create an expert body of trained negotiators. [...] At the worst, [the Romans] were ruthless in their objectives and brutal in their methods, ... their methods were those of the legionary and the road-maker rather than those of the diplomatists." Problems in its foreign relations with neighboring powers "were usually dealt with on the spot, often by military authorities, and this became

 $^{^{10}}$ For a more comprehensive treatment of diplomacy in the Roman world, see Campbell (2001), Hamilton and Langhorne (1995, §1), and Nicolson (1963).

¹¹The power includes the power to conduct war as well as to send and receive diplomatic representatives.

more common when the great crisis developed in the East with the expanding Sassanid Empire in Persia" (Hamilton and Langhorne 1995, 13).

The immediate cause of the fall of the Roman Empire has been a great source of scholarly interests, and the consensus on this issue is that the heavy reliance on its military capability in managing its international relations had left the Empire overstretched, undermining its governing effectiveness. It is interesting to notice that one of the main reasons for the inactiveness of diplomacy was also the decisive driving force behind the decline of its supremacy and eventually its fall.

Inheriting the successor's declined military capability, the East Roman Empire could not afford to rely on its military and hence had to rely on diplomacy in order to maintain its territorial integrity. Because of its constant effort to supplement its weakened military with the engagement in diplomacy, the East Roman Empire made a marked contribution to the development of diplomacy, and its practice and institutional characteristics are known as "Byzantine diplomacy."

2.1.4 Byzantine Diplomacy: Middle Ages

The next turning point in the development of diplomacy occurred with the fall of the Roman Empire. While Byzantine diplomacy is known for its ceremonial and sublime aspect as well as its manipulative and cunning conduct of foreign policy, these traits are products of Byzantium's rational response to its unfavorable strategic setting. Specifically, because the East Roman Empire (i.e., the Byzantine Empire) was not able to rely on the overwhelming military capabilities, the Empire had to maintain its security and imperial status by other means: diplomacy. The primary challenge to the Byzantine Empire was that it was surrounded by an array of countries posing the threat of invasion from almost all quarters, although the only resource that Byzantine empire possessed was the legitimacy as the imperial status that it inherited from the late Roman Empire.¹²

Diplomatic Manipulation: In order to supplement the deficiency of the strong military, the Byzantine Empire had to resort to diplomatic efforts in attempts to manipulate the international security environment through alliance formation and the balance of power.¹³

The key strategy behind such diplomatic efforts that the rulers of Byzantium adopted, involved the awe and sublime rather than terror or fear (see also Neumann 2005) as well as secrecy (Thompson and Padover 1963, 15). The most evident example of the former strategy is the conversion of the Empire to Christianity, which rendered the Roman Emperor a conjugation of divine power (religious) and secular (political) power. With this arrangement, the Byzantine Empire became not only the center of the world (due to its inherited hegemonic status) but also the representative of God. As a consequence, all other political leaders and rulers were forced to be positioned inferior to the Empire, and those who attack the Empire must "expect the wrath of God because it was 'superior to every authority on earth, the only one on earth which the Emperor of all has established' (Hamilton and Langhorne 1995, 15). While this concentricity arrangement also had the effect of providing the religious basis to the diplomatic method of the rulers of Byzantium, it was essentially part of the larger diplomatic strategy: to overwhelm visiting ambassadors with flashy displays. Hence, the key theme of the procedure and practice of Byzantine diplomacy were designed to impress foreign visitors by displaying the physical appearance of absolute superiority. It is

¹²The neighboring rivals included the Slavs, the Turks, the Arabs, and the Germans among others. For a more comprehensive treatment of Byzantine diplomacy, see essays in Shepard and Franklin (1992). See also Hamilton and Langhorne (1995), Neumann (2005), and Nicolson (1963).

¹³According to Nicolson (1963, 10), three techniques that the Byzantine emperors employed in particular for this purpose include: (1) the provocation of rivalry between the "barbarians" to weaken them; (2) the purchase of the support from the "frontier tribes and people by subsidies and flattery;" and (3) the conversion of the "heathen to the Christian faith."

in this context that the luxurious ceremonial protocol arose to the standard of diplomatic practice. The Byzantine influence on ceremonial procedure of diplomacy was adopted by Venice and Genoa (who were friendly allies due to their commercial connections), which in turn spread as the Italian System of diplomacy spread to the rest of Europe beyond the Alps (see the following section for these dissemination processes).

Other tactics included flattery and bribery, dynastical marriage, and hostagetaking. Members of the ruling families would routinely be requested to stay on in Constantinople.¹⁴ Bribery and flattery played a crucial role in the Empire's diplomatic efforts in alliance formation and power balancing. In particular, as Nicolson (1963, 10) writes, "The method of playing off neighboring despots one against the other" made it essential that the Byzantine emperors should be fully informed about the preferences, intention, and capabilities of the target neighboring countries. This elevates the collection and organization of information to the upmost importance.

Importance of Intelligence: In the serious deficiency of military capability, the diplomats were not expected to play the role of messengers or orators; rather their primary task was to collect and report relevant information on the political situation of neighboring countries as well as the strategic and power relations among them. That is, Byzantine diplomacy primarily functioned as the acquisition and assessment of intelligence information. Recall that in ancient Near East, the primary role of diplomats was conveyance of messages between political leaders as they were conducting diplomatic negotiation, and that diplomats of Greek city-states were primarily public debaters. Hence, it is worth emphasizing that diplomacy had not fully developed its informational function until the Byzantine

¹⁴The similar practice of taking family members of the nobles as hostages was instituted by some of historical notable dictators including the Tokugawa shogunate, the feudal military dictatorship of Japan during the Edo period (1603-1868), and King Louis XIV of France.

Empire systematically assigned intelligence activities to their diplomats. The informational role of diplomats at this stage of the development of diplomacy was not completely separated from the role of espionage or spy. Because the primary task expected of diplomats was to discover the secrets of the courts where he resides, a French diplomatic theorist Abraham de Wicquefort, who witnessed the Congress of Westphalia (Keens-Soper 2001b, 88), once referred to an ambassador as an "honorable spy" (Wicquefort 1997).¹⁵ Until the Modern Age an ambassador simultaneously played the roles of both a diplomat and a spy.

The informational role of diplomacy is occasionally emphasized throughout the history, as it helps political leaders avoid the expenses of unwarranted wars. In the case of Byzantine diplomacy, intelligence gathering and assessment concerning the preferences, intentions, and military capabilities of potential enemy were the principle tools of Byzantium, and it saved Byzantium from the cost of war. The Byzantine Empire hardly won a military victory in the last 150 years before the fall of Constantinople in 1453 as it became increasingly deficient in fighting capabilities. As theorists recently put it, diplomacy "functioned as a way to determine whether the issue at hand was critical enough to fight for" (Guisinger and Smith 2002, 176), and this characterization of the informational function of diplomacy was exactly the Byzantine Empire's answer to its strategic environment. After all, unlike its precedent, diplomacy, not military, was Byzantium's greatest strength.

2.1.5 The Italian System: Renaissance Diplomacy

Perhaps the most documented period in the development of diplomacy is Renaissance Italy, in which the rudiments of what we today know as diplomacy

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¹⁵This phrase also appear in the work of another a French diplomatic theorist François de Callières, who served Louis VIX as his courtier (Callières 1983, 80).

first began to take shape. In particular, the most important invention in the development of diplomatic institution took place in the Italian city-states during the Renaissance period. That is, the system of resident ambassadors residing at permanent embassies in foreign countries was first institutionalized in the second half of the 15th century in northern Italy and later spread throughout the rest of Europe over the following centuries.

Changing Security Environment and the Treaty of Lodi: The Renaissance was underway in Italy roughly from the 14th century. During about the same period, Italy was constantly menaced by persistent military conflict, with Italian city-states engaging in power struggles for the hegemonic control of the peninsula. With the long history of antagonism and constant warfare in a precarious society, the city-states were awakened by the fall of Byzantine Empire in 1453.¹⁶

While the fall of the Byzantine Empire strongly signaled the imminent risk of the expanding influence of the Ottoman Empire, the Italian city-states were poorly equipped for war against the Ottoman Turks, not to mention their markedly small size. The military capability of each of the Italian city-states was nothing to comparable to the Ottoman Empire's standing army—exactly the same challenge that the Byzantine Empire was confronted with. In addition, Italy was also harassed by France, as the House of Valois had grown its territorial ambitions towards Italy after successfully unifying the territory of France.

Under the external threats posed by the Turks and French, it is natural that Italian city-states then sought out for a collective security system as their strategy to fend off the external threats and turned to diplomatic efforts to manage their

¹⁶For a more detailed description of the politics and international relations in the background of the emergence of Renaissance Diplomacy, see Hale (1957), Mallett (1994), and Mattingly (1955). For a brief overview, see Anderson (1993, Ch.1) and Hamilton and Langhorne (1995, Ch.2).

alliances. A year after the collapse of the Byzantine Empire, five great powers in Renaissance Italy—including Venice, Milan, Papacy, Naples, and Florence—came to peace and concluded the Treaty of Lodi in 1454. This is a series of treaties effectively agreed on non-aggression and mutual defense between them.¹⁷ This treaty put an end to the warring period among city-states, and they would enjoy forty years of peace without "significant territorial changes, no large alternations in the relative positions" among them (Mattingly 1937, 432). Renaissance blossomed under the peace and stability brought about by the Treaty. This treaty brought 40 years of peace on the Italian peninsula, forming a new but "unstable equilibrium," without any major fighting among these great powers (Mattingly 1937, 432). It was under this peace equilibrium that Italian city-states established the system of resident ambassadors to maintain their non-aggression principles.

Resident Ambassadors as a Stable Communication System:¹⁸ Because the Italian city-states had been in the prolonged warring period prior to the Peace of Lodi, they still needed to establish assurance arrangements in order to overcome the mistrust and security dilemma that hindered any cooperation and coordination of its security policy. Moreover, because this "unstable equilibrium" of peace among former enemies hinged on the delicate balance of power between them, "diplomatic alertness was of the first importance" (Mattingly 1937, 432).¹⁹

It is against this strategic background that city-states in Renaissance Italy

¹⁷The Treaty of Lodi was actually concluded between Venice and Milan. But it is also used to refer to other related agreements among other city-states including Naples and Florence, as five great powers were typically divided into two camps, in which Papal states allied with Venice, while Milan allied with Naples and Florence.

¹⁸For more detailed discussions on the practice of diplomacy beyond the resident ambassadors during the Renaissance, see Bull (1977, Ch.7), Frigo (2000), Ilardi (1962), Ilardi (1987), and Nicolson (1954, Ch.2).

¹⁹The history of Renaissance diplomacy is still dominated by a single book published over a half century ago—Garrett Mattingly's (1955) *Renaissance Diplomacy*. Mattingly's accounts of Renaissance diplomacy are taken to be standard, or even conventional wisdom. Yet, essays in Frigo (2000) challenges many of Mattingly's theses. For example, the development of resident permanent embassies did not emerge as an assertion of sovereignty as Mattingly claims; rather, they emerged from concerns over sovereignty and legitimation (Fubini).

came to set up a stable and efficient communication network in order to maintain this league of peace, and the diplomatic machinery that they devised was the exchange of resident ambassadors residing at permanent embassies in foreign citystates. Resident ambassadors's role was somewhat similar to a fire-alarm that would transmit the "alarm when any power threatened to upset the balance" (Mattingly 1937, 432). Given this strategic environment, the usefulness and the necessity of the resident ambassadors immediately became obvious. Soon after the Treaty of Lodi was concluded, Italian city-states started exchanging residents.²⁰

The role played by ambassadors residing in the capital of foreign countries was as essential as the standing army in the management of international system of Northern Italy. Resident ambassadors and permanent embassies were unprecedented in character. Indeed, the system of diplomatic envoys in ancient Greece were on an *ad hoc* basis and dispatched to carry out a particular mission with a specific issue. Similarly, the diplomatic messengers carrying the Amarna letters in the ancient Near East were also selected on a temporary basis.²¹ The seminal difference between before and after the establishment of permanent diplomatic missions is that throughout earlier times, diplomatic envoys did not occupy their posts at the courts of foreign rulers on a continuous, regularized reciprocal basis. Sporadic exchanges of diplomatic missions on the *ad hoc* basis were inadequate among great powers in Renaissance Italy. As the external affairs of great powers

²⁰It is tempting to conclude that the unstable equilibrium of peace among the Italian citystates after the Treaty of Lodi caused the first exchange of resident ambassadors. In fact, there exist an alternative account of the first resident ambassador, which claims that Francesco Sforza, the duke of Milan, was the first to send a resident ambassador to Genova in 1455, following the conclusion of the Treaty. Yet, according to Mattingly (1937), the available document indicates that the first *documented* resident ambassador was actually dispatched in 1375 by Mantua to Milan. By the time the Treaty of Lodi was concluded half-century later, the exchange of resident ambassadors was already considered as "normal, or at least desirable, between" city-states with alliance ties (Mattingly 1937, 432).

²¹However, there is evidence that a same person tended to be selected as a diplomatic messenger in the ancient Near East because of the language necessity.

became increasingly enmeshed in their alliance network with shifting preferences and changing military tensions among them (along with the changing security outlook), the conduct of occasional diplomacy on the ad hoc basis became increasingly difficult (Berridge, Keens-Soper and Otte 2001, 108).

Soon after Francesco Sforza dispatched his first resident ambassador in 1454, other Italian city-states one after another dispatched resident ambassadors.²² For the following forty years, the Italian League utilized the communication system consisting of the network of resident ambassadors and successfully maintain the "balance of power" among them. And it was through this process that the resident ambassador and permanent embassies were established as a key component of diplomatic machinery. Because this type of diplomatic machinery was established by Italian city-states, Harold Nicolson calls it the "Italian system" of diplomacy.

The Italian system of diplomacy was gradually adopted in other parts of Europe, and over time constituted a foundation for the modern diplomatic system. The irony is that one of the documented catalyst in the spread of this diplomatic machinery to the north of the Alps came when the "peace of Lodi" collapsed as the Italian city-states were once again thrown into the menace of warfare by the invasion of Charles VIII of France in 1494.²³ When Charles VIII invaded Italy, Pope Alexander VI opposed it by forming the Holy League (a.k.a. the League of Venice) with the help of the Holy Roman Emperor Maximilian I, Ferdinand of Aragon (Spain) as well as his Italian allied states, Venice and Milan, and subsequently repelled the French invasion. The formation of the Holy League was successful partly due to the outstanding performance of Spanish resident ambassadors of Ferdinand at the courts of European countries (including Rome,

 $^{^{22}}$ Niccolò Machiavelli refers to Francesco Sforza in his book, *The Prince*, as an example of good governance and use of mercenary.

²³Charles VIII's excuse of invasion was that he inherited Naples from the House of Anjou (Angiò in Italian).

Venice, London, Brussels, and Vienna). Impressed with this success, European monarchs came to realize the utility of resident ambassadors and permanent embassies, spreading the Italian system of diplomacy throughout the rest of Europe in the 16th century (Elliott 2002). By the onset of the Thirty Years' War, the spread and formation of resident ambassadors and permanent diplomacy was largely complete (Mattingly 1955; see also Keens-Soper 1973).²⁴

It was the Byzantines who taught the diplomatic practice to Venice, and the Venetians in turn set the pattern for other city-states in Italy (Nicolson 1963, 24). Over centuries, the Italian system spread throughout Europe in the sixteenth century, and as Wiseman (2005, 411) puts it, resident ambassadors and permanent embassies gave the modern diplomacy its signature. The Thirty Years' War had the disastrous effect upon European diplomacy because ambassadors were prone to forget that their function was to make peace, which was originally envisioned in the "Italian System." Many of them instead ended up engaging in espionage and subversion.

2.1.6 The French System: 17th & 18th Centuries

If Renaissance Italy gave birth to the modern diplomatic system, France in the 17th and 18th centuries perfected it.²⁵ Absorbing the Italian system of diplomacy based on the system of resident ambassadors, a "distinctively French approach to diplomacy" solidified as the French system of diplomacy in the the second-half of the 17th century (Keens-Soper 1973, 490). Around the conclusion of the Thirty Years' War, Louis XIV of France replaced Habsburg Spain as the leading power,

²⁴Note, however, that because the European courts during this age were not stationary but mobile, resident ambassadors who were sent to a court did not reside at a permanent embassy but they traveled along with the court that they was accredited to.

²⁵The word "diplomacy" had not become current in the modern sense until 1796, according to the Oxford English Dictionary.

dominating the affairs of Europe.²⁶ As French power reached its culmination, her language and culture also had profound influence on the European courts. With the pre-eminence of the political power and culture, French practice of diplomacy also carried the European diplomacy into a new phase in which the art of "negotiation" was established (Keens-Soper 1973, 490; see also Keens-Soper 2001a, 109-113). The French supremacy helped to spread and consolidate this French system and elevate it to the model of the modern diplomatic system.

The so-called the "French System" of diplomacy was first formulated by Cardinal Richelieu, who served Louis XIII during the Thirty Years' War and wrote *Testament Politique*, and later formalized by François de Callières who was a diplomat during the reign of Louis XIV and published *The Art of Diplomacy* in 1716 (see also Nicolson 1954).²⁷ Callières has been regarded as a representative of the French system of diplomatic machinery, which is a reformulation of the opinions of Richelieu Keens-Soper 2001a, 107; see also Keens-Soper 1973, 486-487).²⁸

The primary characteristic of the French system of diplomacy is its explicit emphasis on the utility of negotiation in comparison to warfare or military coercion. It is possible to point to other aspects of a uniquely French method of diplomacy developed in the 17th and 18th centuries, but I limit my attention to

²⁸For a more complete treatment of diplomatic theory advanced by Callieres, see Keens-Soper (2001a, 1973).

²⁶For a more comprehensive treatment of the historical background of France's international relations, see Anderson (1993, Ch.2), Hamilton and Langhorne (1995, Ch.3), Jensen (1985), Kissinger (1994), and Roosen (1976).

²⁷Richelieu's Testament Politique is based on notes and dictations, and considered to be complied after his death (1642). The fist publication of the work was by a press in Amsterdam in 1688. The English translation along with the commentary is furnished by Hill (1961), which I relied on for the dissertation research. Henry Bertram Hill. 1961. The Political Testament of Cardinal Richelieu: the Significant Chapters and Supporting Selections. Madison: University of Wisconsin Press. According to Keens-Soper (2001a, 106), Callières' book enjoyed a European reputation throughout the 18th century, becoming one of the standard references on diplomatic practice. Callières' The Art of Diplomacy had been considered essential reading in the training of diplomats for a substantial period of time during until the 19th century, along with Wicquefort (1997)'s The Embassador and His Functions.

two more characteristics that are relevant to the role of diplomacy in international security: first, the importance of rationalism including the virtues of intelligence, honesty, prudence, and patience, and second, the establishment of professional diplomats.²⁹ While I shall discuss the relevancy of rationalism shortly below, as for the profession of diplomacy it is sufficient to note that diplomats gradually acquired their own distinct character and methods of work like the military and judiciary (Keens-Soper 2001a, 109). That is, diplomacy became institutionalized profession of the same kind of military during this period.

Richelieu and Continuous Negotiation: In the management of international relations, Richelieu turned on diplomacy more than anything. In his *Testament Politique*, Richelieu opens the chapter on the "continuous negotiation in diplomacy" by noting that "States receive so much benefit from uninterrupted foreign negotiations" (Hill 1961, 94). And he continues: "...it is absolutely necessary to the well-being of the state to negotiate ceaselessly, either openly or secretly, and in all places, even in those from which no present fruits seem likely" (Hill 1961, 94).

Observe that what is distinct about Richelieu's calls for diplomatic negotiation is its emphasis on the *continuation* of conducting negotiations with foreign countries. What does he mean by "continuous negotiation"? Richelieu argues that diplomacy (based on the system of a broad and comprehensive network of resident ambassadors) must do more than the collection and transmission of information, political manipulations, or the conduct of ceremonial rituals—standard diplomatic practices in Renaissance Italy and the Byzantine Empire. Rather, diplomacy "should be ceaselessly pursuing achievement of agreement on all outstanding questions" (Berridge 2001, 74).

²⁹For the nature of diplomacy in this era, see Berridge (2004), Butterfield (1953, Chaps. 6-8), Jensen (1974), Nicolson (1954, Chaps.3-4), Roosen (1970), Roosen (1973), and Roosen (1976)

Also observe that his emphasis on continuous negotiation is the revelation of his preference for diplomacy over the use of force or coercion. Richelieu expresses this preference in *Testament Politique* arguing that "It is much more expedient to lead men by means by which imperceptibly win their wills than, as is more the practice, by those which coerce him" (Hill 1961, 72). Richelieu's preference for diplomacy over military, according to Hamilton and Langhorne (1995), was a natural consequence of his ultimate goal of maintaining an equilibrium of the balance of power within Christendom. Notice here the similarity with the development of diplomatic methods within the Italian League during the age of Renaissance. In both the Italian and French systems, the innovation of new diplomatic methods was motivated by the desire for a stable balance of power within an alliance—the Italian League in Renaissance Italy and Christendom in Europe at the time of Thirty Years War (Hamilton and Langhorne 1995, 71).³⁰

What is the logic behind Richelieu's preference for diplomacy over military? Richelieu extensively explains the utility of negotiations but its essence can be stated in a quite simple way: through negotiations one can obtain a better outcome (Hill 1961, 99-101). That is, the rationality of continuous negotiation is that it is suited to secure an agreement that all the parties to an issue can be better off than via the imposed settlement through military coercion. To use the language of the bargaining theory, negotiation outcomes can be Pareto-improvement of any imposed settlement through coercion or warfare. This rationality is derived not from the desirability of negotiated settlements itself or its normative value, but from the inefficiency of military instruments. Callières is more blunt on this point, according to Keens-Soper (1973, 497), as he "regarded war as an expensive and wasteful instrument, a 'deésse bien hideuse [hideous goddess]'." Since

³⁰If this inference is true, it may explain why France did not intervene in the Thirty Years' War until the last decade of the War, while Richelieu was actively involved in the diplomacy behind the Danish and Swedish intervention into the War against Habsburg before Frace herself directly intervened.

reliance on force is a costly and risky business, force begets more conflict rather than appeases (Keens-Soper 1973, 503).

There are two more principles that Richelieu spelled out in his argument for continuous negotiation: the first is the importance of compromises and the second is patience or prudence. First, Richelieu wrote "In order to have good fruit it is necessary to employ the art of grafting" (Hill 1961, 100), meaning that the working of negotiation is the art of compromises. Callières' chapter on negotiation also reflects this view of Richelieu as his view of diplomacy is, according to Keens-Soper (1973, 503), such that if diplomacy is to work, compromise is essential, and hence it is a political necessity of a state to act by persuasion and by appeal to other states' true value of moderation, rather than unilaterally sanction a solution.

Richelieu also emphasizes the importance of patience and prudence. Richelieu wrote "...it is absolutely necessary to the well-being of the state to negotiate ceaselessly, either openly or secretly, and in all places, even in those from which no present fruits seem likely" (Hill 1961, 94). His explanation for patience is that since "[d]ifferent nations have different characters, some quickly carry out what they have in mind, while others walk with fee of lead. ...it is necessary to be content with little in the hope of getting more later. For this reason it is wise to negotiate painstakingly with them in order to give them time, and to press them only when they are ready for it" (Hill 1961, 97). Richelieu once again resort to the inefficiency of coercion in justifying his emphasis on patience. He notes, "Even if [negotiation] does no other good on some occasions that gain time, which often is the sole outcome, its employment would be commendable and useful to states, since it frequently takes only an instant to divert a storm" (Hill 1961, 99).

Hence, state leaders sometimes buy time and continue negotiation at the expense of costly delay in order to divert a "dramatic confrontation" as such a

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maneuver was evident in Henry Kissinger and Richard Nixon's handling of a crisis that could have been a second Cuban crisis (Kissinger 1979, 651).³¹ As for the importance of prudence, Richelieu's view on prudence can be derived from his adherence to rationalism, which typically realized in the form of *raison de'état*.

Rationalism and raison de'état: It is worth noting that Richelieu's preference for continuous negotiation instead of force and coercion and its logics are derived from his belief in reason in conjunction with raison de'état. Richelieu begins the chapter on the importance of reason by the declaration that human behavior is a rational process:

Common sense leads each one of us to understand that man, having been endowed with reason, should do nothing exept that which is reasonable, since otherwise he would be acting contrary to his nature, [...] It further teaches us that the more a man is great and conspicuous, [...] the less he outght to abuse the rational process which constitutes his being. (Hill 1961, 71)

He further claims that reason should guide the conduct of public (including foreign) affairs: "reason ought to be the torch which lights the conduct of both princes and their states" (Hill 1961, 72).

Richelieu was "acutely sensitive to the possibilities of language as an instrument of power" (Elliott 1991, 30). His belief in the power of reason led him to establish the Académie Française, which was "an explicit recognition of the power of language, of the superiority of eloquence and reason over naked force" (Elliott 1991, 134). Callières notes that the pursuit of state interests habitually

³¹Richelieu also writes that "The payoffs from continuous diplomacy are very uncertain, but they must not be ignored" (Hill 1961, 100). As I shall demonstrate in Chapter 4, diplomatic negotiation does not carry much information compared to military coercion. Yet, as Richelieu claims, the uncertainty surrounding diplomatic negotiation should not encourage bargainers to forego the agreement that diplomacy can produce, which often is Pareto-improvement of imposed settlement through coercion.

come to relay on force in the lack of intelligence or prudence (Keens-Soper 1973, 499; Keens-Soper 2001a, 113).

As I mentioned above, Richelieu's reliance on diplomacy is a natural consequence of his desire to stabilize an equilibrium within Christendom. It was primarily due to his belief in reason that France did not intervene militarily into the Thirty Years' War until the last decade of the War when Spain invaded French provinces of Champagne and Burgundy and threatened Paris in 1636. Instead, Richelieu resorted to diplomacy to manage the crisis situation after the War erupted in order to seek a *balance of power* within Christendom. Richelieu's emphasis on the prudence given the *raison de'état* was most evident in forming an alliance not only with Catholic states but also Protestant states in order to counter-balance against the Habsburgs of Spain and Austria.(see also Berridge 2001, 72).³²

French System: To summarize, a distinctive feature of the French system that is relevant to the development of diplomacy is its explicit emphasis on diplomatic negotiation as an alternative instruments to force and coercion. its logic is well documented in Richelieu's *Testament Politique* (Hill 1961) and Callières' *The Art of Diplomacy* (Callières 1983).

By the time the Westphalia Treaty was concluded in 1648, the court diplomacy declined and professional diplomats gradually took over the business of diplomacy, which led to the rise of an autonomous profession of diplomacy. Like the military and judiciary, diplomats gradually acquired their own distinct profession (Keens-Soper01-Callieres, 109). The first minister of foreign affairs was appointed in 1589 when Henry III of France assigned Louis de Revol, one of his four cabinet

 $^{^{32}}$ I should probably add that some argue that the poor economic condition and his problematic relationship with its own military were also responsible for Richelieu's reliance on diplomacy, as he could not rely on French military strength alone to attain the *raison de'état* that he perceived. See for example, Berridge (2001, 72).

members, the responsibility of managing his relationships with foreign countries. The post (i.e., the secretary of state for foreign affairs) was succeeded later by Richelieu (during the reign of Louis XIII) and Colbert (under Louis XIV) among others.

With the emergence of professional diplomats, by the time Callières published *The Art of Diplomacy* in 1716, roughly between the end of the Thirty Years' War and the French Revolution, diplomacy emerged as a principle and institution of order, something comparable to a national standing army Keens-Soper (2001a, 122). Callières claimed that "a small number of [diplomats] with a small expense do frequently as much service as standing armies would be able to do" (Callières 1983, 73). For this reason, Callières declares that "diplomacy is a necessary, unavoidable, activity essential to the well-being of a state and deserving of recognition as a separate profession" (Keens-Soper 1973, 499; Keens-Soper 2001a, 113).

2.1.7 Spread and Institutionalization: 19th Century

Over the course of the 19th century, the territorial sovereignty (established by the Westphalia Treaty) and the nation-state system spread to non-European countries. This movement from a (semi-)feudal society to a sovereign state was typically accompanied by the accreditation and recognition of the diplomatic representatives of European countries. This was because the creation of diplomatic relations was a conventional procedure to commence the formal recognition and integration in the international society (Strang 1991, 152). During the late 19th century, Asian countries, such as China, Japan, Korea, Thailand, and Turkey among others, were incorporated into the Europe-based diplomatic system. Over the course of modern international history, the "diplomatic system has witnessed the number of states in the world grow to 140, while incorporating all; none had formally repudiated the mechanism" of the European-based diplomacy (Bull 1977, 171).³³

The challenge faced by political leaders as the diplomatic system incorporated non-European countries is that those newly incorporated countries often did not share the customs or culture of European countries. Since European countries generally enjoyed the homogeneity of their historical and cultural background with the shared history of politics and diplomacy, the European diplomatic system functioned well with the implicit reliance on such unwritten shared norms.

To cope with the problem of non-European countries not being accustomed to the implicit rules and norms, stated leaders moved on to formally codifying the practices and procedures of diplomacy. These gave rise to the Congress of Vienna in 1815 as well as Vienna Conventions in 1961 and 1963 that codified the rules of the diplomatic game. These treaties formalized the rule of the diplomatic game that we can observe today (Stearns 1996, 12).

First, the agreement among the European countries at the Congress of Vienna in 1815 included the regulations specific diplomatic rules and practices, such as diplomatic privileges and immunities and the seating order and arrangements for diplomatic representatives (Bátora 2003; Stearns 1996).³⁴ It also determined the rules regarding precedence among diplomatic envoys in accordance with the doctrine of the equality of sovereign powers, which regulates the ranks and title of diplomatic representatives, such as ambassador (ambassador extraordinary and

³³For a more detailed analysis of the spread of diplomacy to the non-Western world, see Bull and Watson (1984, esp. 1-9), Nicolson (1954, Ch.4), Sofer (1988), Strang (1991), and Watson (1984, Ch.11).

³⁴The rules regarding the seating arrangements were actually formalized in the supplemented agreement three years later. Although this issue might seem trivial and inconsequential, it actually has had an impact on the success and failure of diplomatic negotiations. A notable example is the Potsdam Conference in 1945. They were not able to begin diplomatic negotiation because they failed to agree on who should enter the conference room first among Stalin, Churchill and Truman. This "dispute" was settled with the agreement that these three figures enter simultaneously from three different doors (Morgenthau 1973, 82).

plenipotentiary), envoys and minister (envoy extraordinary and minister plenipotentiary), Chargé dAffaires, and so forth (Bull 1977).

Second, the Vienna Convention on Diplomatic Relations in 1961 and the Vienna Convention on Consular Relations in 1963 both codified the modern (European) bilateral diplomatic practices for the whole international society including new states that recently gained independence from European colonial controls. These treaties were signed by countries from *all* political blocs, which helped to clear any doubts and uncertainty about the acceptances of the traditional rules of the diplomatic game in the age of the Cold War.

2.2 Diplomacy as Conflict Resolution Institution

Diplomacy has evolved through multiple paths as political leaders responded to particular strategic problems at various historical junctures: the Roman Empire's predilection for military coercion in governing its colonies forestalled the development of diplomatic practice and institutions for centuries; witnessing the fall of Constantinople in 1453, the Italian city-states faced the need for stable communication to overcome the mistrust and security dilemma among them, and devised the permanent resident embassies; witnessing Louis XIV's militarism in the era of the Thirty Years' War, Callières aspired for the utility of continuous diplomatic negotiations in establishing a stable diplomatic system as the basis for the conduct of international affairs. As a result, the practice of diplomacy takes many different forms and functions, and the lack of a consensus on meaning and function of diplomacy reflects this heterogeneity in the variety.

Although diplomacy has multiple facets in terms of its institutional and functional forms, the development of diplomatic norms and culture has historically centered around security-related issues. At every stage in the course of the development of diplomacy, new institutional arrangements were advanced in response to significant challenges posed by the changing security environment and the occurrence of war. In this process, diplomacy has been always cast as an alternative method to coercion and warfare.

Although it was Cardinal Richelieu who first explicitly emphasized peaceful nature of diplomatic instruments, diplomacy from its origin was almost always envisioned to play a role of the tension reduction and the pursuit of acceptable agreements between states in a conflict. In other words, diplomacy can be conceptualized as conflict-resolution institutions. For Hans Morgenthau, diplomatic statecraft is central to international peace and "diplomacy is the best means of preserving peace which a society of sovereign nations has to offer" (Morgenthau 1973, 549).³⁵

Although Wight is not as enthusiastic as Morgenthau about the potential of classical diplomacy to mitigate power politics, he nonetheless agrees on its key role in mitigating the conditions for war:

The notion that diplomacy can eradicate the causes of war was part of the great illusion after 1919. Diplomacy can do a little, perhaps, to mitigate the social condition of war; it can circumvent the occasions of war; but the cases of war, like the need for diplomacy itself, will remain so long as a multiplicity of governments are not reduced to one government and international politics transformed into domestic politics. (Wight 1978, 138)

Hedley Bull, Martin Wight's successor as the leading figure in the English school,

³⁵The historical example that Morgenthau has in mind is the Concert of Europe, in which the nineteenth century European diplomats were successful in preventing war between major powers. In particular, he considers the "peace with honor" that was reached by the Congress of Berlin of 1878 as the outstanding example of successful use of "the peaceful means of an accommodating diplomacy" in preventing the outbreak of war between Britain and Russia.

also considered the main task of diplomacy as reducing the "effects of the frictions in international relations" (Bull 1977, 165):

The diplomatist ... helps to minimize friction through the conventions he observes in dealing with foreign officials, and also through his influence upon his own state's policy.

If diplomacy, as Martin and other English school scholars claim, is an institution of the same kind as military coercion, alliance, deterrence, and other conflict resolution institutions, how is diplomacy different from these institutions? The natural history of diplomacy above suggests that the empirical literature seems to agree on the one key aspect that distinguishes diplomacy from other conflict resolution mechanisms: its commitment to peaceful means.³⁶ The emphasis on peaceful means is also the main theme of Morgenthau's writing on diplomacy, as he notes:

For a diplomacy that ends in war has failed in its primary objective: the promotion of the national interest by peaceful means. (Morgenthau 1973, 519)

Sir Ernest Satow, the author of one of the most adopted reference textbooks on the practice of diplomacy, offers a renowned definition of diplomacy which reads "Diplomacy is ... the conduct of business between states by peaceful means" (Satow 1922, 1; see also Bull 1977, 157). The emphasis on the peaceful means commonly implies its contrast to military instruments. Hedley Bull (1977, 157) says "War ... exemplifies the conduct of international relations by official agents; diplomatists differ from soldiers in that they confine themselves

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³⁶More recent authors who claim the peaceful means as the integrative characteristic of diplomacy include, for example, Barston (2006), Berridge and James (2001), Sharp (1997), Sofer (1988), Watson (1984), and Wiseman (2005).

to peaceful means," he continues, "[the diplomatist] seeks always to reason or persuade rather than to bully or threaten" (Bull 1977, 165). As these citations indicate, the premise of diplomatic institutions has historically been understood as the use of peaceful means to settle a dispute among political entities short of war, and these authors regard diplomacy in contrast to military coercion. Hence, the blurred borderline between diplomacy and military force is a relatively recent phenomenon, especially in the post-WWII period (e.g., Barston 2006, 1). This tendency is evidently the case in the coercive diplomacy literature championed by Alexander George and his Associates, which explicitly consider the coercive use of military force as the essential part of diplomacy.

Taxonomy of Diplomacy: The multifaceted nature of diplomatic institution is a natural consequence of its development that traverses the history of (mostly) European inter-state politics. Reflecting this nature, scholars of diplomacy have proposed many different definitions of diplomacy. Some argue that the essence of diplomacy is communication, and others argue that negotiation is the key instrument of diplomacy.³⁷ The lack of the consensus on what constitutes diplomacy, as I argued in the previous chapter, has led some scholars of international relations to regard diplomacy as too vague and confused to subject to systematic empirical analysis (Mearsheimer 1992, 226; see also Steiner 2004).

Because the main goal of this study is to establish theoretical foundations for the study of diplomacy, it may not be fruitful to engage in a definitional debate of what is diplomacy and what is not. Instead, following Bull (1977) and Wight (1978), I focus on its functions in international disputes and classify them in order to generate a set of empirically identifiable mechanisms of diplomacy. Through

³⁷The discussion of diplomacy that presumes the communication role of diplomacy include Fearon (1994a, 1995), Jönsson and Hall (2003), Ramsay (2006), Regan and Aydin (2006), and Sartori (2002, 2005) among others. The argument that negotiation is a key component of diplomacy is advanced by Berridge, Keens-Soper and Otte (2001), Kissinger (1979), Hill (1961), and Iklé (1964) among others. See my discussion below for details.

the analysis of the natural history, there emerge three distinctive classes of diplomatic machineries: Communication, negotiation, and manipulation. Briefly, each of these functions can be summarized as follows. First, the machinery of diplomatic communication is the revelation of states' preferences so that they can identify whether their preferences overlap in order to avoid war. Second, the machinery of diplomatic negotiation is to sort through states' preferences so that they can reach an agreeable settlement in order to avoid an imposed settlement via coercion and force. Third, the machinery of diplomatic manipulation is to restructure states' preference so that they will have a (modified) incentive to agree to something that they would not otherwise, which expands the range of agreeable settlements and hence reduces a risk of war.

2.3 Diplomacy Games: Stylization

In the following chapters of the dissertation, I turn to explicating the mechanism of each of these key functional forms of diplomacy. Towards that goal, I shall present a series of three *diplomacy games* to elaborate the role that each of these functions of diplomacy plays in international dispute. Each diplomacy game is a stylized model that represents general ways in which diplomacy is pursued commonly in most international disputes, in which each key function of diplomacy is mapped to the evolution of international disputes. Figure 2.1 depicts those diplomacy games. Each diplomacy game basically describes a stylization of the strategic environment commonly observed in international disputes in which diplomacy operates. Each game also explicates the underlying connections linking the functions of diplomacy to the micro-foundation of international disputes. For example, the communicative function of diplomacy is typically observed before a serious crisis bargaining takes place. Similarly, diplomatic negotiations are most crucial when the state leaders are trying to prevent the dispute from escalating to a military crisis. Although the manipulative function of diplomacy can be utilized at any given phase of an international dispute, its utility becomes crucial when the state leaders are trying the last round of diplomacy in a military crisis before the outbreak of war. These diplomacy games are fully formalized and analyzed in the following chapters of this dissertation.

Note that diplomacy games are not complete descriptions of actual uses of diplomacy, but are stylized models meant to elucidate the essence of the strategic problems. The development of any given actual international dispute is not expected to follow these games. Each of these stylized models is meant to illuminate a causal mechanism that provides a basis for the empirical investigations on the determinants of success and failure of diplomacy in international disputes.

In many respects, my diplomacy games altogether resemble Bueno de Mesquita and Lalman's (1992) *international interaction game* in their landmark contribution in *War and Reason*. Both games are meant to highlight the skeletal features of the conduct of international affairs. Just like the international interaction game captures a great deal of international politics and what is often referred to as a military crisis or crisis bargaining is only a subset of this larger game, the diplomacy games is also meant to capture the entire process of international disputes leading up to the outbreak of war.

Yet, unlike the international interaction game, I present three midlevel models of diplomacy rather than one grand model encompassing the entire process of the onset, the outbreak and escalation of international disputes. Each diplomacy game represents a distinctive class of phenomena and constitutes an empirically identifiable mechanism. Each of these different sets of phenomena therefore requires a distinctive explanation. Each explanation tells a story of a causal mechanism of diplomacy, which in turn clarifies why it works, how it works, and when it works, and so on. To construct a causal story, each model isolates one or two



Figure 2.1: Diplomacy Games: Stylized models of diplomacy in the evolution of an international dispute. The first phase is *pre-crisis diplomacy*, where the primary form of diplomacy is political and diplomatic communication; the second phase is *diplomatic negotiation* beginning with a diplomatic demand, where typically a continuation of alternate-offer bargaining takes place; the third phase is crisis diplomacy after one of the states to the dispute resorts to military coercion, where state leaders can utilize *diplomatic manipulations*—e.g., face-saving measures, ceremonial protocol, and secrecy—to search for a settlement short of war.

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strategic elements of diplomacy and then examines them carefully.

Why is it important to explain each distinctive class of phenomena by developing its own particular model? To be sure, it is possible to combine all of these three models and call it the *unifying model* of diplomacy, in which multiple classes of phenomena are unified. The resulting solution may be traceable yet it would be difficult to decipher which result follows from which assumption. Not only would this practice mitigate the purpose of stylization and modeling (that is, simplification), but also the resulting explanation can be confusing if not incoherent or incomplete. It is my view that a theorist should build a few models, each with a clear point, rather than a single one with so many moving parts that none can be understood. None of the models presented in the following pages can characterize all diplomatic activities altogether or provide the complete picture of diplomacy. However, each model captures the general tension involved in the use of diplomacy in managing international disputes in the shadow of war.

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Precrisis Diplomatic Communication

The first diplomacy game is diplomatic communication prior to crisis bargaining. When a pair of states find themselves in tension in the form of conflicting interests, the leaders of these states simply try to communicate their respective diplomatic positions including how serious they are about the issue at stake, how willing they are to avoid or conduct armed conflict over the disputed issue, how much compromise they are willing to make, and so on, in the hope that they prevent the escalation of the international dispute. State leaders attempt to conduct this sort of diplomatic communication through exchanging envoys, making diplomatic announcements, or simply talking to each other through the established diplomatic channels or back channels. Learning the opponent's diplomatic position, state leaders quite often let tensions go uncontested and hence unresolved by accepting the status quo. Diplomatic communication at this stage may or may not be informative enough to influence the course of the subsequent crisis bargaining. In chapter 3, I formalize pre-crisis diplomatic communication as a pre-play cheap talk game. In it, I review several cheap-talk models of diplomacy in which strategic information transmission takes place prior to a standard ultimatum game. I discuss when and why diplomatic statements can affect subsequent crisis bargaining, and highlight a leader's strategic use of diplomatic announcements.

Diplomatic Negotiations in International Disputes

In the second diplomacy game, diplomacy is modeled as diplomatic negotiation. Once they exchange their views and find that their interests are not compatible, they proceed to diplomatic negotiations. A diplomatic negotiation begins by (at least) one state making a demand, and hence an international dispute is now formally underway. A demand basically proposes a settlement to the dispute, and a demand may take many different forms. Diplomatic negotiations typically last for some period of time with two states alternating their turns to make offers and counteroffers of a settlement to a dispute. The alternation of demands and counter-demands continues (in principle) indefinitely. Since diplomacy operates under anarchy, diplomatic negotiations are also conducted against a background of potential armed conflict. However, the failure to reach a negotiated settlement does not automatically result in a military crisis. The dispute escalates to a military crisis when a state makes an explicit decision, in responding to a diplomatic demand, to leave the negotiation table and resort to military coercion in an attempt to impose its favored settlement onto its opponent. At this juncture, along with its demands, a state typically issues a threat to use force if the demands are not complied with. A state's decision to resort to military coercion typically marks the departure from "normal diplomacy" to "crisis diplomacy" where the possibility of military confrontation is imminent. However, it is possible that a state can issue an ultimatum at the outset of diplomatic negotiation as an extreme form of a diplomatic demand, which carries a military fait accompli. In this case a demand is designed so that a negotiation will not take place with the intension of terminating diplomacy, and such a demand takes the form of a "take-it-or-leave-it-offer" or an ultimatum. This case amounts to skipping the diplomatic negations altogether and jump into the third diplomacy game: crisis diplomacy.

In chapter 4, I formalize diplomatic negotiation as an alternating offer bargaining game within infinite-horizon, where each state takes turns to decide whether to continue diplomacy or to opt out of diplomacy for the military "outside option" with crisis dynamics.

Diplomatic Manipulation in Military Crises

The third diplomacy game captures diplomatic manipulation in military crises that follow the issuance of a military threat and/or an ultimatum. A military crisis occurs usually because the states leaders have not found a mutually acceptable rearrangement of the status quo without the coercive pressure by military force. The demands in crisis diplomacy take the form of "take-it-or-leave-it" offer or ultimatum, which presumes no further continuation of negotiation. Also these demands are typically accompanied by the threat to use force if the demands are not complied with. The state leaders in military crisis thus confront decisions of whether to carry out their (implicit or explicit) military threats. The outbreak of military confrontation is imminent. To prevent a war from breaking out in a military crisis, state leaders can utilize diplomatic manipulations—such as facesaving maneuvers, ceremonial protocols, and secrecy—to locate some settlements that are mutually acceptable by both leaders.

Among many diplomatic manipulations that state leaders can exploit to settle the dispute short of war, I focus on the role of secrecy. The use of secrecy as diplomatic manipulation in crisis diplomacy can be considered as the last chance of diplomacy before going to war (JFK) when the state leaders have already left a negotiation table and resorted to military coercion.

In chapter 5, therefore, I model crisis diplomacy as a costly signaling game and formalize secrecy in crisis diplomacy as a strategic decision of whether to go public or private in making a military threat in the presence of domestic audiences on both sides of the dispute. The analysis highlights when and why the strategic choice to keep the matter secret works and how secrecy can serve as a face-saving devise and therefore mitigates the risk of war.

CHAPTER 3

Diplomatic Communication: The Role of Institutions in Precrisis Cheap Talk

3.1 Introduction

If diplomacy plays only marginal roles in crisis bargaining and conflict resolution as suggested by conventional wisdom in the literature as well as the public distrust in diplomacy, why is it that the international system has maintained the current form of diplomatic institutions at least since the Renaissance or perhaps earlier (see Chapter 2)? In fact, diplomacy is one of the oldest political institutions designed to preserve security and peace among states. As Guisinger and Smith (2002, 178) correctly observe, "Throughout the course of history, countries have invested much time and energy into diplomacy, suggesting that signals between countries do have value."

Need for communication: A typical point of departure for analyzing the role of diplomacy in international disputes is to consider diplomacy as the communication system between the parties to the dispute. As I have demonstrated in the previous chapter, the very origin of diplomacy is the problem caused by the lack of public information about each other's preferences and intentions. When there exists this uncertainty, each party to the dispute is uncertain about what actions its opponent is prepared to undertake. Although some governments might consider the issue at stake so important that they are willing to use force to secure

their diplomatic gain, others might prefer to concede if they had perfect information about their opponent's high resolve to fight a costly war. That is, when facing uncertainty, states are confronted with what a rationalist would refer to as the informational problem, where incomplete information in the mixed-motives situation gives rise to the so-called *risk-return trade-off* that appears as a necessary condition for the outbreak of war (e.g., Banks 1991, 72).¹

This is where the need for diplomatic communication comes in as a possible solution. In part responding to this problem, states consider diplomatic communication seriously because they need to assess the risk of dispute escalation and to anticipate their adversary's likely behavior. In principle, each party to the dispute could ask their opponent how much they value the issue at dispute, and the military capabilities that they possesses at their disposal. If this sort of communication eliminates uncertainty about all the relevant parameters before engaging in a crisis, then the risk of dispute escalation would evaporate.

For Hans Morgenthau, therefore, one of the main tasks of diplomacy is to determine one's foreign policy objectives in light of the military capabilities available (both in terms of actual and potential) for the pursuit of these objectives. Another is to assess the objectives of other countries and the military capability that

¹I formally characterize the risk-return trade-off below. More generally, this class of problem is sometimes called the "Hicks paradox," where bargaining failures are irrational in a setting of complete and perfect information but rational with incomplete information (Kennan 1986; see also Cameron 2000). See Rauchhaus (2006) for interesting empirical evidence of this claim. It is important however to note that this argument—that incomplete information is a necessary condition for the outbreak of war in equilibrium-depends on particular model specifications. It is more appropriate to say that an equilibrium can be constructed, in which war occurs with positive probability in equilibrium under incomplete information that would otherwise not occur under complete information. Hence, we should ask what are the characteristics (or conditions) of an equilibrium where war occurs under (in)complete information. Scholars have examined equilibria where war occurs in the presence of complete but imperfect information. For example, Slantchev (2003a) constructs an equilibrium where inefficient fighting can result in coercive bargaining if warfare is viewed as a costly bargaining process, and Tarar and Leventoğlu (2006) propose an equilibrium where war occurs with positive probability when the bargainers are allowed to strategically tie their hands by making public commitment to delivering a certain bargain to the public.

are available to them for the pursuit of these foreign policy objectives. Diplomatic communication therefore is crucial because, as Morgenthau (1973, 519-20) observes, a state will "invite war if its diplomacy wrongly assesses the objectives of other [states] and the power at their disposal, [and] it may be equally fatal to the cause of peace" if diplomatic communication either overestimates or underestimates vital information such as the power of other countries. Consequently, by overestimating the opponent's military capability, a country "may prefer to yield to [the opponent's] demands" and by underestimating the opponent's capability, it "may advance demands and impose conditions upon [its opponent] which the latter is supposedly too weak to resist. Unsuspecting [the opponent's] actual power of resistance, [it] may be faced with the alternative of either retreating and conceding defeat or of advancing and risking war" (Morgenthau 1973, 520).

This view on the role of pre-crisis diplomatic communication is also shared by more recent theorists: For example, Sartori (2005) and Guisinger and Smith (2002) similarly claim that because war is almost always socially inefficient diplomatic communication allows states "to determine whether issue at hand [is] critical enough to fight for" (Guisinger and Smith 2002, 175), and "to realize common interests" avoiding unwarranted wars (Sartori 2005, 66).

Strategic misrepresentation and cheap talk: All this points to the demand-side logic of why diplomatic communication may be rational in international disputes, and why state leaders facing the possibility of conflict have reasons to want diplomatic communication. However, the demand-side logic cannot establish the rationality of diplomatic communication for two reasons. First of all, none of these arguments tells the supply-side logic of why diplomacy may be rational because they do not offer a causal mechanism that explains how and under what conditions diplomatic communication works. Second, as we shall see momentarily, a satisfactory explanation for why diplomatic communication can work is not straightforward. Notice that the discussion above points to diplomatic communication that takes place before states engage in crisis bargaining. Pre-crisis communication typically takes the form of official governmental announcements, diplomatic communiqué, private talks between diplomatic envoys, or public verbal threats that may or may not be backed up by a military fait accompli. This class of communication is often characterized as *cheap talk*, and the effectiveness of cheap talk is attained only under somewhat restrictive conditions.

The term cheap talk is due to Joseph Farrell (1987), and it refers to a communication method that does not require that false communication or simply lying be costly. That is, communication does not have direct costs or benefits (that is, payoffs). In other words, cheap talk involves *costless* communication. As a consequence, cheap talk is often nonbinding and nonverifiable and the message itself has no intrinsic meaning or interpretation. Costless communication, or cheap talk, is informative if the sender and receiver of messages have aligned preferences; if the preferences of the sender and receiver are sufficiently diverse, cheap talk conveys no information. More precisely, Crawford and Sobel (1982) show that the informativeness of the most informative equilibria is a function of the similarity between the players' preferences, i.e., common interest. The closer the players' preferences of the players are sufficiently diverse, then only babbling equilibria can be sustained.²

This theoretical result on the informative-ness of cheap talk is troublesome because states in a dispute typically possess heterogeneous preferences, as militarysecurity issues are typically considered as in the realm of relative-gains. Suppose an international dispute can be characterized as the bargaining problem depicted

 $^{^{2}}$ In finite costless signaling games, where the type space, the message space, and the action space are finite, Crawford and Sobel (1982) show that with continuous sets the most informative equilibria will not be completely separating, involving some amounts of pooling (i.e., babbling).

in Figure 1.1. Given this bargaining space, if S_1 's gain in a negotiated settlement, for example, is x = 0.7, then S_2 's share becomes 1 - x = 0.3. The more S_1 shares, the less S_2 gains. In other words, the preferences of the rivals in a dispute are sufficiently diverse. As a consequence, pre-crisis diplomatic cheap talk can rarely convey meaningful information.

To add to this complexity, the rivals in a dispute typically have strategic incentives to falsely report their military capabilities, how valuable the issue at stake is for them, and their willingness to fight all-out wars so that they can deceive their opponent, exploiting their fear of escalation, and obtain a better deal. Fearon (1995) shows that states' incentives for strategic misrepresentation can render diplomatic cheap talk ineffective. Yet, once again, this poses our original puzzle: if diplomatic communication is ineffective, why have states kept using diplomacy ever since it was established as a communication system centuries ago?

Overview: Recent formal models of diplomatic communication in the shadow of war are, in part, an attempt to fill the gap. In the remainder of this chapter, I shall examine how various types of institutional settings of diplomacy can be seen as rational responses to these problems, and how existing models formalize the informational role of diplomacy and analyze the role of diplomatic institutions. I will also provide my original critiques and insights on those existing attempts, with a view to understanding how we can extend these studies to better understand when and to what extent pre-crisis diplomatic communication can help solve international disputes short of war. The summary is presented in Table 3.1. Throughout, I keep technical considerations to a minimum, re-presenting the models by simplifying the details of the set-ups if necessary to highlight the main points and to facilitate comparisons among these models. By re-representing a simpler version of the existing models, I attempt to characterize each model as
Models	Diplomatic	Information-	Institutional	Mechanism
-	message	al efficacy	apparatus	
Cheap talk diplomacy (Fearon 1995)	Resolve	No	None	N/A
Simple diplomacy (Ramsay 2006)	Resolve	Informative	Chance to negotiate	Coordination & screening
Reputational diplomacy (Sartori 2002, 2005)	Intention $i.e.$, threat	Partially? informative	Repetition & honesty	Limited punishment
Honest diplomacy (Guisinger & Smith 2002)	Intention $i.e.$, threat	Informative	Repetition, honesty, (& election)	Unlimited punishment

Table 3.1: Models of Diplomatic Communication and Institution

an incremental modification that develops naturally from the simpler ones.

Before moving onto the role of diplomacy, however, I will first examine briefly a standard ultimatum game, which is often used to capture the fundamental features of crisis dynamics proceeding the outbreak of war. Despite its simplicity, because of its rich theoretical implications, a variation of this canonical model of international crises frequently appears in many theoretical investigations of the origins of war. The discussion of the ultimatum game is useful in many respects. First, I use this model to elaborate on how the introduction of uncertainty generates the risk-return trade-off, and gives rise to the positive probability of war. Second, it substantiates my argument that the role of diplomacy in international disputes can be understood in the same way we understand military coercion and many "correlates of war." That is, we can see diplomacy as a natural extension of bargaining models of international disputes. Third, as we shall see below, all the subsequent models of diplomacy (including those in the rest of this dissertation) are in fact a series of incremental modifications and extensions of the standard ultimatum game. I then proceed to Fearon's (1995) seminal analysis of pre-crisis diplomatic communication and the results establishing that the incentives to misrepresent private information renders pre-crisis communication ineffective. His result is powerful partly because it establishes that pre-crisis diplomatic communication cannot transmit meaningful information in the absence of institutions and partly because it therefore provides a basis for the analysis of the role of diplomatic institutions.

It is well known, however, that cheap talk can matter in bargaining. There are generally two ways in which this is the case:

- Cheap talk can matter if its expected mechanism is to facilitate coordination between players (e.g., Farrell 1987; Farrell and Gibbons 1989a; Kim 1992); and
- 2. Cheap talk can also matter if communication is regulated by some institutional constraints that essentially make cheap talk not so cheap any longer. Or, lying is costly. Typically, this involves a (indirect) punishment mechanism for sending a false message (e.g., Austen-Smith and Banks 2000, 2002; Farrell and Gibbons 1989b; Kim 1996).

Interestingly, although it is not always explicit, the empirical literature suggests that when diplomatic communication is successful, it is usually channeled through diplomatic institutions that are associated with one of these two mechanisms. As Table 3.1 shows, the formal literature on pre-crisis diplomatic communication falls into one of these two categories, except for Fearon's (1995) model of cheap talk diplomacy.³

Ramsay's (2006) model of simple diplomacy explores how diplomatic procedure essentially transforms the expected mechanism of diplomatic communica-

³That is to say, diplomatic cheap talk does not matter in Fearon's model because his model is institution free.

tion, and how it functions as a coordination devise among the disputants. By introducing a screening mechanism, under certain conditions, the task of diplomatic communication is to allow the disputants to choose a good equilibrium over others. Sartori (2002, 2005) proposes the reputational diplomacy model, in which the institutionalized repetition of diplomatic interactions facilitates the communicative benefits. This is possible because the potential loss of diplomatic reputation for "honesty" functions as a punishment mechanism that generates an incentive for truth-telling. In other words, because false diplomatic messages can invoke international audience costs, diplomatic cheap talk becomes costly. Guisinger and Smith (2002) extend the reputational diplomacy model by explicitly modeling the domestic consequences. In it, domestic accountability is shown to reinforce the reputational effects of effective diplomatic cheap talk. In all of these equilibria, pre-crisis diplomatic communication can convey meaningful information and hence influence the subsequent crisis behavior.

3.2 Cheap Talk Models of Precrisis Communication

3.2.1 Ultimatum Game: Preliminary

One of the most ubiquitous forms of international bargaining in the shadow of war is an ultimatum game, where a defining feature is that one of the parties to the bargaining makes a take-it-or-leave-it offer to other parties. In a common one-shot ultimatum game, two states, state 1 (S_1) and state 2 (S_2), are in a dispute over some international good of the size $v \ge 0$. S_1 makes a take-it-orleave-it offer $x \in [0, v] = X$ on the division of the disputed good (x, v - x), where x is S_1 's share and v - x is S_2 's share. S_2 can either accept this offer, or can reject it. If S_2 accepts the offer, each side's utility is simply its proposed share:

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x for S_1 and v - x for S_2 .⁴ If S_2 rejects it, the states automatically go to war, in which case the division of the good is allocated according to the winner-take-all protocol (i.e., the side that wins obtains the entire good and the side that loses receives none of it). S_1 wins the war with probability $p \in (0, 1)$ and loses with probability 1 - p. War is costly, with the states' costs of war being $c_1, c_2 > 0$, respectively. This is an ultimatum "bargaining" protocol, which is depicted in Figure 3.1.



Figure 3.1: A Standard Ultimatum Game

To keep the matter as simple as possible without loss of generality, we normalize the size of the disputed good to one (i.e., v = 1). A typical point of departure for analyzing the *ultimatum game* is the assumption that all actors are perfectly informed about the preferences and actions of all other players. Under these assumptions, there is no uncertainty about how the receiver, S_2 , will respond to an initial offer. Inspection of the ultimatum game reveals that S_2 will reject an offer and go to war if and only if the payoff from rejecting an offer x is at least as good as the payoff from accepting x, or $1 - p - c_2 \ge 1 - x$. The assumption that there is no uncertainty implies that S_1 is capable of forming this expectation correctly and of making a decision by way of backward induction. Therefore, S_1 will make the largest possible offer such that S_2 prefers accepting x. That is, S_1 can set x at this limit and this is his optimal offer. I now (formally) present Proposi-

⁴More precisely, when S_1 and S_2 strike a deal with an offer x, their (concave) utility functions given this deal are $U_1(x) \leq x$ and $U_2(x) \leq v - x$, respectively. In the literature, however, it is typically assumed that both states are risk-neutral for simplicity, which implies that $U_1(x) = x$ and $U_2(x) = v - x$.

tion 1, which describes the offers and the responses in the subgame perfect Nash equilibrium to the standard ultimatum game.

Proposition 1 (Ultimatum Game under Complete Information). There exists a unique subgame perfect equilibrium to the ultimatum game defined above, where S_1 makes an optimal offer $x^* = p + c_2$, and S_2 always accept this offer. War will never be an equilibrium outcome.

The no-war outcome in equilibrium is the artifact of the assumption that S_1 is perfectly informed about S_2 's private information, and this fact is well reflected in the optimal offer $x^* = p + c_2$. This result clearly hinges on S_1 's knowledge about S_2 's estimated cost of war c_2 , which implies that the matter changes if there is a change in the informational structure.

Now consider the same ultimatum game under incomplete information, where S_2 has private information about its estimated costs for fighting. In this situation, Fearon notes that S_1 "can only guess about just how willing $[S_2]$ is to fight rather than accept a demand" (Fearon 1992, 20). More formally, S_1 does not know S_2 's expected cost of fighting c_2 but he does know its probability distribution. S_1 therefore forms a pre-crisis assessment about c_2 . Formally, this assessment is described by a prior belief that c_2 is distributed according to the cumulative distribution function $F(z) = Pr(c_2 \leq z)$ with the support $[\underline{c}_2, \overline{c}_2]$.

 S_1 now faces a dilemma, often referred to as the risk-return trade-off, in which the "larger the demand x, the better off $[S_1]$ will be if it is accepted; but the larger the demand, the greater the chance it will be rejected" (Fearon 1992, 20). To solve this dilemma, S_1 will first assess the risk that S_2 rejects a given offer and goes to war. Proposition 1 indicates that S_2 will reject an offer if $x \ge p + c_2$. Given the function F, therefore, it is easy to show that his prior belief is such that, given an arbitrary offer x, S_2 will reject x with probability F(x-p) and accept an offer with complementary probability 1 - F(x-p). Then, S_1 's problem is to choose the demand x that maximizes his expected utility: arg max $F(x-p)(p-c_1) + [1 - F(x-p)]x$. Differentiation of this optimization problem yields $\partial/\partial x = 1 + f(x-p)(p-c_1-x) - F(x-p)$. S_1 's equilibrium "demand" must solve the first-order condition:

$$x^* = \frac{1 - F(x - p)}{f(x - p)} + p - c_1.$$
(3.1)

Note that the *ex ante* probability of war is given by $F(x^* - p)$, which is zero if, and only if, $x^* = p$ regardless of the cost of war c_i or the military balance p. Given the optimal offer, the *ex post* probability that S_2 rejects the optimal offer is thus $F(\frac{1-F(x^*-p)}{f(x^*-p)} - c_1)$, which suggests that for any positive C_1 , there always is a positive probability of war in equilibrium unless $x^* = p$. The next proposition summarizes this analysis.⁵

Proposition 2 (Ultimatum Game under Incomplete Information). There exists a unique perfect Bayesian equilibrium to the ultimatum game with incomplete information defined above, where S_1 offers $x = \frac{1-F(x-p)}{f(x-p)} + p - c_1 \equiv x^*$ if and only if $c_1 \ge x/F(x-p) - (x-p)$ and x = 0 otherwise; conditional on $x = x^*$, S_2 accepts this offer if and only if $c_2 < x - p$ and rejects it otherwise.

An important implication of this proposition in its comparison to Proposition 1 is that the introduction of uncertainty (in the form of incomplete information) gives rise to the positive probability of war due to the risk-return trade-off inherent in the bargaining situations. One feasible solution to this problem would be to allow states to communicate their private information to each other prior

⁵For simplicity, Fearon (1992) assumes that c_2 is distributed uniformly in the interval [0, 1]. Given this assumption, S_1 's problem in this game can be reduced to $\max(x-p)(p-c_1) + (1-x+p)x$. This yields the optimal offer such that $x^* = p + (1-c_1)/2$ and the equilibrium probability of war such that $(1-c_1)/2$. This result suggests that as long as S_1 's cost of war is less than the size of (i.e., the utility from controlling) the disputed good, there always exists a positive probability of war.

to playing the ultimatum game so that they could eliminate uncertainty. Intuitively, this "solution" would effectively turn the incomplete information game into the one of complete information, in which the equilibrium probability of war is always zero.

The natural history in Chapter 2 suggests that it is this communicative role of diplomacy that the Byzantine Empire (and subsequently the city-states of Renaissance Italy to some extent) envisioned to achieve, so that states can escape from the risk-return trade-off dilemma, and therefore the prevalent positive probability of war, *regardless* of their military preparedness. And this is also the information role that Morgenthau and recent scholars (Guisinger and Smith 2002, Regan and Aydin 2006, and Sartori 2002, 2005) envisioned as a key instrument of diplomacy.

I will now explore how various types of diplomatic communication in international disputes and diplomatic institutional arrangements can be seen as rational response to the presence of informational asymmetries.

3.2.2 Cheap Talk Diplomacy: Fearon (1995)

I first establish our baseline model, in which diplomatic communication takes place in the absence of diplomatic institutions. Building on the *ultimatum game* above, Fearon (1995) analyzes pre-crisis cheap-talk communication in its purest form (i.e., without diplomatic institutions), where S_1 and S_2 communicate their private information before they engage in serious crisis bargaining. This baseline model therefore will serve as a point of reference when we analyze the role of diplomatic institutions in shaping diplomatic communication.

In this game, S_2 is allowed to communicate how serious she is (in terms of resolve, i.e., costs of fighting) by making diplomatic announcements before S_1 makes the take-it-or-leave it offer in the ultimatum game. These announcements

do not directly affect payoffs—*cheap talk.* In the game theory literature, cheap talk is taken to mean a message that is not verifiable, non-binding, and not (directly) costly.⁶ Because S_2 's pre-crisis diplomatic announcements are cheap talk, they do not constitute an "argument" in any player's payoff function, i.e., cheap-talk messages are not payoff-relevant.

In modeling the diplomatic announcement, Fearon's (1995) original game with cheap talk allows S_2 to choose a message m from a finite set of possible messages M. Therefore, S_2 's message strategy is to assign a probability distribution on all possible messages $m \in M$ for each $c_2 \in C_2$, and $m(c_2)$ determines the message sent by type c_2 such that $C_2 \rightarrow M$. After the diplomatic communication, the game proceeds exactly as in the *ultimatum game* defined above with the identical sequence of moves, payoffs, and the information structure, with one exception. S_1 's offer strategy is now conditional on his beliefs about S_2 's type, given the diplomatic message m. Let x(m) denote S_1 's offer, upon receiving a diplomatic message m. The posterior belief of S_1 is represented by some distribution F as before. Note that this class of costless signaling games typically assumes that the type space (C_2) , the message space (M) and the offer space (X) are finite (Banks 1991). Accordingly, Fearon's (1995) original model modifies the continuous types in the *ultimatum game* with a new assumption that types are now drawn from a finite set of possible discrete types $C_2 = \{c_2^0, c_2^1, c_2^2, \dots, c_2^n\}, n > 0$ (for a detailed treatment on this issue, see Fearon 1995, 412).

⁶We abstract from mechanisms such as reputation that might induce S_2 to tell the truth even when it is against her short-term interest. We will turn to those mechanisms in a moment. Similarly, we assume that it is impossible to promise side-payments contingent on the realization of a certain outcome in a subgame. For example, as President Kennedy's final attempt of diplomacy before the military action against Cuba, Robert F. Kennedy made a verbal promise of secret concessions on Jupiter Missiles in Turkey in return for the Soviet's removal of its missiles in Cuba. But this side-payment was contingent on the complete silence of the Soviets on this quid pro quo; or else the United States would have walked away from it as if such a promise for a secret side-payment had not existed. We assume away this kind of quid pro quo (or side-payment) because this class of outcomes (and their associated payoffs) is often not publicly observed.

For the sake of simplicity, I further make simplifying assumptions. Recall that the meanings conveyed by pre-crisis diplomatic announcements in the purestrategy equilibrium of Fearon's original game with cheap-talk can only be concerned with whether the realization (or true) value of S_2 's cost of war is sufficiently high (i.e., $c_2 \ge c_2^*$) or low (i.e., $c_2 < c_2^*$) at her last information sets. Hence, in this section, I will only consider the simplest possible language—that is, "low resolve" or "high resolve"—and, assume that no other messages are used in equilibrium. Formally, I restrict the message space such that $m \in \{m_H, m_L\} = M$, where m_H and m_L , respectively, denote the message that S_2 's resolve is "high" and that it is "low." As a corollary of this assumption, I also restrict the type space such that the number of partitions equals one, n = 1, meaning that there are two possible types, a high-cost type (i.e., $c_2 = c_2^H$) and a low-cost type (i.e., $c_2 = c_2^L$), where $c_2^L < c_2 < c_2^H$. Even though the continuous message space M might better approximate the reality than the two-massage space does, there is not much more that can be said in equilibrium. In fact, it is sufficient to consider the two-message space, for any message-space with at least two messages would give the same set of pure-strategy equilibrium outcomes. This assumption is further justified on two grounds. First, the main result concerning the effect of diplomatic communication remains unchanged. Second, since the subsequent models of diplomatic communication in this chapter also adopt the two-massage space assumption, this assumption facilitates the comparison with those models.

I call this simplified version of Fearon's (1995) game with diplomatic communication the *cheap talk diplomacy game*. Figure 3.2 provides the schematic presentation of this game.

I now turn to Proposition 1, which formally describes a class of perfect Bayesian equilibria to the cheap talk game, specifying S_2 's diplomatic message, S_1 's demand presented to S_2 with a fait accompli, and S_2 's response. S_2 's mes-



Figure 3.2: A Cheap Talk Diplomacy Game (Fearon 1995): Note that the diplomatic message is restricted to take one of two possible messages.

sage strategy specifies the probability that S_2 announces $m \in \{m_H, m_L\}$ for each type (i.e., each possible level of resolve defined by the cost of fighting); S_1 's offer strategy now specifies the probability that S_1 makes a high offer $x(m) = x^*$ conditional on each message.

The equilibria to this class of cheap-talk games generally fall into one of two types (e.g., Farrell and Rabin 1996). There always exists a *babbling* equilibrium, where the sender of diplomatic messages might just "babble"—that is, send some messages that are uncorrelated with her type; this preplay communication is completely ignored—that is, the beliefs of the receiver of diplomatic messages are unaffected by the message. There may also exist an *informative* equilibrium, where preplay communication is meaningful in that the sender reveals her true type, the receiver believes it, and thus alters his behavior (which yields a different outcome).

It is easy to see that there is only one equilibrium outcome in the cheap-talk diplomacy game: Each type of S_2 announces anything or randomizes between m_H and m_L and S_1 chooses $x(m) = x^*$ as is given by expression (3.1) if $c_1 \ge x/F(x-p) - (x-p)$ and x = 0 otherwise. The next proposition presents this equilibrium, which generates one powerful prediction that offers the key point of departure for understanding the role of diplomatic institutions (the proof is presented in the appendix).

Cheap Talk Diplomacy Proposition (Fearon 1995). If x^* is the unique equilibrium in the game without talk, then in any equilibrium of the game with talk in which S_1 uses a pure strategy, (1) S_1 demands x^* regardless of the diplomatic announcement; (2) the ex ante risk of war is the same as in the game without diplomatic announcement.

This unique babbling equilibrium rules out credible pre-crisis communication from the *cheap talk diplomacy game*: S_1 does not condition his offer on S_2 's diplomatic message. With this result, Fearon (1995) establishes that the pre-crisis diplomatic communication cannot convey meaningful information that would change the opponent's beliefs and hence strategies, which otherwise would not be sustained in the absence of cheap talk (as shown in Proposition 2).

This simple result is important at least for two reasons. First, this result is often taken to provide a foundation for the claim that cheap talk diplomacy is generally ineffective in international disputes due to states' strong incentives for strategic misrepresentation (esp. weaker types' incentives to mimic stronger ones). An important caveat is due here: this result also attests to the fact that the conventional claim—that diplomacy is ineffective in international disputes is derived from a particular interpretation of the function of diplomacy as costless communication taking place before crisis bargaining. Hence, it would be a mistake to interpret this result as a more general statement about the effectiveness of diplomacy. As we shall see below, diplomatic communication can be effective under certain conditions, as can other functions of diplomacy such as diplomatic negotiation and diplomatic manipulation.

The second reason why this result is important is that it highlights the key strategic issue involved in pre-crisis diplomatic communication. The issue in cheap talk models of pre-crisis communication boils down to truthful revelation of private information about one's resolve level or valuations, or honesty and credibility in the information revelation process. This theoretical construct is especially crucial in the context of international disputes because this payoffrelevant private information is the factor that determines the bargaining range of peaceful settlements.

Fearon's cheap-talk diplomacy game provides the starting place for thinking about diplomacy but it cannot be the ending place. In what follows in this chapter, I shall review three recent noteworthy attempts to search for the conditions under which cheap-talk diplomacy can meaningfully influence the outcome of international disputes, all of which draw on Fearon's baseline model that I just outlined. For example, Ramsay (2006) examines how the opportunity to negotiate before crisis bargaining will improve the informational efficacy of pre-crisis diplomatic communication. Sartori (2002, 2005) and Guisinger and Smith (2002) attempt to formalize how one's diplomatic reputation for honesty, the folklorelike aspect of traditional diplomacy, might make diplomatic cheap-talk credible. Each of these three models demonstrates how an institutional arrangement of diplomacy might generate more interesting equilibria in which pre-crisis communication can convey meaningful information.

3.2.3 Simple Diplomacy: Ramsay (2006)

One of the rational responses to the presence of informational asymmetry in international disputes is to set up a diplomatic protocol that provides a "forum" or an opportunity to coordinate their behavior. The intuition is that in principle we can design a diplomatic mechanism so as to manipulate the strategic environment that induces the incentives necessary for cheap talk diplomatic communication to be "informative."

One such mechanism is to redefine the task of diplomatic communication. Re-

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call that the assumption about the role of diplomatic communication underlying Fearon's baseline cheap-talk game, is that diplomatic communication was considered as a device to supply private information to the uninformed state. That is, because the positive probability of war in Proposition 2 is attributed to the presence of uncertainty, the diplomatic communication was implicitly expected to transform the game with incomplete information to the one with complete information. However, at the abstract level, Crawford and Sobel (1982) have shown that such a transformation is virtually impossible to be realized.⁷

Note that it is also well known that costless signaling can be particularly useful in solving a coordination problem in mixed-motives games (e.g., battle-of-thesexes games), where there exist multiple equilibria (Farrell 1987). It then follows that cheap talk can matter if the states' strategic dilemma is concerned with reaching an agreement on their actions that will generate outcomes potentially beneficial for both states, rather than transforming the information structure (Farrell and Gibbons 1989a). This implies that one plausible way to render credibility to cheap talk communication is to redefine the task of diplomatic communication as the coordination problem, while diplomatic communication in Fearon's baseline model implicitly was expected to eliminate the uncertainty about the true type of S_2 . The presumption for the states to coordinate in international disputes is to have some element of common interests. Although states in a dispute by definition cannot have perfectly aligned preferences, they also share one fundamental interest of avoiding mutually undesirable outcome: war. Hence, states often have a common interest in coordinating their strategies to avoid ending up in a war.

⁷In costless signaling games there generally will exist equilibria that are completely informative (i.e., fully separating) as well as those that are completely uninformative (i.e., babbling). With typical assumptions that the type space, the message space, and the action space are finite, Crawford and Sobel (1982) show that the most informative equilibria will not be completely informative but will involve some amounts of pooling with continuous sets. That is, full revelation of informed player's true type will not occur in equilibrium.

The empirical literature on diplomatic institutions suggests the state leaders have placed strong emphasis on the importance of negotiation in the dealings of international affairs. Hedley Bull (1977) for example emphasizes the importance of diplomatic negotiations as the key function of diplomacy, because its primary goal is to minimize the friction between states. It can be argued that historically state leaders have designed a diplomatic protocol—either informal or formal that obliged the state leaders to hold negotiations or consult before taking any actions.

In this way, the newly defined expected mechanism of diplomatic communication determines whether to conduct a serious negotiation. Historical examples of pre-crisis diplomatic communication can be interpreted as an effort to create expectations that would bring about coordinated actions that should promote mutually preferred equilibrium outcome rather than another. Once this sort of diplomatic protocol is in place, pre-crisis diplomatic communication will be regulated and the states will have incentives to control arbitrary claims in order to promote efficient coordinated actions.

To illustrate the idea that the expectation for negotiation may facilitate the credible revelation of private information through cheap talk, Farrell and Gibbons (1989a, 222) provide the following hypothetical scenario:

Imagine that one Saturday evening, two corporate moguls have a chance encounter at their country club. One mogul's company owns a division that the other mogul's firm may wish to buy. Serious negotiation, involving binding offers and hordes of lawyers, can take place on Monday morning; all that can happen Saturday night is talk. If, based on this talk, the moguls conclude that there is sufficient prospect of gains from trade, then they will send their lawyers into the fray on Monday morning. Otherwise, Saturday evening will be the end of it.

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Therefore, each mogul has an incentive not to sneer too much, lest the other choose not to try to do business with one who seems uninterested. The strategy (common in bazaars) of sneering and then returning for serious bargaining is less attractive to the mogul because a sneer may end negotiations.

Therefore, the expected function of pre-crisis diplomatic communication in this context is to help create shared expectations between antagonists, which in turn influences whether negotiation occurs. If the states are allowed to decide whether to proceed to a negotiation phase, then the key issue will be whether both states prefer holding negotiation rather than strictly preferring fighting. Hence, now that the provision for negotiation as the institutional apparatus is in place, diplomatic institutions effectively turn the problem about the risk-return trade-off into the one about the coordination. That is, with the appropriate institutional arrangement, diplomatic communication creates the hope and prospect for peace in the mind of leaders involved in the crisis.

Recently, Kristopher Ramsay (2006) formally explored this possibility. In his model, at the outset of international disputes, the state leader of S_2 sends a diplomatic envoy to S_1 in order to assess the prospect of peaceful settlements of their dispute before the situation degenerates into a crisis (as is also the case in Fearons' cheap talk diplomacy game). At this diplomatic meeting, S_2 announces her position by either claiming that (1) S_2 's relative cost of fighting is low, implying that she is unwilling to compromise and hence is resolved to fight, or that (2) S_2 's cost of fighting is high, implying that she is willing to negotiate a peaceful settlement.⁸ Formally, S_2 chooses one of two messages $m \in \{m_H, m_L\}$. Upon the

⁸Ramsay's (2006) definition of S_2 's types (private information) is slightly different than the one presented here. The types in his analysis is defined over the net utility from the war outcome, i.e., $p - c_1 = w_1$. Since the cost term in this standard costly-lottery formulation captures the expected cost *relative* to the probability of S_1 's victory p as well as the *fixed* size of the disputed good, these two formulations are effectively identical.

conclusion of the diplomatic meeting, each state then decides whether to proceed to bargaining or cut to the chase and start a war. That is, S_1 and S_2 simultaneously decide on their respective action $a_i \in \{Fight, Negotiate\}$. If any single state decides to go to war, then a war breaks out. Hence, bargaining will not take place unless both states decide to engage in serious bargaining.



Figure 3.3: Simple Diplomacy (Ramsay 2006)

The institutional innovation about the diplomatic mechanism that Ramsay advances is that the bargaining opportunity is only available if both states choose to engage in bargaining. If either state is not interested in bargaining, then the states would not get to bargain at all. Hence, Ramsay's analysis departs from Fearon's analysis in that not all the states are "forced" to bargain following diplomatic talks; rather bargaining can take place only if both states explicitly decide to do so.

In the form of a game-theoretic model, his institutional innovation amounts to adding the simultaneous decision phase between diplomatic communication and the ultimatum game, wherein S_1 and S_2 independently decide whether to forgo the opportunity to negotiate. In this phase, if either state opts out of the crisis

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bargaining, the game ends with the war outcome with the war payoffs. Ramsay refers to this mechanism of diplomacy as *simple diplomacy*. The sequence of moves is depicted in Figure 3.3.

Because we are interested in whether this institutional innovation gives rise to the informative equilibria that do not exist in Fearon's baseline model, we will only look for the condition of such equilibria (or the lack thereof) in Ramsay's simple diplomacy game.⁹

Simple Diplomacy Proposition (Ramsay 2006). There exist perfect Bayesian equilibria, in which S_2 sends a message $m = m_H$ if and only if $c_2 \leq c_2^*$; otherwise she sends $m = m_L$. Given $m = m_H$, both S_1 and S_2 simultaneously choose to fight and the game ends; given $m = m_L$, both S_1 and S_2 simultaneously choose negotiate and proceed to the ultimatum-game stage, where S_1 makes the demand x^* given the posterior belief that he is facing the types with $c_2 \geq c_2^*$.

The substantive interpretation of this equilibrium outcome is that the dilemma that state leaders face during the phase of diplomatic talks is the imperative not to miss the opportunity to negotiate when the real prospect for peaceful settlement of the dispute through bargaining actually exists. That is, if a state leader is interested in bargaining and peaceful settlements, then it is absolutely imperative for the diplomatic envoy to convey its interest in negotiation in order to coordinate two states' decisions to hold a serious negotiation.

Ramsay's institutional innovation essentially invokes a self-selection mechanism that screens out states according to their preference for compromise and peaceful settlements, recognizing that the fundamental reason why diplomacy is

⁹Ramsay (2006) notes that as is usually the case with this class of cheap talk games, there also exist the babbling equilibria, which actually take two different forms. The first is the case where both states decide to go to war and this decision is uncorrelated with the diplomatic message. The other is the case where a negotiation always occurs regardless of diplomatic cheap talk.

dysfunctional in Fearon's baseline cheap-talk diplomacy game is the non-resolved type's incentives for strategic misrepresentation during the phase of the ultimatum game (i.e., the one-shot terminal bargaining). Hence, in the presence of this institutional arrangement of diplomacy, those types of S_1 that would make a stingy offer during the ultimatum game would self-select out of the negotiation, and consequently stingy offer will not be sustained in equilibrium. This institutional apparatus—which allows states to decide whether a negotiation takes place (rather than forcing all the types of players to engage in the negotiation)— effectively transforms the problem of the risk-return trade-off into the one about the coordination.

This result highlights the claim that pre-crisis diplomatic communication is ineffective in the absence of diplomatic institutions because states have strategic incentives to take uncompromising diplomatic positions and thus miss the opportunity to engage in serious negotiations. The institutional innovation in Ramsay's formalization speaks to the general principle of diplomacy about the less-provocative nature, and Bull's (1977) and Sterner's (1996) notion of diplomacy: minimize the friction.

Another take-away point of Ramsay's simple diplomacy result (Proposition 1) is that this suggested institutional design will make cheap talk diplomacy effective if (but not only if) a state has a high cost of fighting. In other words, a state with high resolve to fight cannot use diplomatic communication effectively, implying that diplomacy might be useful in the shadow of a severe crisis in which the expected cost of fighting is large. This poses a puzzle: Can the communicative function of diplomacy be meaningful only in the case of a severe crisis and can diplomacy cease to be effective in a less-than-severe crisis? The quick reading of history suggests that it is not always the case. What are the other possible mechanisms that make diplomatic communication effective? This is where Sartori's

model comes into the picture.

3.2.4 Reputational Diplomacy: Sartori (2005)

In addition to the coordination and screening mechanism of endogenous negotiations, the punishment mechanism generated through the diplomatic reputations is known to help diplomatic communication make a difference in the course of international disputes. That is, Anne Sartori (2002, 2005) and Alexandra Guisinger and Alastair Smith (2002) demonstrate an alternative way in which diplomatic cheap-talk can matter in a subsequent international dispute. They show that precrisis diplomatic announcements can convey meaningful information if the states garner "situational" reputations (rather than "dispositional reputations"—i.e., reputations regarding the characteristics of an actor) about its behavioral characteristics, provided that states make decisions conditional on the past behavior of others.

The significant contribution of these authors to our understanding of the importance of diplomatic institutions in enhancing communicative efficacy is that their models explicate (1) the process through which the repeated interactions in a diplomatic community give rise to a country's reputation, and (2) the mechanism in which repetition-induced reputations in turn constrain a country's decision to choose a pre-crisis diplomatic message. As the result, the effectiveness of pre-crisis diplomatic communication hinges on the past behavior or the "history." A history of, say, country A is defined as a sequence of A's diplomatic messages and its subsequent decision in a crisis whether to follow through with that message. This history then are shared in the diplomatic community so that country A can acquire its reputation for "honesty" or for "dishonesty" based on the history. That is, one's reputation is contingent upon her history. Because this reputation essentially is an institutionalized memory or information about country A's past

behavior shared in the diplomatic community, the reputation mechanism then can be thought of as a collective monitoring system, or a "fire-alarm," on a country's the deviation from a diplomatic norm of honest communication.

Recall that communication can potentially be a Pareto-improving device in the presence of the *risk-return trade-off* due to the presence of uncertainty. Then, truthful (or honest) information transmission at the pre-crisis communication stage is crucial for both parties to a dispute to avoid an unwarranted war. On the other hand, false information transmission will not help states determine whether their interests overlap. Hence, a reputation for honesty is an *institutional apparatus* of diplomacy that generates a *punishment mechanism* to deter false communication (see Table 3.1 for other apparatuses and mechanisms). Because a false communication, if caught, invokes the diplomatic punishment, each country in the diplomatic community will have an incentive to make only credible communications in order to acquire a reputation for honesty. In short, a reputation is a valuable institutional apparatus because it helps countries in the diplomatic community learn each other's intent in a forthcoming crisis and hence avoid unnecessary wars (Guisinger and Smith 2002; Sartori 2002, 2005).

To explicitly analyze the role of these institutional apparatus and mechanisms, both Sartori (2002, 2005) and Guisinger and Smith (2002) expanded on Fearon's (1995) *cheap-talk diplomacy game* examined above (Figure 3.2), by allowing countries to repeatedly play the game infinitely. The sequence of plays and payoffs in the stage game is depicted in Figure 3.4.

Notice however that in Sartori's (2002, 2005) original model, she also includes another move by S_1 at the onset of the stage game prior to S_2 's diplomatic messaging. This reflects an additional decision node of S_1 at the onset of the stage game, shown by the dotted line, in Figure 3.4. We drop this additional move from our analysis because its inclusion is inconsequential for the analysis of

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Sartori's original model. That is, Sartori's main theoretical result can be obtained irrespective of S_1 's decision of whether to threaten. In fact, in constructing an equilibrium (or a set of equilibria) to establish her main result, she drops S_1 's decision from her analysis but instead simply assumes that S_1 always threatens in equilibrium. Sartori (2005, 59) notes that "The stage game effectively begins at the second node of the game tree.... I ignore the possibility that the challenger, too, can communicate." Hence, we drop S_1 's initial decision to threaten at the onset of the stage game from our analysis here.



Figure 3.4: Reputational Diplomacy (Sartori 2002, 2005): Although the original game proposed by Sartori includes S_1 's initial decision to make a threat in order to get a crisis going (shown in dashed lines), the main result remains intact without this initial move. For the sake of simplicity and clarity, I omitted the first move from the analysis here.

Having eliminated the first move by S_1 , the sequence of moves in our stage game is essentially identical to the simplified version of Fearon's (1995) oneshot game of cheap talk diplomacy (i.e., cheap-talk diplomacy game that we discussed above Figure 3.2): (i) S_2 first sends one of two diplomatic messages $m \in \{m_1, m_2\}$, where $m_1 = \{\text{will attack}\}$ and $m_2 = \{\text{will not attack}\}$; (ii) upon receiving S_2 's diplomatic massage, S_1 makes a *take-it-or-leave-it* "ultimatum" demand $x \in \{0, v_1\}$. If he "demands" x = 0 then the stage game ends, yielding the status quo payoff $(0, v_2)$; (iii) If S_1 demands $x = v_1$, S_2 must decide whether to attack or not. If S_2 attacks, then war occurs with the standard costly-lottery war payoffs; if S_2 does not attack, then the stage game ends with S_2 concession, yielding the per-period payoffs $(v_1, 0)$.¹⁰

Note that S_1 's demand strategy is a choice from a finite set of discrete demands in Sartori's model, whereas the previous models assume a continuous demand space. One may think of Sartori's demand strategy space a simplified version of the latter, because S_1 's offer only takes one of two forms: $x = v_1$ or x = 0 in equilibrium in all of three previous models discussed above (i.e., the *ultimatum* game, the cheap-talk diplomacy game, and the simple diplomacy game). Hence, to keep the matter simple, I follow Sartori's (2002, 2005) original treatment and reduce the continuous offer space down to a set of two discrete offers.

Sartori (2002, 2005) advances an important theoretical innovation in a relatively straightforward manner. Most importantly, she generates a country's reputation for "honesty," not for resolve as is usually the case with the previous models, but for honesty, as I discussed above. This is done in two steps. First, we replace the message content of S_2 's diplomatic message $m \in \{m_1, m_2\}$ in the infinite repetition of *cheap talk diplomacy game* (see Table 3.1 for the comparison). As Figure 3.4 shows, instead of announcing her "resolve" (in terms of her cost of fighting c_2) she now announces her "intended action" (or simply a threat to attack) in a forthcoming crisis, where $m = m_1$ represents the message that "she will fight/attack" and $m = m_2$ says "she will not attack."¹¹

Second, given this formulation of diplomatic messages, a reputation is modeled as follows. Although there are the infinite number of histories, we would only need to consider two types of history: a "dishonest" history, in which a

¹⁰Note that in Sartori's (2002, 2005) original setup, the per-period status quo payoff pair $(0, v_2)$ is adjusted to (0, 0), and the per-period concession payoffs $(v_1, 0)$ are reduced to (0, 0).

¹¹As we shall see shortly, this formulation of the pre-crisis diplomatic messages is necessary to generate diplomatic reputations for honesty, which in turn is necessary to install the punishment mechanism in the repeated crisis interactions.

country recently failed to follow through on its diplomatic statement, and an "honest" history, in which a country has recently not failed to follow through on its diplomatic statement. Given country A's has a dishonest history, any country in the diplomatic community should ignore A's diplomatic statement; as long as A maintains an honest history, other counties listen to A's diplomatic announcements and update their own beliefs about country A accordingly. Notice my emphasis on "recently" here in the definition of the history. This qualifier indicates the key difference between Sartori's model and Guisinger and Smith's model. In the former, once a country acquires a reputation for "dishonesty," she can restore her reputation for "honesty" in two periods after as long as she follows the equilibrium strategy (which is defined in a moment). This assumption implies that countries in a diplomatic community have less-than-perfect recall and hence that a bad diplomatic reputation is short-lived. This effectively weakens the deterrent effect of the reputation's punishment mechanism. On the other hand, in Guisinger and Smith's model, this qualifier is removed and hence once a country obtains a "dishonest" reputation, this reputation becomes a permanent fixture. I refer to Sartori's model as the *reputational diplomacy game*, and Guisinger and Smith's model as the honest diplomacy game.¹²

As is often the case with this class of cheap talk games, in every period there always exists a babbling equilibrium, in which S_1 ignores S_2 's message. In addition to babbling equilibria, there always exist an infinite number of informative equilibria. In this setup of the repeated game, the informative equilibrium takes the following form: S_2 (the informed player) truthfully makes a diplomatic state-

 $^{^{12}}$ As I will argue in a moment, there is no fundamental difference between these two models. First of all, Sartori's main result of partially effective diplomacy does not depend on this qualifier "recently"; the result actually holds for a more general case and in fact there is no need to make any assumption about the length of the "punishment" phase as long as it is nonzero. Second, as it turns out, there also exists a *fully* informative equilibrium to Sartori's *reputational diplomacy game*. Finally, all these considerations suggest that the *reputational diplomacy game* and the unitary actor version of the *honest diplomacy game* are equivalent, and each of them is a special case of the general case that I present below.

ment with positive probability, and S_1 (the uninformed player) checks up on the honesty of S_2 by taking an action, which is not in his one-time interest with positive probability, to figure out whether or not the opponent made an honest diplomatic announcement. Following Sartori (2002, 2005), I focus only on this class of equilibria, and ask the following question: what are the conditions for a fully separating equilibrium, in which S_2 sends a diplomatic message $m = m_1$ (or "attack") if and only if she will resist and sends $m = m_2$ (or "not attack") if and only if she will surrender?

Reputational Diplomacy Proposition (Sartori 2005). There exists a perfect Bayesian equilibrium in stationary strategies in which S_2 's types are at most partially separating given the reputation for honesty, in which there exist three sets of types: (i) types that make a threat $(m = m_1)$ if and only if she will resist if challenged; (ii) types that make a threat $(m = m_1)$ but back down if challenged; and (iii) types that make no threat $(m = m_2)$ and back down if challenged. Given the reputation for dishonesty, on the other hand, all types of S_2 pools on $m = m_1$.

The result suggests both encouraging and pessimistic implications about the effectiveness of precrisis diplomatic communication. First, it is encouraging because the repeated interaction makes a state's diplomatic announcement convey *some* meaningful information. The intuition is that if the players are concerned about their reputation for honesty (or credibility), precrisis diplomatic statements cannot be taken as meaningless even in a game where the interests of the states are so conflicting (e.g., their preferences are directly opposed) that cheap-talk statements would not be useful if the diplomatic interaction lasts only for one period (a la, the *cheap-talk diplomacy game* of Fearon discussed above). Obviously, this is a significant improvement from Fearon's (1995) implications about the hopeless possibility of diplomatic communication in the absence of diplomatic institutions. Sartori's (2002, 2005) effective diplomacy result is obtained because current gains from bluffing can be outweighed by future losses in payoff from a damaged reputation. In other words, unlike in a one-shot interaction, if diplomatic relations are expected to last perpetually, a state will find it to her advantage to maintain a certain level of honesty (or credibility) in making precrisis diplomatic statements because of the reputational effect. A damaged diplomatic reputation is costly because it deprives the states of the ability to communicate and hence the ability to mitigate the risk of unwarranted wars in future crises.

However, this result is also pessimistic because it indicates that diplomatic communication in this model can be at most *partially* effective. Despite Satori emphasizes that diplomatic communication can be effective in deterring S_1 from challenging the status quo, the theoretical result that she relies on actually indicates that diplomatic communication is not very effective. This proposition suggests that diplomatic communication in her model is not very successful in revealing S_2 's private information and avoiding unnecessary wars. This implication is obtained due to the her claim that a *fully* separating equilibrium does not exist in the reputational diplomacy game. This means that there exist S_2 types that issue an empty threat in equilibrium (i.e., types (ii)). Because there still exist types that can rationally send false information in equilibrium, the punishment mechanism embedded in the diplomatic apparatus of reputation for "(dis)honesty" is only partially effective. As a result, diplomatic signals in this sense can only convey noisy information at best. On the other hand, when S_2 has a reputation for dishonesty, her diplomatic communication does not convey any meaning information at all and by construction S_1 simply ignores her diplomatic signals.

Why is it that diplomatic communication can only be partially informative? One might suspect that the limited length of the punishment might be responsible for the semi-separating equilibrium. Recall that Sartori assumed that if a diplomatic relation is broken by a "lie" a diplomatic relation will be normalized in two periods. That is, if S_2 acquires a diplomatic reputation for dishonesty in period t, then she will punished by the diplomatic community for only two periods and hence her "honesty" reputation will be restored in period t + 3.¹³ Hence, one might suspect that the punishment mechanism is not strong enough to deter some type of S_2 from making an empty threat (i.e., from bluffing). The implication of this argument could be such that if we strengthen the punishment mechanism by extending the length that a bluffing country incurs a reputation for dishonesty, then the full separation of types would occur in equilibrium, and hence precrisis diplomatic communication would be fully informative.

However, as Sartori (2005, 60, 136) correctly points out, her main theoretical result does not depend on the assumption about the limited length of punishment for dishonesty (i.e., S_2 's bluffing being caught by S_1). As I will demonstrate shortly, her result holds in a more general case as long as the punishment length is nonzero, and we do not actually need any assumption on the length. Before turning to the formal presentation, I briefly explain the intuition. To cut to the chase, the reason why the result does not depend on any assumption about the specific length is due to the construction of the equilibrium (i.e., the one-shot deviation principle) along with two additional assumptions.

The first assumption is about S_1 's belief updating given S_2 's dishonesty reputation. Because S_1 must ignore the S_2 's diplomatic message as long as S_2 has a reputation for dishonesty, both states behave exactly in the same manner during this "punishment period" and hence their continuation values will be identical

¹³Since the transition from the punishment phase to the "diplomatic normalization" phase is assumed, not derived, the exact process of this transition is unknown in her model. Hence, her claims that this restoration of a reputation is "optimal" is not correct, as the optimality is not assessed, but assumed: "Theoretically, the fading of a reputation represents behavior that is optimal. As long as the challenger believes that the defender will cease its bluffing behavior, it is in the challenger's interest to assign the defender a reputation for honesty" (Sartori 2005, 61).

across the time periods (or subgames) in the punishment phase. The second assumption is that S_2 's types are drawn at the beginning of each period from a (uniform) distribution (Sartori 2005, 53, 56). With this assumption, at the beginning of each period, S_i 's belief about S_j 's type is initialized (Sartori 2005, 133, fn.2). As a result, S_i 's stage-game strategy is independent of the history or time. That is, the distribution assumption about S_2 's type imposes the stationarity onto the equilibrium strategies, which in turn guarantee the invariance of the continuation values implied by the first assumption. Finally, because the construction of the equilibrium employs the one-shot deviation principle in requiring the sequential rationality of the equilibrium strategies, it is sufficient to assess the incentives to deviate from the equilibrium for just one period. In other words, this principle implies that it is inconsequential to check the deviation incentives for $N \gg 1$ periods as long as a given strategy is sequential rational against the one-period deviation. Hence, the sequential rationality of the strategy can be obtained by constructing the optimality stage-game strategies given the reputation-contingent continuation values.

I now turn to presenting a formal result with a N punishment length. In doing so, I will show that it is possible to construct an informative equilibrium with the stationary strategies in which S_2 's types are fully separating in Sartori's (2002, 2005) reputational diplomacy game.

More Effictive Reputational Diplomacy Proposition (Sartori 2005 revisited). Let N denote the number of periods in which S_2 incurs a reputation for dishonesty. Then, for any $N \ge 1$, there exists a fully separating equilibrium to the reputational diplomacy game of Sartori (2002, 2005) in stationary strategies if $\delta - \delta^{N+1} \ge \frac{jc_2}{(1-p(1-j))(w_H-w_{D1})}$, in which, provided that S_2 has an honesty reputation, S_2 makes a threat $(m = m_1)$ and resist when challenged if $v_2 \ge 0$, and makes no threat $(m = m_2)$ and accept when challenged if $v_2 < 0$. In Appendix A, I fully present the formal characterization of this equilibrium. This result suggests that precrisis diplomatic communication can be fully informative, and hence more effective than Sartori (2002, 2005) originally claimed. This result does not undermine Sartori's original contribution to our understanding of how pre-crisis diplomatic communication works to avoid unwarranted wars; rather, this result strengthens it.

Recall that Sartori assumes that a bluffing state will incur diplomatic costs in the form of a reputation for dishonesty only two periods. However, the condition on N for the equilibrium to be fully informative indicates that her assumption is irrelevant. Indeed, diplomatic communication can be informative as long as a state incurs a diplomatic punishment for a nonzero period (i.e., $N \ge 1$). There is no need to assume that $N = \infty$ (i.e., grim trigger) or N = 2 (i.e., as Sartori does).

Moreover, because $N \to \infty$, $\delta^{N+1} \to 0$, this result is effectively equivalent to the informative equilibrium of the unitary-actor version of the *honest diplomacy* game by Guisinger and Smith (2002).

3.2.5 Honest Diplomacy: Guisinger and Smith (2002)

Now consider the *honest diplomacy game* of Guisinger and Smith (2002). The sole difference with *reputational diplomacy game* of Sartori (2002, 2005) is the designated length of the punishment period following the "dishonest" history. That is, in the *honest diplomacy game* the length of diplomatic punishment against being dishonest is unlimited, or infinity. Members in a diplomatic community should punish a dishonest country by ignoring any diplomatic message sent by her. The structure of the game remain unchanged otherwise.

Honest Diplomacy Proposition (Guisinger and Smith 2002). There exists a

set of informative equilibria in which S_2 's types are fully separating given the reputation for honesty, in which S_2 makes a threat $(m = m_1)$ if and only if she will resist if challenged, and makes no threat $(m = m_2)$ otherwise.

3.3 Discussion

We have seen that outcomes desirable for all players can be achieved as equilibria of repeated crisis games when the states are allowed to communicate prior to crisis bargaining because the state leaders use strategies so that diplomatic communication generates a reputational mechanism that threatens to "punish" deviations. However, this key result on the deterrent effect of diplomatic reputation in both Sartori's (2002, 2005) model of *reputational diplomacy* and Guisinger and Smith's (2002) model of *honest diplomacy* crucially depends on a couple of assumptions about how relevant information is shared and maintained.

First, as Guisinger and Smith (2002) correctly point out, there must exist common knowledge about previous crises and the behavior of each player among the entire population of the international system because, unlike the frequent encounters between enduring rivalries, states are randomly matched up in each period. To be sure, the argument can be made about the relatively small number of actors in the international system and the high politics nature of "reputation" that matters in this diplomacy equilibrium. Yet, it is not entirely clear if the monitoring of honesty of each government (or each government of the past behavior) is immune from the problems of noise or such a mechanism is publicly feasible. Moreover, this class of equilibria with a punishment mechanism is not robust to mistakes by the players. For the problem of noisy monitoring in the context of repeated interactions, see Abreu, Pearce and Stacchetti (1990) and Fudenberg, Levine and Maskin (1994). On the theoretical issues of private monitoring see Ben-Porath and Kahneman (1996) and Matsushima (2004), Kandori (2002), and Kandori and Obara (2006).

Second, the formation of reputation in Guisinger and Smith's (2002) model must follow the punishment scheme prescribed by the grim trigger (GT) strategy, because any failure to follow through on a threat leads to the reputation for cheating in all future periods. However, many authors find the grim trigger equilibrium unrealistic and undesirable, because of the assumption that a state's reputation for honesty will forever be lost after a single failure to carry through on one's threat. It is not entirely clear if the failure to carry through on one's commitment once is worth granting a reputation for dishonesty that will lasts forever. Sartori's (2002, 2005) original model successfully escapes from this type of problems by assuming that the diplomatic reputation for cheating is relevant only for periods, much in the spirit of Milgrom et al.'s (1990) modified tit-for-tat or contrite tit-for-tat in Kurizaki (2004).¹⁴

Even though one can relax the grim-trigger assumption in many different ways, the reputation mechanism still requires that the incentive-compatible punishment is feasible. If deviation occurs (and when it occurs), the severity of the threatened punishment entails a trade-off: more drastic punishment may allow more desirable outcomes to be sustained, but at the same time may entail the reductions in the payoffs during its implementation.¹⁵

This theoretical issue may link to a more general problem of "renegotiation-

¹⁴Yet, she does not provide an explanation for this assumption or a discussion of how long a certain diplomatic reputation itself can last; she simply imposes an assumption that diplomatic reputations are only relevant to equilibrium behavior in the game for two periods.

¹⁵This is where Sartori's (2002, 2005) assumption about the reputation being exogenously restricted for two periods becomes theoretically questionable as to its incentive compatibility. It is not straightforward to analyze the optimality of the duration or the severity of the punishment. On the other hand, even though Sartori herself does not mention it, according to Gelpi and Grieco (2001), this assumption is empirically well grounded on average if one is willing to agree on Guisinger and Smith's (2002) assumption that a state's diplomatic reputation will be restored if its leadership is replaced. Roughly speaking, the vast majority of state leaders in the twentieth century engaged in international crises no more than three times.

proofness" (Fudenberg and Tirole 1991, 179-184). Following a breakdown of desirable diplomatic outcomes due to diplomatic dishonesty, the state leaders cannot renegotiate to return to the cooperative phase, even though this is something they clearly have an incentive to do. If state leaders can engage in such renegotiation, however, the incentive for being honest diminishes and as a result diplomatic reputation will no longer be a credible deterrent.

Guisinger and Smith's (2002) leader-contingent punishment mechanism can be thought of as the remedy for this renegotiation-proof problem. However, the leader-contingent mechanism is renegotiation proof only if the state is democratic, but it is not renegotiation proof if the state is non-democratic. This is because, while this leader-contingent mechanism is a direct application of McGillivray and Smith's (2000) "agent-specific grim trigger" (ASGT) strategy, ASGT is renegotiation proof only if an agent is democratic. This is simply because by definition the leader contingent equilibrium cannot be sequentially rational (hence it fails to meet the perfection requirement) if agents (or leaders) are not democratically accountable.

Third, while theoretically interesting and important, the empirical problem of the Guisinger-Smith (2002) model of honest diplomacy is that one of the key assumptions is not consistent with an empirical fact. That is, for the Guisinger-Smith's (2002) leader-contingent reputation model to work, the same state leader must play a crisis game repeatedly (at least in the expectations of voters and the leader herself) until she gets removed domestically. This assumption is especially crucial for democratic leaders because they are the ones who would benefit from enhanced credibility and enhanced reputation for honesty due to the institutionalized electoral accountability.

The empirical record, however, suggests that democratic leaders do not stay in office for long time. On average they have a shorter period of time in office than autocratic leaders do. Gelpi and Grieco (2001, 802) found that among the defending leaders in a random sample of leader-dyad between 1918 and 1992, the democratic leaders on average had been in office for approximately 4 years, while autocratic defenders had been in office for more than 10 years. Among 319 political leaders who engaged in the total of 403 international crisis between 1918 and 1992, about half of them engaged only in a single crisis in their tenure in office, and over 80% engaged in no more than three crises.

One may argue that it is not important if the assumptions correspond to the facts as they are known because what is more important is the recognition that no logical structures can be constructed without assumptions: if assumptions are "useful," that would be enough. However, it is also true that the greater the gap between the assumption and the fact, the less reliable the conclusion that follows from them. One may argue that it is not important if the assumptions correspond to the facts as they are known because what is more important is to realize the real role of assumptions: no logical structures can be constructed without assumptions. Hence, one might argue that as long as an assumption is useful, the assumption should be validated. However, it is also true that the greater the gap is between the assumption and the facts, the less reliable the conclusion that follows from them.¹⁶

Finally, what makes Sartori's contribution stand out is her innovative analysis of diplomatic reputation for honesty within the context of rigorous crisis bargaining. Yet, this innovation comes at some cost. Notice that this analysis requires that diplomatic messaging reveal S_2 's intended actions, rather than announcing S_2 's resolve level (as in Fearon's cheap talk diplomacy game and Ramsay's simple diplomacy game). Without this assumption about diplomatic messaging, Sartori

¹⁶Milton Friedman (1953) once challenged this latter position in the defense of the former, arguing that it is the conclusion (or the resultant causal argument) that should be evaluated, but not the underlying assumptions; it is not constructive to criticize the assumptions. I disagree.

would not be able to introduce audience costs—that is internationally generated audience costs. As a result, diplomatic communication in Sartori's model is analytically equivalent to and substantively interchangeable with threat-making in the classical crisis bargaining games (Fearon 1997; Schultz 1998; Smith 1998b; Ramsay 2004). For example, one of key results about diplomatic communication is that for diplomatic cheap talk to be effective, S_2 must be willing to follow through on her threat (p. 138). But how is this argument different from standard argument about the role of threats in crisis bargaining? Hence, this modeling choice, albeit innovative, raises a concern: how is it substantively different from existing rationalist accounts of crisis bargaining?

I argue that a more natural way to analyze the effectiveness of diplomatic communication is to go back to the basics. That is, diplomatic messaging must be about the players' payoff parameters—their level of resolve, either in terms of cost of fighting or the valuation, as modeled by Fearon and Ramsay. For Hedley Bull, the purpose of diplomacy is to allow for communication among the potential disputants so that they can coordinate their actions and hence avoid inefficient wars. He says the primary task of a diplomat is to ensure that the "objective for which he is seeking is consistent with the other party's interests, as well as with his own," he continues, "[a diplomat] tries to find the objective for which he is seeking in a framework of shared interest and agreed principle that is common ground between the parties concerned" (Bull 1977, 165). For Morgenthau (1977) and Guisinger and Smith (2002), the purpose of diplomatic communication is to evaluate the value of the issue at stake in comparison to its military capabilities and the cost of the eventual fighting. The bottom line is that diplomatic communication is supposed to transmit information about the players' valuation, and modeling the players' announcements about their intended action in the eventuality blurs the difference between the coercive nature of threats

and diplomatic communication. The diplomatic communication is envisioned as a remedy for the asymmetric distribution of private information; it should be distinguished from the credible-revelation of commitment within the traditional rationalist framework, because the latter always carries the coercive nature.

3.4 Conclusion

In this chapter, I set out to explicate the machinery of diplomatic communication. As I argued in Chapter 2, the key function of diplomatic communication in international disputes is to reveal states' preferences so that they can identify whether their preferences overlap in order to avoid war. This implies that states would find diplomatic communication most useful before they engage in diplomatic negotiation.

This chapter therefore explored the dynamics of pre-crisis diplomatic communication and the condition under which such pre-crisis communication can be effective. The most fundamental logic of the origin of war is the risk-return tradeoff due to the presence of uncertainty. Although the presence of uncertainty is not necessary nor sufficient for the occurrence of war, the risk-return trade-off has been known in the literature as representing one of the key mechanism that gives rise to the positive probability of war. This is shown by the analysis of the *ultimatum game* under both complete and incomplete information.

This link between uncertainty and the positive probability of war via the riskreturn trade off was the key motivation for diplomatic communication. However, as the analysis of the *cheap-talk diplomacy game* demonstrates, a pure attempt of diplomatic communication cannot convey meaningful information because each state has an incentive to misrepresent its private information. This is where diplomatic institution can be useful in rendering pre-crisis diplomatic communication informative.

The fist institutional apparatus of diplomacy to make diplomatic communication effective is a "diplomatic forum" where parties to a dispute can communicate and decide whether they are serious about avoiding costly fighting. This essentially allows states to select themselves into a diplomatic route of conflict resolution. That is, if they find out that there is no hope in diplomacy, then they can cut to the chase and start fighting. This selection mechanism of diplomacy basically provides parties to a dispute with a tool to coordinate on the diplomatic route if they are interested in it. This way, they can avoid the risk-return trade off and hence avoid unwarranted wars. Ramsay (2006) proposes this mechanism in his simple diplomacy game, and shows that this mechanism can work if a state expect to incur a high cost of fighting—that is, it works in the shadow of a severe crisis in which the expected cost of fighting is high.

The second institutional apparatus of diplomacy is the sense of a "diplomatic community." In the absence of the diplomatic community, the states will not expect to interact with other states in the future repeatedly. If the repeated interaction is expected, then the concerns for their diplomatic reputation enter the states' strategic calculation. In particular, if a state caught bluffing in the course of a diplomatic crisis, then the diplomatic community will punish this state for being "dishonest" in the use of diplomatic communication by ignoring this state's subsequent diplomatic statements. Because it is costly for a state to be deprived of diplomatic communication, all the states in the diplomatic community will have incentives to be "honest" in communicating diplomatically. Hence, a diplomatic reputation for "honesty" can function as a deterrent mechanism unless a state is myopic and discount the value of future diplomatic relations.

Note that we use the informativeness as a criterion for the effectiveness of diplomatic communication. We do so simply because diplomatic communication

is an informational device. Yet, as we shall see, other functions of diplomacy, such as diplomatic negotiation and diplomatic manipulation, do not necessarily have informational efficacy simply because the goal of those functions is not to convey information. Therefore, although the literature tends to focus on the informational role of diplomacy, the informativeness should not be the sole criterion of the effectiveness of diplomacy as a foreign policy instrument.
3.5 Appendix A: A Fully Separating Equilibrium to the Reputational Diplomacy Game

In this appendix, I construct a fully separating equilibrium to the reputational diplomacy game, and in doing so, I adopt the original notations that Sartori (2002, 2005) used. In particular, letting l denote the marginal type of S_2 that prefers $m = m_2$ in equilibrium, I look for an equilibrium in which all types $v_2 > l$ send $m = m_1$ and attack if S_1 demands $x = v_2$, and all types $v_2 < l$ send $m = m_2$ and accept the demand if S_1 demands $x = v_2$, provided that S_2 has a reputation for honesty (i.e., she has not been caught bluffing in the past two periods).

If S_2 has a reputation for honesty, S_1 believes that S_2 will always attack, upon receiving a message $m = m_1$, and that S_2 will always accept, upon receiving $m = m_2$. Hence, S_1 's optimal stage-game strategy is to choose $x(m) = v_2$ always, given $m = m_2$, and to choose $x(m) = v_2$ if, and only if, $0 < pv_1 - c_1$, or equivalently

$$v_1 > \frac{c_1}{p} \equiv j, \tag{3.5.1}$$

given $m = m_1$, where *j* denotes the critical type of S_1 who must be indifferent between attacking and accepting.¹⁷ This implies that, given $m = m_2$ and a reputation for honesty, S_1 choose j = 0.

Following Sartori (2005, 135), I adopt the one-shot deviation principle to check for the sequential rationality of the strategy. Specifically, for a given pair of strategies in period t, the following conditions (H), (D1), (D2), ..., (DN-1), and (DN) must be met:

• (H): S_i has no incentive to deviate for one period at t when S_2 has a reputation for honesty.

¹⁷Note that this characterization remains the same with Sartori's original specification of the war payoffs and the concession payoffs.

- (D1): S_i has no incentive to deviate for one period at t when S₂ was caught bluffing in period t - 1 (i.e., t is the 1st period of the punishment for dishonesty)
- (D2): S_i has no incentive to deviate for one period at t when S₂ was caught bluffing in period t 2 (i.e., t is the 2nd period of the punishment for dishonesty);

:

- (DN 1): S_i has no incentive to deviate for one period at t when S_2 was caught bluffing in period t N 1 (i.e., t is the (N 1)th period of the punishment for dishonesty).
- (DN): S_i has no incentive to deviate for one period at t when S_2 was caught bluffing in period t - N (i.e., t is the Nth and last period of the punishment for dishonesty).

Further, the continuation value of S_2 in period t depends on a history h^t . As I mentioned in the text, there are only two relevant histories: that is, a history h_H^t that generates an honesty reputation; and h_{DN}^t that generates a dishonesty reputation, where $N = \{1, 2, 3, ..., N - 1, N\}$ for $N \ge 1$. Hence, h_{DN}^t denotes the history in which S_2 was caught bluffing in period N.

Let w_H^t denote S_2 s' continuation value at t, given h_H^t . Similarly, we let w_{D1}^t denote S_2 s' continuation value at t, given h_{D1}^t . Or, more generally, we can write w_{DN}^t given h_{DN}^t . I now turn to characterizing these continuation values. I first consider w_H^t . Because w_H^t has a recursive structure, it is convenient first to calculate the expected payoff from playing the *reputational diplomacy game* for one period:

$$EU_B(honest) = F(l) \cdot 0 + (1 - F(l)) \Big\{ (1 - G(j)) [(1 - p)E(v_2|v_2 > l) - c_2] + G(j)E(v_2|v_2 > l) \Big\}. = (1 - F(l)) \Big\{ [1 - p(1 - G(j))] E(v_2|v_2 > l) - (1 - G(j))c_2 \Big\}.$$
(3.5.2)

Hence, the continuation value given an honesty reputation is given by $w_H^t = \frac{EU_B(honest)}{1-\delta}$.

Now consider w_{D1}^t . Given h_{D1}^t , S_2 will play the game with a dishonesty reputation for N periods from t to N, and will play the game with a restored honesty reputation indefinitely from the period N and thereafter. Hence, S_2 's per-period value of playing the game for N periods from the period t, with a reputation for dishonesty, can be written as:

$$(1 - G(o)) \left[(1 - F(q)) \times \text{war payoff} + F(q) \times \text{back-down payoff} \right]$$
$$+G(o) \times \text{concession payoff.}$$
$$= (1 - G(o)) \left[(1 - F(q)) \times ((1 - p)E(v_2|v_2 > q) - c_2) \right]$$
$$+G(o) \times E(v_2), \qquad (3.5.3)$$

where

$$o = \frac{[1 - F(q)]c_1}{p + (1 - p)F(q)},$$
(3.5.4)

which denotes the critical type of S_1 that is indifferent between $x = v_1$ and x = 0

in equilibrium with a dishonesty reputation, and

$$q = \frac{c_2}{1 - p},\tag{3.5.5}$$

which denotes the critical type of S_2 that is indifferent between attacking and accepting given S_1 has chosen $x = v_1$ and a dishonesty reputation.

Hence, S_2 's continuation value at t given the history h_{D1}^t is

$$w_{D1}^{t} = \left\langle \left(1 - \delta^{N}\right) \left\{ \left(1 - G(o)\right) \left[\left(1 - F(q)\right) \cdot \left((1 - p)E(v_{2}|v_{2} > q) - c_{2}\right) \right] + G(o) \cdot E(v_{2}) \right\} + \delta^{N} w_{H} \right\rangle / \left(1 - \delta\right),$$
(3.5.6)

where
$$w_H = \left\langle \left(1 - F(l)\right) \left\{ \left[1 - p(1 - G(j))\right] E(v_2 | v_2 > l) - \left(1 - G(j)\right) c_2 \right\} \right\rangle / (1 - \delta).$$

Similarly, consider w_{D2}^t , the continuation value of S_2 who was caught bluffing in period t - 2. Observe that as long as S_2 has a reputation for dishonesty, her choice of stage-game strategy becomes irrelevant for the continuation value due to the one-shot deviation principle. This implies that as long as the condition (D1) is satisfied, the condition (D2) for the one-shot deviation principle that are required by the sequential rationality is irrelevant (Sartori 2005, 135-136). An analogous argument eliminates the conditions (D2), (D3), ..., (DN - 1), and (DN) for S_i , for i = 1, 2. That is, in order to check for the sequential rationality of the equilibrium strategies using the one-shot deviation principle, it is sufficient to check only for the conditions (H) and (D1) for both S_1 and S_2 .

We now have all the components to characterize the cutoff-point l of S_2 such that all types $v_2 > l$ send $m = m_1$ and attack if S_1 demands $x = v_2$, and all types $v_2 < l$ send $m = m_2$ and accept the demand if S_1 demands $x = v_2$, provided that S_2 has a reputation for honesty. In equilibrium, the critical type l must be indifferent: $(1 - G(j))[(1 - p)l - c_2] + G(j)l + \delta w_1 = 0 + \delta w_1$. Simple algebra yields

$$l = \frac{\left[1 - G(j)\right]c_2}{1 - p(1 - G(j))},\tag{3.5.7}$$

where $j = \frac{c_1}{p}$.

To ensure that S_2 's precrisis diplomatic message is fully informative, it must be shown that all types above l prefer attacking to accepting if S_1 demands $x = v_2$, given $m = m_1$. If S_2 falsely announces that $m = m_1$ and fails to attack when S_1 responds with $x = v_2$, S_2 receives the immediate payoff of 0, receives w_{D1} for N periods beginning from the next period (t = 1), and restores a reputation for honesty at N + 1. In equilibrium, the payoff from announcing that $m = m_1$ and attacking must be at least as good as the payoff from announcing (falsely) that $m = m_1$ and subsequently not attacking:

$$\frac{(1-p)v_2 - c_2 + \delta w_1}{1-\delta} > \frac{0 + (\delta - \delta^{N+1})w_{D1} + \delta^{N+1}w_H}{1-\delta}$$
$$v_2 > \frac{c_2 - (\delta - \delta^{N+1})(w_H - w_{D1})}{1-p} \equiv v_2^{\dagger}, \qquad (3.5.8)$$

where v_2^{\dagger} denotes the critical type that is indifferent between attacking and accepting given the message $m = m_1$.¹⁸ Hence, the following condition must hold for the proposed equilibrium to exist.

$$l > v_2^{\dagger}. \tag{3.5.9}$$

Assume that $F(\cdot)$ and $G(\cdot)$ are the uniform distributions. Then, the last condition is satisfied when

$$\delta - \delta^{N+1} \ge \frac{jc_2}{\left(1 - p(1 - j)\right)(w_H - w_{D1})}.$$
(3.5.10)

¹⁸Note that in Sartori's (2002, 2005) original model, this critical type is denoted by m. I replace Sartori's m with v_2^{\dagger} to avoid the confusion.

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Since $\delta \in (0, 1)$, the last inequality (3.5.10) holds if

 $N \geq 1.$

Hence, it is easy to verify that for any $N \ge 1$ there exist l that satisfies the condition 3.5.9.

3.6 Appendix B: Proofs of the Propositions

Proof of Ultimatum Game Proposition under Complete Information. The result immediately follows from the analysis in the preceding text. \Box

Proof of Ultimatum Game Proposition under Incomplete Information. Because the proof of this result is readily available elsewhere (e.g., Fearon 1995), I provide a sketch of the proof here. In the proposed equilibrium, S_2 surely rejects the offer and fights only if $1 - x \ge 1 - p - c_2$, or $x - p \le c_2$ by the subgame perfection. Then given the cumulative distribution function $F(c_2)$ on $[0, \overline{c_2}]$, S_1 's problem is to choose x such that the optimal demand x^* maximizes his expected utility:

$$F(x-p)x + (1 - F(x-p))(p - c_1).$$
(3.6.1)

It is straightforward to show that the result follows with the first-order condition and algebra. $\hfill \Box$

Proof of Cheap Talk Diplomacy Proposition. Fearon (1995) provides the proof for the case of $N \gg 1$ in the finite message space. With the two-message space, we must simply show that the message m_H will never be credible because S_2 with low resolve $(c_2 = c_2^H)$, always has an incentive to mimic the higher type of S_2 , for which $(c_2 < c_2^L)$. Proof of Simple Diplomacy Proposition. I provide a sketch of the proof provided by Ramsay (2006). To prove the proposed informative equilibria, because each player's strategy can be characterized by a pair of cut-point decision rules, it is sufficient to show (1) that neither state has incentives to deviate from negotiation to fight and (2) that S_2 's diplomatic message $m = m_L$ is incentive compatible. First, given S_2 's diplomatic message that $m = m_L$, for S_1 to opt for negotiation it must be the case that the expected payoff from choosing negotiation is greater than or equal to his war payoff, $F(x^* - p, m_L)x^* + (F(c_2^*) - F(x^* - p, m_L))(p - c_1) \ge (p - c_1)$, where x^* denotes S_1 's optimal "take-it-or-leave-it" demand. This condition holds as long as $x^* \ge p - c_1$, which is always true in equilibrium. Second, to see if the message $m = m_L$ is incentive compatible for types with $c_2 \ge c_2^*$, we simply need to check if the highest possible types with $c_2 \in [x^* - p, c_2^*]$ can "profit" by $m = m_H$.

Proof of Reputational Diplomacy Proposition. As I argue in the text and the next proposition, the claim that the informative equilibrium to the reputational diplomacy game involves at most partial separation of S_2 cannot be supported; there also exists a fully separating equilibrium. Hence, proof of the next proposition disproves this result.

Proof of More Effictive Reputational Diplomacy Proposition. I have already formally characterized the proposed equilibrium and derived the conditions for its existence. \Box

Proof of Honest Diplomacy Proposition. The difference between this proposition and More Effictive Reputational Diplomacy Proposition above is the specification of the punishment length, and other aspects of the game remain unchanged. Hence, the cut-point strategies and equilibrium beliefs carry over. It is sufficient to demonstrate that the solution in More Effictive Reputational Diplomacy Proposition holds for $N = \infty$. The equilibrium condition for the case with N is given by the inequality (3.5.9):

$$l > \frac{c_2 - (\delta - \delta^{N+1})(w_H - w_{D1})}{1 - p},$$

Since $\delta^{N+1} \to 0$ as $N \to \infty,$ in the limit the last inequality is

$$l > \frac{c_2 - \delta(w_H - w_{D1})}{1 - p}$$

It is straightforward to verify that these are the conditions for the fully separating equilibrium in Guisinger and Smith (2002). \Box

CHAPTER 4

Diplomatic Negotiation: Diplomacy and Military Coercion in International Disputes

[D]iplomacy that ends in war has failed in its primary objective: the promotion of the national interest by peaceful means.

— Hans Morgenthau, Politics Among Nations¹

[T]he teaching of [the Cuban Missile Crisis] ... was not how to "manage" a grave crisis, but how important it is not to have one.

— McGeorge Bundy, Danger and Survival.²

States receive so much benefit from uninterrupted foreign negotiations.

— Cardinal Richelieu, Testament Politique³

4.1 Introduction

Why did Nixon and Kissinger avoid a dramatic confrontation on the order of 1962, pursuing instead quiet diplomacy to settle Cienfuegos Crisis in 1970? Why did John Kennedy resort to embargo and created a public crisis during the 1962

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¹Morgenthau ([1948] 1973), p. 519.

²Bundy (1988), p. 462.

³See Section 2.1.6 in Chapter 2 "Natural History of Diplomacy" and the references therein.

crisis to convince Khrushchev to withdraw the missiles from Cuba? Why are some international crises resolved through diplomatic negotiations while others require military coercion that entails risking war in order to avoid war?

This chapter explores the role that diplomacy plays in resolving international disputes. In particular, I propose a rationalist model of diplomacy to explain when and why political leaders abandon diplomatic negotiation and resort to military coercion, and why and how political leaders can demonstrate their resolve without appealing to publicly demonstrated military coercion. To do so, I develop an alternating-offer bargaining game of international disputes where states can choose between diplomatic negotiation and military coercion. Analyzing how diplomatic negotiation and military coercion interact with each other, I attempt to identify the relative effectiveness of military coercion and diplomatic negotiation to settle international disputes short of war.

In what follows, I first discuss the choice between diplomatic negotiation and military coercion that faces political leaders in international disputes. The second section presents an alternating-offer bargaining game, which is followed by the analysis of the game under complete information in the third section. The fourth section discusses the result under incomplete information with a particular focus on the condition under which states may continue diplomatic negotiation forgoing their military options. The fifth section discusses some of the implications.

4.1.1 Diplomacy and War

A fundamental question in the study of international politics is why war occurs. In many cases, war resulted from one or more states' attempt to influence the adversary's strategic calculations and decisions through military coercion. Wars are typically preceded by a period of military coercion, but military coercion in turn is preceded by diplomatic negotiations intended to locate peaceful settlement

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of a dispute. The record of international history shows that states usually do not resort to military coercion as a bargaining tool from the outset of international bargaining, but instead, they first try out diplomacy. War, therefore, can be seen as failure of diplomacy.

As such, the logic of success and failure of diplomacy in international disputes is at the core of the answer to the fundamental question regarding the origins of war and peace. Then, to understand this fundamental issue in the study of international politics, the question to ask here becomes why do these diplomatic efforts sometimes fail to reach peaceful settlements that both sides would prefer to the gamble of military coercion? Notice that just as wars are always costly and hence inefficient, military coercion carries costs both in terms of politics and military. With this assumption, our first puzzle here is as follows: *Why do political leaders abandon diplomacy and resort to military coercion when the former is available, despite the inefficiency of military coercion.*

At first glance, however, this puzzle seems trivial since it is quite obvious that diplomacy, rather than military coercion, plays a vital role in settling a conflict of interests between states and in preventing militarized disputes. However, there is no adequate theory to explain this puzzle, since rigorous theoretical research on the origin of war and conflict resolution is must about how states can reach peaceful settlements through normal diplomacy, as opposed to coercive diplomacy that presumes threats and the limited use of military forces. In fact, the success and failure of "peaceful" diplomacy in international disputes is largely unexplored. As Sartori (1998) observes, "Realist deterrence theory ... and psychological deterrence theory all maintain that diplomacy is important, but none of these schools of thought completely explains how or why a state's diplomacy influences the behavior of other states" (p. 8). The study of diplomacy and its role in the origins of war remain marginal to and almost disconnected from the study of war and conflict resolution (see also Sharp 1999).

For example, when the construction of a Soviet nuclear submarine base was discovered in 1970 in Cuba, President Nixon and Henry Kissinger pursued almost entirely private diplomacy to settle the Cienfuegos Submarine Base Crisis. To avoid "a dramatic confrontation on the order of 1962," the Nixon administration "considered that quiet diplomacy was best suited to giving the USSR an opportunity to withdraw without humiliation" (Kissinger 1979, 651). Although this crisis could "have been known as the Cuban Nuclear Submarine Crisis of 1970 and which, like its predecessor, might have taken us to the brink of nuclear confrontation with the Soviet Union," possibly no one remembers this incident because it was managed quietly through quiet diplomatic negotiation so that the public would not remember this incidence as a crisis (Nixon 1978, 489).

The discussion above suggests that there is a gap between our systematic understandings and empirical facts about diplomacy, and hence this gap suggests our puzzle becomes as follows: if diplomacy is ineffective as suggested by the dominant theoretical approach, why is it that political leaders have maintained diplomatic institutions for centuries, and bother to try diplomatic negotiation rather than to resort to military coercion from the outset of international disputes?

This paper attempts to fill this gap by developing a rationalist model of diplomacy, which is capable of explaining this puzzle. To do so, I analyze how diplomatic negotiation and military coercion interact with each other in the course of crisis bargaining, and identify when and why normal diplomacy can settle a dispute without military coercion.

Following the rationalist approach to war, I first argue that the role of diplomacy in the origin of war and conflict resolution can be understood by a natural extension of bargaining theories of war. Students of war and conflict resolution have long conceptualized war as a bargaining failure between governments and uncertainty is a fundamental cause of such a bargaining breakdown. On the one hand, the modern diplomatic institutions (often called "Italian system" and/or "French system" depending on one's perspective) were historically developed in Renaissance Italy as uncertainty reduction mechanisms in response to the security dilemma due to the lack of communication among city-states. Therefore, diplomatic negotiation in international crises can be seen as states leaders' efforts to overcome uncertainty through revealing information and hence identify mutually acceptable peaceful settlement of disputes without inefficient fighting. This approach views diplomacy as a conflict-resolution system of the same kind as war and military coercion.

Second, following the historical approach, I look for that the rationality of diplomatic processes its distinctive institutional features, including honesty; secrecy; non-violence; face-saving maneuvers; ceremonial protocols; etc. I argue that each aspect of diplomatic institutions such as secrecy and the alternating offer protocol facilitate peaceful settlement of international disputes without military coercion.

With this combined approach, how might one make sense of the rationality of the seemingly irrational diplomatic practice in international crises? Here, building on Fearon (1992), my argument holds that as means for resolving international disputes, military coercion is costly for both sides to a dispute, even when militarized dispute do not lead to war. Military coercion is a highly visible event in which leaders take risky and provocative actions observed by relevant political audiences. It is costly because when leaders publicly concedes or backs down, they typically suffer the political costs of poor foreign policy performance and/or diplomatic humiliation.

4.1.2 Bargaining and Coercion

There are two ways to bargain in international crises: *diplomacy* and *coercion*. While the literature seems to agree that there are three key functions of diplomacy, including information-gathering, negotiation, and communication, I restrict my attention in this paper to a single aspect — negotiation—because all diplomacy implies some degree of negotiation (Stearns 1996, 132).⁴

Diplomatic Negotiation.

Diplomacy is the attempt to adjust conflicting interests and negotiation is the principle form of diplomacy, where bargainers exchange information or withhold it, and agree to settle a problem or agree to disagree (Wight 1978, 89; see also Stearns 1996, 132). Historically, modern form of diplomatic negotiation was established during the reign of Louis XIV, which had been the practice of international negotiation originated by Richelieu and later theorized by Callieres. During the 17th to 19th centuries, this method was adopted by all European countries (Nicolson 1963, 52-72).

The primary objective in such a diplomatic negotiation is to reach an agreement through compromise, and negotiation takes place continuously rather than making a "take-it-or-leave-it" offer. A persistent feature of diplomatic negotiation that distinguishes itself from coercion is that bargaining is conducted without the use of force.

The primary strategic problem involved in a diplomatic negotiation is that, under conditions of asymmetric information, states face the well-known trade-off between reducing the risks of bargaining breakdown and increasing the returns

⁴In chapter 5, I have developed a theoretical rationale of secrecy in crisis bargaining when going public is an available option to enhance the credibility of one's signals (see also Kurizaki 2007a)

to peace agreement (Fearon 1995; Powell 1999). The more concession the offer makes, the greater is the likelihood that the offer will be accepted, thus preventing bargaining breakdown or further possibility of military confrontation. However, while more generous concessions will make peace more likely, they reduce the return to the peace obtained by a concession. Hence, peace comes at a cost in this case. Similarly, the more demand the offer makes, the greater is the likelihood that the offer will be rejected, thus opening the possibility for the bargaining breakdown or the military confrontation. While more demanding offer delivers a higher payoff to the side making demands, such offers entail a higher risk of bargaining risk of bargaining breakdown.

Military Coercion.

On the other hand, coercion is forceful persuasion that relies on ultimatum and the threat of military force to influence an adversary's decision making (Art and Cronin 2003; Byman and Waxman 2002; George 1991). A threat or ultimatum is the ultimate form of diplomatic communication in international crises and typically conveys an explicit sense of urgency for compliance with demands (Lauren 1972, 136). While an ultimatum and a threat may threaten a wide range of coercive measures, including means short of force, I focus on military forces because our concern here is about the role of diplomacy in the origin of war. Alexander George refers to this form of diplomacy as "coercive diplomacy" (George 1991; see also Snyder and Diesing 1977 for the similar distinction).

The primary strategic problem in bargaining with military coercion is that the target of the threat or ultimatum is uncertain as to whether the coercer is willing or resolved to carry out its threat to inflict damage on the target if resisted. This uncertainty feeds an incentive for a risky gamble. Because not all threats are genuine but there is some chance that the challenge is a bluff, the target has

incentives to resist some of the threats, gambling that the coercer is bluffing and will back down in the event of resistance. Yet, this gamble does not pay off all the time, so occasionally the coercer fails to concede, thinking that the threat is just a bluff, although the threat happens to be genuine. In this case, bargaining through military coercion ends up in war that could have otherwise been avoided.

What makes concession if threatened is that the demand contained in the threat or ultimatum offers much less favorable allocation of the good, and this offer is the final and the counter-offer is not implied as in the case of the "takeit-or-leave-it" offer. Hence, while conceding to a threat to use force guarantees the peaceful settlement, it delivers a much lower payoff than making a concession in a diplomatic negotiation. From the coercer's point of view, while imposing a settlement through military coercion might deliver the entire prize, such an attempt entails a higher risk of war with a much lower gain than compromise through diplomatic negotiation.

4.1.2.1 Modeling issues

Both diplomatic negotiation and military coercion are essential aspects of crisis bargaining and conflict resolution. The states must be able to choose between staying at the bargaining table or "opting out" and making a threat to impose a settlement (ultimatum). But existing analyses treat the two processes separately. No existing model captures both negotiation and coercion processes simultaneously in a single model by limiting players' available actions in a game to one of the two processes.

For example, a large class of crisis bargaining and deterrence games fail to incorporate bargaining process by limiting their focus to coercion (Bueno de Mesquita and Lalman 1992; Fearon 1997; Schultz 1998; 2001; Zagare and Kilgour 1989). The standard bargaining model of international crises, on the other hand, explicitly model bargaining processes but the coercion process is reduced to a game-ending point with the exogenously determined payoff in the form of the "outside option" (Fearon 1995; Powell 1996; 1999).

The model developed here proposes to ameliorate this modeling deficiency by simply incorporating negotiation and military coercion in a single game so that the two processes are simultaneously in equilibrium. To do so, this model embeds the simple but canonical crisis bargaining game into an alternating-offer bargaining model of diplomatic negotiation. The key here is that the military coercion phase will constitute a subgame and replace the outside option "point." The idea is that although the standard "outside option" is modeled as a game-ending point and hence military coercion is reduced to an exogenously given payoff determined by the costly-lottery (e.g., Powell 1996), I model military coercion as a process with the basic structure of the standard crisis game (e.g., Fearon 1997; Schultz 2001). Moreover, the states have outside options only when they respond to a proposal. This implies that the states usually try out diplomacy first, even if that is just a political gesture. Therefore, at the onset of the crisis bargaining, there is no option of military coercion so that no state is allowed to launch a preemptive attack, as is the case in Powell (1999, Ch 4).

In addition to this aspect, the model is designed to highlight several more aspects of diplomacy in crisis bargaining. First, diplomatic negotiation is bargaining, so the states must be able to make offers and counteroffers and, especially, to choose how much to offer in any effort to reach a compromise. In other words, a goal here is to allow for endogenous offers. I use the Rubinstein's standard framework of the alternating-offer bargaining game to represent diplomatic negotiation. Second, the infinite horizon of this bargaining game allows the model to reflect one of enduring feature of modern diplomacy that negotiation needs to be continuous (Nicolson 1977, 75-76).

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Third, in the phase of military coercion, the states are assumed to present the other with a "take-it-or-leave-it" demand backed by a military fait accompli, which the other state can either accept or resist. If resisted, the coercer must decide whether to stand firm or back down. This "take-it-or-leave-it" offer assumes that the coercer makes no compromise but demands the entire good in making an offer.

The outbreak of war in the present analysis is treated as a game-ending move and modeled as costly lottery. This simplification assumption necessarily limits the scope of the present analysis to the origins of war. This limitation however is rather appropriate because the one of the key empirical puzzles that motivates this paper is concerned about the origins of war and conflict resolutions short of war. This paper hence views the outbreak of war as a failure of diplomacy.

4.2 The Model

Consider a dispute between two states, S_1 and S_2 , over the division of some international good of size $v \ge 0$. Let (q_1, q_2) denote the status quo division of the good, where q_1 and q_2 are S_1 's and S_2 's respective share. Each period $t \in \{0, 1, 2, ...\}$ consists of two processes: diplomatic bargaining and military coercion. The two states bargain according to the alternating-offers protocol (Rubinstein 1982). Assume that S_1 makes offers of an allocation $(x_1, v - x_1)$ in even-numbered periods, and S_2 offers an allocation $(v - x_2, x_2)$ in odd-numbered periods. Since the first offer occurs in the zeroth period, S_1 makes the initial offer $x_1 \in [0, v]$, to which S_2 responds in one of three ways: (1) accept the offer, (2) reject the offer to make a counter-offer x_2 ; and (3) reject the offer to opt out of diplomatic bargaining by making a threat in an attempt to impose a settlement through military coercion. If S_2 accepts this offer, the good is reallocated as agreed $(x_1, v - x_1)$ and the game ends. Suppose that agreement is reached in period t = n. Then each state's payoff derives from the original status quo allocation leading up to t = n, and from this new allocation in every subsequent period. The payoff for S_1 from agreeing on x_1 in period t = n is therefore the discounted sum of the status quo payoff q_1 from t = 0 to the *n*-th period, and his present value of controlling the share x_1 thereafter. Letting $U_1(x_1)$ denote this payoff gives:

$$U_{1}(x_{1}) = \sum_{t=0}^{n-1} \delta^{t} q_{1} + \sum_{t=n}^{\infty} \delta^{t} x_{1}$$

where $\delta \in (0, 1)$ is a (common) discount factor. To simplify the expression, we take the average of this payoff over the time by multiplying by $(1 - \delta)$, which yields the time-averaged discounted payoff: $q(1 - \delta^t) + \delta^t(x_1)$. Similarly, S_2 's expected payoff from agreeing to $(x_1, v - x_1)$ in period t is given by the average per-period payoff $q_2(1 - \delta^t) + \delta^t(v - x_1)$.

If S_2 rejects x_1 and opts out of diplomacy by making a threat in the form of a military fait accompli, the states play a military coercion subgame that has the basic structure of a common crisis game (e.g., Fearon 1997, 2002; Kurizaki 2007a,b; Schultz 1998, 1999, 2001a; Zagare and Kilgour 1993). Let Γ_i denote a military coercion subgame that follows S_i 's threat for $i \in \{1, 2\}$. The game enters Γ_1 if S_1 makes a threat, to which S_2 must respond by either conceding the good, at which point the game ends, or resisting the threat. If resisted, S_1 must either back down or stand firm. In case of standing firm, war occurs. A military coercion subgame Γ_2 is defined analogously. Figure 4.1 depicts the sequence of moves and the payoffs associated with each outcome in Γ_1 and Γ_2 .

Suppose S_2 opts out of diplomacy, and Γ_2 occurs in period t. When S_1 capitulates to S_2 's threat, the per-period payoffs for S_1 and S_2 are $q_1(1-\delta^t)-\delta^t a_1$







Figure 4.1: A Schematic Representation of Military Coercion Subgames, Γ_1 , Γ_2 . Note: Panel (a) on the left shows a military coercion subgame Γ_2 that follows S_2 's threat, while in panel (b), S_1 makes a threat and the states enter a subgame Γ_1 . The index of "diplomacy" immediately preceding each subgame Γ_i is composed of two choices that S_i can make in response to a demand x_j : accepting a demand x_j ; and rejecting x_j to counter with x_i in the next period. and $q_2(1 - \delta^t) + \delta^t v$, respectively, where $a_1 \ge 0$ is S_1 's instantaneous "audience cost" of diplomatic humiliation from a public concession (Kurizaki 2007a). When S_2 backs down from her threat if resisted, S_1 receives the payoff of $q_1(1 - \delta^t) + \delta^t v$ and S_2 receives $q_2(1 - \delta^t) - \delta^t a_2$, where $a_2 \ge 0$ is S_2 's instantaneous audience cost of backing down from her threat (Fearon 1994a). When S_2 stands firm and war occurs, the outcome is determined by the standard "costly-lottery," where S_1 wins the entire good of size v with probability $p \in [0, 1]$, or S_2 wins with probability 1 - p.⁵ Since war is costly, each state incurs (expected) costs of fighting $c_i > 0$, $i \in \{1, 2\}$. The expected payoff from war for S_1 is therefore $q_1(1 - \delta^t) + \delta^t(vp - c_1)$. Similarly, S_2 gets a war payoff of $q_2(1 - \delta^t) + \delta^t(v(1 - p) - c_2)$.

If S_2 rejects S_1 's offer and makes a counter-proposal of an allocation $(v - x_2, x_2)$, the game passes into the next period, where S_1 can either accept x_2 , counter it, or opt out from diplomacy and resort to military coercion. The crisis bargaining proceeds in this way with offers alternating back and forth with options of military coercion. A set of an offer and a response is called one period of bargaining. Diplomatic negotiation could continue infinitely if there is no agreement or military coercion, and hence a horizon of this game can arise endogenously. In the case of infinite delay, the whole game ends with the status quo allocation. There is no exogenous risk of the shutdown of diplomacy, which implies that the termination of diplomatic negotiation is a strategic choice and endogenous, not exogenous, to bargaining. Figure 4.2 illustrates the sequence of moves and the payoffs associated with each outcome in Γ_1 and Γ_2 .

This game involves two-sided uncertainty: Each state has private information about the valuation of the disputed good $v_i \ge 0$. For $i \ne j \in \{1, 2\}$, S_i believes

⁵The common interpretation is that while p primarily reflects the balance of military capabilities between states, the cost of war c_i mirrors S_i 's "resolve." This is the standard formulation of the war outcome employed by virtually all the crisis bargaining models (e.g., Fearon 1995; Powell 1996a, 1999). While this interpretation implicitly assumes the bargaining indivisibility where the "winner take all," this assumption can be dropped if p is interpreted as the expected proportion of the good S_1 obtains through fighting (Powell 2002; Leventoğlu and Tarar 2005).



Figure 4.2: A Schematic Representation of the Negotiation Game. Note: The notations Γ_1 and Γ_2 in the figure following the decision to threaten by S_1 and S_2 , respectively, indicate the military coercion subgames defined in the text above and depicted in Figure 4.1.

that S_j 's valuation v_j is uniformly distributed over the support interval $[\underline{v}_j, \overline{v}_j]$, where $\underline{v}_j \geq 0$, according to the cumulative distribution $F_j(y) = Pr(v_j \leq y)$ with continuity, differentiability, and full support.⁶ These distributions are also common knowledge.⁷

To define the strategies in this game formally, let $x_i^t \in [0, v_i]$ be *i*'s offer in period $t, a_j^t(x_i) \in \{AC, RJ, TH\}$ be *j*'s response to an offer $x_i, m_i^t \in \{CD, RS\}$ be *i*'s response to *j*'s threat in a coercion subgame Γ_j , and $m_j^t \in \{BD, SF\}$ be *j*'s decision at its final node in Γ_j . A history $h^t \in \{(x_1^t, x_2^t, a_1^t, a_2^t, m_1^t, m_2^t) : t =$ $0, 1, \ldots, n - 1\}$ in period t = n is a series of offers and responses up to that period.⁸ Let H^t denote the set of all h^t , which ends when the states strike a diplomatic deal, or either state imposes a settlement onto the other through military coercion. A pure strategy σ_i determines state *i*'s actions for every H^t .

⁶Because $F(\cdot)$ is a continuous distribution, it follows that $Pr(v_j = y) = 0$, implying that the difference between $Pr(v_j \leq y)$ and $Pr(v_j < y)$ is immaterial.

⁷I will later assume that the cost of fighting is private information instead.

⁸The notations for the strategies represent as follows: AC = accept, RJ = reject, TH = threaten, CD = concede, RS = resist, BD = back down, and SF = stand firm.

Since this game consists of both diplomatic negotiation and coercive bargaining phases, I shall refer to it as the *negotiation game*. Unlike the existing bargaining approach to international crises, the breakdown of diplomacy in this model does not automatically result in war. Rather than reducing a "military" option to a single-shot event of the costly lottery, this model permits analysis of its dynamics by effectively integrating the common *bargaining* and *signaling* approaches to international crises.

4.3 Complete Information Game

We first consider the *negotiation game* under complete information, in which the states know each other's valuation, v_1 and v_2 . While incomplete information is one of the central strategic problems in diplomatic bargaining, it is useful to clarify the underlying structure of the game and its intuition with a simpler information structure. The incentives that the states face in the game under complete information also carry over to the two-sided incomplete information game. There is a simple equilibrium to the *negotiation game* under complete information.

Suppose S_2 opts out of diplomacy and resorts to military coercion in the first period (t = 0). Then, at its final node in the military coercion subgame Γ_2 , S_2 must decide either to back down incurring (instantaneous) audience costs $-a_2$, or to stand firm receiving its (instantaneous) expected value for war $v_2(1-p) - c_2$. Clearly, S_2 will stand firm if and only if $v_2(1-p) - c_2 \ge -a_2$, or

$$v_2 \ge \frac{c_2 - a_2}{1 - p} \equiv \kappa_2$$
 (4.3.1)

where κ_2 denotes the cutoff value on v_2 , above which she will stand firm in any equilibrium of Γ_2 . This condition partitions the strategic interactions in Γ_2 into two major cases: either S_2 's threat to fight if refused is credible, or it is not. S_2 's threat is credible if condition (4.3.1) holds; it is a bluff otherwise since she would back down in the face of S_2 's refusal. With complete information S_1 knows for certain whether the threat is credible when he sees it. When it is credible, S_1 knows that his decision to resit is equivalent to the decision to go to war. He therefore will resist if and only if his expected payoff from doing so is greater than, or equal to, his audience cost incurring from a public concession. This condition holds when $v_1p - c_1 \ge -a_1$, or

$$v_1 \ge \frac{c_1 - a_1}{p} \equiv \kappa_1 \tag{4.3.2}$$

where κ_1 denotes the cutoff value defined analogously to κ_2 . These cutoff points will be useful in the analysis of the game with incomplete information below.

Now suppose S_1 opts out of diplomacy and resorts to military coercion in period t = 1. Then, the states enter Γ_1 , in which S_2 decides whether to resist in response to S_1 's threat; and S_1 decides at his the final node either to stand firm if resisted. As it turns out, conditions (4.3.1) and (4.3.2) again dictate the optimal decision rules of S_1 and S_2 , respectively, in this subgame Γ_1 . Observe that Γ_1 can be reached only in odd-numbered periods, whereas Γ_2 can occur in even-numbered periods.

Lemma 1 (Optimal Strategies in Γ_i under Complete Info.). Consider any equilibrium $(\sigma_1(\Gamma_i), \sigma_2(\Gamma_i))$ in military coercion subgames Γ_i for $i \in \{1, 2\}$ under complete information. S_1 always stands firm in Γ_1 and resists in Γ_2 if $v_1 \ge \kappa_1$, and S_2 always resists in Γ_1 and stands firm in Γ_2 if $v_2 \ge \kappa_2$.

This brings us to S_2 's decision in the first period on whether to resort to military coercion or continue diplomacy by either accepting S_1 's initial offer x_1 or rejecting it to make a counter-offer x_2 . S_2 will abandon diplomacy to make a threat if and only if her expected payoff in Γ_2 is greater than continuing diplomacy. To analyze this decision, it is useful to define state *i*'s equilibrium value of each military subgame.

Corollary 2.1 (Equilibrium Value of Military Coercion Subgames). For $i \in \{1, 2\}$, let $\pi_i(\Gamma_i)$ denote state *i*'s equilibrium payoff of a military coercion subgame Γ_i . Lemma 1 implies the following payoff pair:

$$(\pi_1(\Gamma_i), \pi_2(\Gamma_i)) = \begin{cases} (v_1p - c_1, v_2(1-p) - c_2) & \text{if } v_2 \ge \kappa_2 \text{ and } v_1 \ge \kappa_1 \\ (-a_1, v_2) & \text{if } v_2 \ge \kappa_2 \text{ and } v_1 < \kappa_1 \\ (v_1, -a_2) & \text{if } v_2 < \kappa_2 \end{cases}$$

where the equilibrium payoff pairs are identical in Γ_1 and Γ_2 .

Given this, to characterize S_2 's decision whether to quit diplomacy to start military coercion, we must first understand what S_1 will offer on the negotiation table because it determines S_2 's expected gain at the table. The decision confronting S_1 is simple. He can either refuse to meet S_2 's minimal demands, thereby effectively starting military coercion, or offer S_2 enough to ensure that she finds military coercion non-profitable. If S_2 is resolved (i.e., $v_2 \ge \kappa_2$) and S_1 knows that he will obtain the entire good, then he has no reason to be conciliatory.

Otherwise, S_1 must offer just enough so that S_2 would rather accept this concession than resort to military coercion. That is, S_1 must propose a diplomatic solution x_1 , in which S_1 offers to concede the good of the size equivalent to what S_2 expects to receive in the military coercion subgame. Hence, to satisfy this condition, S_1 's offer x_1 must be such that $v_1 - x_1 \ge \pi_2(\Gamma_2)$, where $\pi_i(\Gamma_i)$ denotes state *i*'s equilibrium payoff in a military coercion subgame Γ_i for $i \in \{1, 2\}$. Because the more S_1 concedes the less is his share, S_1 will not concede more than the minimal amount necessary to meet this condition. Hence, if $v_2 \ge \kappa_2$, S_1 will offer $v_1 - x_1^* \ge \pi_2(\Gamma_2)$ to ensure that an agreement is reached by diplomacy. S_2 will accept this offer because military coercion is no longer profitable for her.

The next proposition establishes that, in the unique subgame perfect equilibrium, S_1 proposes the allocation of the good so that S_2 receives the equivalent to her expected value of the military coercion subgame Γ_2 . Similarly, S_2 's optimal offer is to concede just enough to leave S_1 indifferent between accepting S_1 's offer and countering it by offering S_2 her expected value of the military subgame. These offers are always accepted in equilibrium.

The solution concept is subgame perfect equilibrium (SPE) where in every proper subgame the states play optimal strategies. A SPE is stationary if the behavioral strategies in every period are independent of time and history of in previous rounds. A SPE is efficient if no payoffs are Pareto superior to the equilibrium payoffs. The following proposition summarizes the equilibrium outcome of the negotiation game under complete information and will be used frequently.

Proposition 3 (Complete Information Equilibrium). Let $\sigma_i(\Gamma_i)$ denote S_i 's equilibrium (behavioral) strategy in a military coercion subgame Γ_i (by Lemma 1), and let $\pi_i(\Gamma_i)$ denote S_i 's expected value of Γ_i (by Corollary 2.1). Then the negotiation game has a stationary SPE, in which S_i always offers x_i^* , always accepts $x_j \leq x_j^*$, and always opts out when receiving $x_j > x_j^*$ if and only if $\pi_i(\Gamma_i) \geq x_i^*$ in the bargaining round, and S_i plays $\sigma_i(\Gamma_i)$ in military coercion subgames, where

$$(x_1^*, x_2^*) = \begin{cases} (b_1, b_2) & \text{if } \pi_1(\Gamma_i) \le b_1 \text{ and } \pi_2(\Gamma_i) \le b_2 \\ (v_2 - \pi_2(\Gamma_i), \pi_2(\Gamma_i)) & \text{if } \pi_1(\Gamma_i) \le b_1 \text{ and } \pi_2(\Gamma_i) > b_2 \\ (\pi_1(\Gamma_i), v_1 - \pi_1(\Gamma_i)) & \text{if } \pi_1(\Gamma_i) > b_1 \text{ and } \pi_2(\Gamma_i) \le b_2 \end{cases}$$

with $b_1 = \frac{v_1 - \delta v_2}{1 - \delta^2} - \frac{q_2 - \delta q_1}{1 + \delta}$ and $b_2 = \frac{v_2 - \delta v_1}{1 - \delta^2} - \frac{q_1 - \delta q_2}{1 + \delta}$. The outcome in all cases is that agreement is reached immediately on the allocation $(x_1^*, v_2 - x_1^*)$ and no military

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coercion occurs.

To see the logic of this equilibrium, I first introduce the definitions of the outside and inside options and elaborate on the meaning in the context of the negotiation game.

Definition 1 (Outside and Inside Options). The instantaneous payoff of q_i that state *i* obtains while the states temporarily disagree is her *inside option*. In contrast, state *i*'s *outside option* is the instantaneous payoff of $\pi_i(\Gamma_i)$ that she obtains if she chooses to permanently stop bargaining, and chooses not to reach agreement with state *j*.

In the negotiation game, state i has a non-negotiable option by issuing a "take-it-or-leave-it" demand in the form of a military fait accompli, and she may also derive utility while she continues diplomatic negotiations. The former is her outside option that turns diplomatic bargaining into coercive bargaining (with military coercion), while the latter is her inside option. Note that the states are in a temporal disagreement while state i continues negotiations because they have not reached an negotiated settlement. Note also that state i invokes outside options when she opts out of diplomacy to initiate a crisis in order to coerce the opponent to capitulate to a demand through military instruments.

When, and if, state i exercises her outside option, diplomatic bargaining between states i and j terminate forever in disagreement with an unilaterally imposed settlement. In contrast, state i's inside option describe her (flow of) utility while she temporarily disagrees with state j over the allocation of a disputed good (c.f., Muthoo 1999). Note that the "take-it-or-leave-it" bargaining protocol implicitly assumes that the players are committed not to continue bargaining if state i rejects her opponent's offer. Hence, it is natural that standard signaling models of crisis bargaining do not allow for bargaining despite its emphasis on "bargaining" (e.g., Fearon 1994b, 2002; Filson and Werner 2002; Kurizaki 2007b; Morrow 1989b; Ramsay 2004; Schultz 1998, 1999; Zagare and Kilgour 2003; See Powell 1999 for a similar argument). In real-life diplomatic bargaining, making such commitments often takes a form of ultimatum (Lauren 1972).

In the present model, since state *i* can permanently disagree by opting out of diplomacy and obtains her military outside option $\pi_i(\Gamma_i)$, state *i* can guarantee a payoff of $\delta \pi_i(\Gamma_i)$ by opting out at the first opportunity in any equilibrium in the negotiation game, where both inside and outside options are available.

Lemma 2 (Reservation Point). In any subgame perfect equilibrium of any subgame of the negotiation game, state *i*'s payoff is greater than or equal to $\delta \pi_i(\Gamma_i)$ for $i \in \{1, 2\}$.

Turning back to the equilibrium, the intuition behind Proposition 3 is that behavior in the negotiation game under complete information is governed by a variant of the "outside option principle" (Muthoo 1999, 103). The key question here is whether or not each state's "military" outside option yields a greater payoff than the utility derived from the equilibrium allocation (b_1, b_2) it would obtain if there is no "military" outside options. Following Muthoo (1999, 148), I shall refer to them as the *limiting SPE allocation* and *payoffs* for convenience.⁹

If each state's value of a military subgame (an "outside option") is less than or equal to the value they expect to receive through diplomacy, then the outside options have no influence on the success of diplomacy or the resulting diplomatic deal. Therefore, the presence of military options can influence the allocation in the equilibrium diplomatic deal, only if π_i (Γ_i) > b_i , that is, S_i 's payoff associated with her military options strictly exceeds her expected gain from diplomacy (i.e., the utility derived from the limiting SPE allocation in the absence of military

⁹Note that the allocation (b_1, b_2) is the bargaining outcome supported in an SPE when the states do not have any outside options (Muthoo 1999, 148).

outside options). When a military option influences the equilibrium allocation, state *i*'s share in the diplomatic deal can be equal to, but cannot exceed, her outside option.

The driving force of this equilibrium allocation boils down to conditions (4.3.1) and (4.3.2)—whether each state values the issue at stake high enough to use force, or simply their levels of resolve. In particular, when one's military threat is not credible, the states should not be influenced by such a non-credible threat. If S_2 's valuation is so low (i.e., the resolve is low) that condition (4.3.1) does not hold, S_1 looks ahead and see that S_2 would back down if resisted. Hence he offers the limiting SPE allocation (b_1, b_2) , knowing that the possibility of military coercion is ruled out. Because S_2 in turn knows her military threat will encounter S_1 's resistance and she will therefore suffer from a humiliating retreat with the payoff of $-a_2$, she immediately accepts this offer at the negotiation table.

Observe that in the negotiation game with complete information (Proposition 3), diplomacy never breaks down in a military crisis, regardless of the balance of military capabilities p, audience costs a_i , or valuations v_i . Complete information allows S_1 to foresee S_2 's best response in the military coercion subgame and thus S_2 's response to his offer. With this assessment, S_1 can always adjust his initial offer by making a demand just acceptable for S_2 , which is immediately accepted.

A diplomatic demand becomes acceptable when it makes military coercion unprofitable for S_2 . Hence, to avoid military confrontation, S_1 concedes only enough so that S_2 's share in the new division of the disputed good is equivalent to her expected value from military confrontation. This logic operates given any configuration of the parameters. Suppose, for example, an extreme case where S_1 does not care for diplomacy such as when he knows for certain that S_2 's valuation is so low that she is not willing to resist (by Lemma 1) and hence his reservation point is v_1 . Even if this is the case and S_1 may be inclined toward military, S_2 would accept anything to avert military confrontation because making a concession in military crisis will costs her diplomatic humiliation and audience costs associated with it.¹⁰ This hypothetical case illuminates the fact that because coercive bargaining via military instruments can be politically costly, if not militarily, there is always more to be divided if the states can agree on a diplomatic solution to a dispute. Hence, this logic suggests that no military crisis occurs under complete information, which leads to the next observation.

Note that Proposition 3 also establishes Pareto efficiency of the equilibrium outcome of the negotiation game with complete information. The fact that no military crisis occurs in equilibrium implies that the subgame perfect equilibrium to the negotiation game is Pareto efficient. Because political or military costs are associated with any outcomes in a military coercion subgame, an international dispute always have some diplomatic settlements that both sides prefer to military confrontation. That is, *ex post* inefficiency of military coercion induced by the cost of fighting c_i or audience costs a_i for $i \in \{1, 2\}$ always opens up the bargaining range that is efficient *ex ante*.

Suppose, for simplicity, that as in Ausubel and Deneckere (1992) there is "no gap" in each states' valuation of the disputed good such that $v_1 = v_2 = v$. Because the joint utility of war for both states is $(vp - c_1) + v(1 - p) - c_2$, or equivalently $v - c_1 - c_2$, allocating the good through diplomacy, rather than through war,

¹⁰A historical example of such a case came in 1903, when Canadian Prime Minister Laurier ceded its territory along the Pacific coast to President Theodore Roosevelt. Laurier reportedly "pleaded to Henry White, the head of the American Embassy, that he would like to 'save his face' with Canadians by an arbitration" (Nevins 1930, 192-3). In response to this plea, Roosevelt agreed to appoint an international tribunal to camouflage the Laurier's apparent surrender to his territorial demands, while he also sent troops quietly along with private letters containing an ultimatum. Although Canada lost its territory including a town now known as Juneau and Laurier was electorally punished later, he avoided instantaneous domestic costs of a public concession (Penlington 1972, 62-3).

generates a surplus of $c_1 + c_2$.¹¹ A surplus from a diplomatic settlement always surmounts not only the joint utility of war, but also the joint value of any outcome from military coercion. For example, if S_1 concedes in military confrontation conditional on S_2 's threat, he receives the payoff of $-a_1$ while S_2 receives v_2 , and so the joint payoff is $v_2 - a_1$, which generates a surplus of a_1 from diplomacy. Turning to a more general statement of these claims, the next corollary is implied by the subgame perfect equilibrium (Proposition 3) that diplomatic negotiation provides a mechanism to achieve an efficient settlement of international disputes.

Corollary 3.1 (Efficient Diplomacy). Because $\overline{\pi}_1(\Gamma_i) + \overline{\pi}_2(\Gamma_i) < \max\{\overline{v}_1, \overline{v}_2\}$, for $k \in \{1, 2\}$, each state's payoff from the use of military instruments, regardless of its outcome in a military coercion subgame, never exceeds their respective share through diplomacy.

Hence, accepting the equilibrium allocation $(x_1^*, v_2 - x_1^*)$ never leaves S_2 worseoff than what she would have received had she made a military threat. Note, however, that the surplus saved by not resorting to military coercion goes to S_1 in the equilibrium outcome. It is the payoff derived from this surplus that yields an incentive for S_1 to prefer appeasing S_2 by conceding to her minimal demand as long as the diplomatic surplus is at least as good as his instantaneous payoff from the military coercion subgame $\pi_1(\Gamma_2)$.

This completes the characterization of the equilibrium to the negotiation game under complete information. Corollary 3.1 suggests that states have incentives, both individually and collectively, to settle a dispute via diplomacy rather than military. Because the states will incur either military or political costs if diplomacy breaks down into a military crisis, they will eventually be locked into the inefficient outcomes once one of the states opts out of diplomacy to make a

¹¹This logic is evoked to establish a well-known claim about the inefficiency of war: that is, the bargaining range always exists which both sides strictly prefer to war as long as fighting war carries strictly positive costs (Fearon 1995; Powell 1999; Schultz 2001a).

threat. Hence, the states have preferences for making diplomacy work. Because both states have complete information about each other's preference for diplomacy, bargaining in the negotiation game never results in a military crisis. To understand the causes of militarized disputes and the origins of war, then, we must consider the factors that make it possible for diplomatic bargaining to fail.

4.4 Incomplete Information Game

The standard equilibrium concept in alternating-offer bargaining games of incomplete information is sequential equilibrium due to Kreps and Wilson (1982), which explicitly characterizes a system of beliefs of the players concerning the history of play at any information set along the equilibrium path in the game. This equilibrium concept places no requirements for beliefs updating following zero-probability events; the only requirements are that the beliefs are "consistent" (i.e., are updated according to the equilibrium strategies via Bayes' rule when applicable) and that the strategies are "sequentially rational" (i.e., are optimal after every history h^t given the current beliefs about the opponent's type and the opponent's strategy). It is well known that because belief updating off the equilibrium path is not restricted, alternating-offer bargaining games typically have the multiplicity of equilibria, even if it has a finite horizon (Ausubel, Cramton and Deneckere 2002). To rule out some of the unreasonable "successful deviation" I supplement Bayes' rule with the following assumptions, all of which are common in this class of bargaining models.

First, I postulate that the support of the beliefs at any information set must be contained in (or be a truncation of) the support of beliefs at preceding information sets. This "support restriction" on the beliefs requires that a revision in beliefs does not increase the support of the distribution representing the player's beliefs. That is, if a belief is updated so that it assigns zero probability to a history (or, equivalently, set of types) at some point, then this belief cannot be updated later in the game to assign positive probability to the eliminated set of types. For example, once S_1 comes to believe that S_2 is of a certain type with probability zero, he must maintain the same updated belief, even if S_2 subsequently deviates from the strategy of her type.¹²

Second, I require that a state's action depend on the history *only* through the effects of the history in changing the seller's beliefs. Although the definition of equilibrium depends on the history of the play in the game, the history is factored into the equilibrium (strategies) only by changing the beliefs. Specifically, at any information set in which a player makes an offer, the only aspect of history that has any bearing on the current or future payoffs is her belief. Hence, along the equilibrium path, the history generates a player's beliefs at the current information set, and her history contingent beliefs about the opponent's valuation determine the optimal behavior in each period.

Third, if in any equilibrium where a player makes an acceptable offer, and in so doing reveals that she is of such a type, then her opponent cannot credibly threaten to reject an offer more than the discounted value of the continuation of the game with this type.¹³

I shall therefore look for a set of stationary sequential equilibria to this game

¹³Instead of the commonly used "optimistic conjecture" proposed by Rubinstein (1985) and adopted in the literature of international relations by Iida (1993) and Tarar (2001).

¹²Although not always explicit, nearly all the signaling and bargaining models of crisis bargaining adopt the this assumption. Ausubel and Deneckere (1992) and Cramton (1992) relax this assumption, and Madrigal, Tan and Werlang (1987) discuss this assumption by demonstrating an example where a sequential equilibrium fails to exist due to the support restriction in a simple signaling game with the unique Nash equilibrium outcome. One problem with this restriction on beliefs is that bargainers are not allowed to correct a mistake in signaling, although mistakes never occurs in theory (i.e., in equilibrium). If, for example, S_2 accidentally makes a non-acceptable offer, revealing that her valuation is much higher than she truly is, then S_1 then may conclude that diplomatic negotiation will not produce an acceptable agreement and thereby resort to military coercion, which is likely to end with S_2 's public concession.

that satisfy the three properties above. The stationary sequential equilibria have a generic structure of a series of cutoff points along the interval $[\underline{v}_i, \overline{v}_i]$ for i =1,2. In particular, in any sequential equilibria, each time a player makes an offer or responds to a current offer, that player partitions the interval of its (remaining) valuation types into two subintervals, and the opponent updates its belief accordingly. Hence, the revision of beliefs along the equilibrium path is history contingent.

Because the construction of the equilibrium, despite its simple and intuitive structure, is quite involved, it is useful to start by establishing some general results that hold in any stationary sequential equilibria to the negotiation game. Specifically, the following analysis proceeds with three steps: (1) I analyze the equilibrium values and strategies in military coercion subgames Γ_i for $i \in \{1, 2\}$ for each state; (2) specify the upper bounds of offers and acceptances that are supported in equilibrium; and define the generic cut-point structure which is used to characterize specific sequential equilibria.¹⁴

Equilibrium Behavior in Military Coercion Subgames

The equilibrium behavior in the military coercion subgames Γ_i for $i \in \{1, 2\}$ can be characterized by a set of cut-points for all $i, j \in \{1, 2\}$. As in the completeinformation case, let κ_i denote the critical type of S_i such that all types above κ_i stand firm if resisted by S_j and all other types below κ_i back down in Γ_i . Similarly, let λ_j denote the type of S_j such that all types above λ_j resist if threatened by S_i and all other types below λ_j concede in Γ_i .

Consider Γ_2 in period t = 0. State S_2 's decision rule at her final node is implied by subgame perfection regardless of her posterior beliefs about S_1 's type.

¹⁴I generally follow the methods used by Grossman and Perry (1986) and Cramton (1992). See Grossman and Perry (1986) for the "screening" component and Admati and Perry (1987) for the "signaling" component.

Hence, as in complete information case, her decision rule is characterized by the condition (4.3.1):

$$v_2 \ge \frac{c_2 - a_2}{1 - p} \equiv \kappa_2.$$
 (4.4.1)

Similarly, in Γ_1 , S_1 's decision rule at his final node is also given by the condition (4.3.2):

$$v_1 \ge \frac{c_1 - a_1}{p} \equiv \kappa_1. \tag{4.4.2}$$

In Γ_2 , all types with $v_2 \ge \kappa_2$ stand firm and all types all types with $v_2 < \kappa_2$ back down if resisted. In Γ_1 , all types with $v_1 \ge \kappa_1$ stand firm and all types all types with $v_1 < \kappa_1$ back down if resisted.

Now consider S_1 's decision whether to resist in Γ_2 conditional on S_2 's threat. S_1 will have updated his belief about S_2 's valuation, conditional on S_2 's response (e.g., a threat) to his offer. Let the distribution function $G_2(\kappa_2)$ generically represent any posterior belief that S_1 may hold, upon receiving S_2 's threat, regarding the chance that she will stand firm if resisted in Γ_2 .¹⁵ Then S_1 's expected utilities from resisting and conceding, respectively, are:

$$U_1(RS) = G_2(\kappa_2)(pv_1 - c_1) + (1 - G_2(\kappa_2))v_1,$$
$$U_1(CD) = -a_1.$$

Letting λ_1 denote the critical type of S_1 that is indifferent between resisting and conceding in equilibrium, S_1 's decision rule in Γ_2 is to resist if and only if

$$U_1(\text{RS}) \ge U_1(\text{CD}) \Rightarrow v_1 \ge \frac{G_2(\kappa_2)c_1 - a_1}{1 - G_2(\kappa_2)(1 - p)} \equiv \lambda_1.$$
 (4.4.3)

Similarly, let $G_1(\kappa_1)$ generically denote any posterior belief that S_2 may have updated about S_1 standing firm if resisted in Γ_2 . Then, the decision rule for S_2

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 $^{^{15}\}mathrm{Posterior}$ beliefs sustained in equilibrium will be fully characterized in the analysis later in this section.

in Γ_1 conditional on S_1 's threat is to resist if and only if $G_1(\kappa_1)((1-p)v_2-c_2) + (1-G_1(\kappa_1))v_2 \ge -a_2$, or

$$v_2 \ge \frac{G_1(\kappa_1)c_2 - a_2}{1 - G_1(\kappa_1)p} \equiv \lambda_2.$$
 (4.4.4)

In Γ_2 , all types with $v_2 \ge \lambda_2$ resist and all types all types with $v_2 < \lambda_2$ capitulate if challenged. In Γ_1 , all types with $v_1 \ge \lambda_1$ resist and all types all types with $v_1 < \lambda_1$ capitulate if challenged.

To complete the specification of the expected value of the "military" outside option for each state under incomplete information, consider S_2 's decision to opt out of diplomacy to make a threat in response to S_1 's offer x_1 . At this juncture, S_2 will have updated her beliefs about S_2 's valuation, conditional on the offers and responses that S_2 has made—a history h^t). As before, let the distribution function $H_1(\lambda_1)$ generically represent any posterior belief that S_2 may have updated, upon receiving an offer x_1 , regarding the chance that S_1 will resist in Γ_2 if threatened by S_2 . Then, S_2 's expected payoff from resorting to military coercion, conditional on x_1 , is given by

$$U_{2}(\mathrm{TH}, x_{1}) = \pi_{2}(\Gamma_{2}, x_{1}) = \begin{cases} H_{1}(\lambda_{1})((1-p)v_{2} - c_{2}) + (1 - H_{1}(\lambda_{1}))v_{2} & \text{if } v_{2} \ge \kappa_{2} \\ H_{1}(\lambda_{1})(-a_{2}) + (1 - H_{1}(\lambda_{1}))v_{2} & \text{if } v_{2} < \kappa_{2}. \end{cases}$$

$$(4.4.5)$$

Note that this utility function takes different forms depending on whether her threat is credible: it is credible if $v_2 \ge \kappa_2$ and it is not otherwise. In both cases, S_2 will opt out of diplomacy to make a threat in period t = 0 if and only if $\pi_2(\Gamma_2, x_1)$ is strictly greater than the payoff from accepting x_1 and that from rejecting x_1 to counter with x_2 (I characterize this condition in detail below).

Similarly, at Γ_1 in period t = 1, letting the distribution function $H_2(\lambda_2)$ denote S_1 's arbitrary posterior belief of about S_2 's probability of resisting, S_1 's expected
utility of resorting to military coercion is given by

$$\pi_1(\Gamma_1, x_2) = \begin{cases} H_2(\lambda_2)(pv_1 - c_1) + (1 - H_2(\lambda_2))v_1 & \text{if } v_1 \ge \kappa_1 \\ H_2(\lambda_2)(-a_1) + (1 - H_2(\lambda_2))v_1 & \text{if } v_1 < \kappa_1 \end{cases}.$$
(4.4.6)

Construction of the Equilibrium

The set of stationary sequential equilibria can be characterized by a series of cutpoints along the continuum of $[\underline{v}_i, \overline{v}_i]$, for i = 1, 2, which partition S_i 's valuation types into subintervals. Suppose that the *negotiation game* reaches a subgame in which it is S_1 's turn to make an offer x_1 and S_1 's belief about S_2 's valuation is that $v_2 \in [\underline{v}_2, \overline{v}_2]$ (i.e., the prior).¹⁶ I denote by γ_i the marginal type that is indifferent between making serious and nonserious offers, such that S_1 makes acceptable offers if $v_1 < \gamma_1$ and nonacceptable offers otherwise.¹⁷

After S_1 's initial offer, S_2 believes that S_1 's valuation is $v_1 \in [\underline{v}_1, \gamma_1]$ if x_1 is acceptable and $v_1 \in [\gamma_1, \overline{v}_1]$ if it is nonacceptable. We denote the marginal type of S_2 by α_2 , such that if S_1 believes that S_2 is of the highest type among the set of types that prefer the continuation of diplomacy to the military outside option, then α_2 is indifferent between rejecting the current offer x_1 and opting out of diplomacy to resort to the military coercion to settle the dispute. If S_2 opts out of diplomacy to make a threat, then the states enter a military coercion subgame Γ_2 , where S_1 , for which $v_1 \geq \gamma_1$, believes that S_2 's valuation type now is $v_2 \geq \alpha_2$.

Similarly, let β_2 denote the marginal type of S_2 so that all types $v_2 < \beta_2$

$$\frac{F_j(\overline{v}_j) - F_j(v_j)}{F_j(\overline{v}_j) - F_j(\underline{v}_j)}.$$

¹⁷Following the standard practice (e.g., Ausubel and Deneckere 1992), I refer to an offer which have zero probability of acceptance as a *nonacceptable* offer. In the literature, (non)acceptable offers are also referred to as (*non*)serious offer (e.g., Slantchev 2003b).

¹⁶Throughout the analysis when I say " S_i believes that S_j 's valuation is in $[v_j, \overline{v}_j]$," I mean that he beliefs of S_i are described by the truncated prior distribution:

strictly prefer accepting the current offer x_1 to rejecting it to make a counteroffer x_2 , and all types $v_2 \ge \beta_2$ prefer the opposite. As we shall see, the marginal type β_2 's best alternative is to counter with an acceptable offer \hat{x}_2 , which S_1 immediately accepts.¹⁸ Hence, β_2 must be indifferent between accepting x_1 today and \hat{x}_2 in the next period: $U_2(x_1) \ge (1-\delta)U_2(q_2) + \delta U_2(\hat{x}_2)$, which implies

$$x_1 \le \hat{x}_1 = \beta_2 - (1 - \delta)q_2 - \delta y_2, \tag{4.4.7}$$

where \hat{x}_1 denotes an acceptable offer, and $y_2 = \max\{\gamma_1 - \pi_1(\Gamma_1), \gamma_1 - b_1\}$. Note that γ_1 is the highest type of S_1 that S_2 believes it is facing after receiving an acceptable offer. Hence, we can think of \hat{x}_1 as the largest offer that induces β_2 to be the marginal type that accepts the current offer.

Observe that if in equilibrium types $v_1 < \gamma_1$ make an acceptable offer \hat{x}_1 , then $v_2 < \beta_2$ cannot credibly threaten to reject an offer of more than the continuation value for valuation types $v_2 < \beta_2$. That is, S_2 types $v_2 < \beta_2$ cannot threaten to reject any offer of $x_1 = \hat{x}_1 \ge \overline{x}_2$ and demand a better deal (i.e., $x_1 > \overline{x}_1$) along the equilibrium path.

Once type $v_2 \ge \beta_2$ rejects the current offer x_1 to counter with x_2 , some types prefer to make acceptable counteroffers and other types prefer making nonacceptable counteroffers. Let γ_2 denote the marginal type of S_2 that is indifferent between making acceptable counteroffers \hat{x}_2 and nonacceptable counteroffers $x_2 \le \hat{x}_2$. That is, the "rejecting" types (i.e., $v_2 \ge \beta_2$) may be further partitioned into two subsets by γ_2 : the higher types $v_2 \ge \gamma_2$ make nonacceptable offers; and another subset $v_2 \in [\beta_2, \gamma_2]$ makes acceptable offers.¹⁹

¹⁸As we discussed above, this counteroffer $\hat{x}_2 \geq \overline{x}_2$ is accepted immediately because \overline{x}_2 is designed to ensure that the highest type of S_1 cannot do better than accepting \overline{x}_2 by resorting to military coercion or by continuing negotiation instead.

¹⁹As we shall see, some subsets of valuation types may be empty, depending on the configuration of these cut-points.

A counteroffer by S_2 further reveals her valuation to be $v_2 \ge \gamma_2$ if it is nonacceptable offers and $v_2 \in [\beta_2, \gamma_2]$ if acceptable.²⁰ In response to S_2 's counteroffer, S_1 can respond in one of three ways. Let α_1 denote the highest type of S_1 that prefers the continuation of diplomacy to the military outside option. Hence, all types α_2 prefer opting out of diplomacy to start a military crisis Γ_1 , which signals to S_2 , for which $v_2 \ge \gamma_2$, that S_1 's valuation is $v_1 \ge \alpha_1$.

Similarly, let β_1 denote the highest type that prefers accepting the counteroffer x_2 to rejecting it to make a another counter. As before, types $v_1 \in [\gamma_1, \beta_1]$ will accept a counteroffer x_2 , provided that $U_1(x_2) \geq (1 - \delta)U_1(q_1) + \delta U_1(\hat{x}_1)$; otherwise, the critical type will have an incentive to profitably deviate by making another counteroffer. Hence, the acceptable counteroffer by S_2 must satisfy:

$$x_2 \le \hat{x}_2 = \beta_1 - (1 - \delta)q_1 - \delta y_1, \tag{4.4.8}$$

where $y_1 = \max\{\gamma_2 - \pi_2(\Gamma_2), \gamma_2 - b_2\}.$

Once S_1 rejects S_2 's counteroffer $x_2 > \hat{x}_2$, the negotiation game reaches the period t = 2, revealing his valuation type $v_1 \ge \beta_1$.²¹ The whole process repeats itself where $[\beta_1, \alpha_1]$ and $[\gamma_2, \alpha_2]$ are the new priors.

Recall that the strategies and beliefs off the equilibrium path have the same stationary structure as on the equilibrium. The strategies in period t only depend on the current beliefs and the most recent offers and responses in period t - 1. The posterior beliefs depend on the prior belief and the history h^t .

Note that all nonacceptable offers in a given period are forced to be the same in equilibrium. This means that any two (nonacceptable) offers that have zero probability of acceptance are required to induce the same beliefs. More precisely,

²⁰Acceptable counteroffers may reveal that $v_2 \in [\beta_2, \alpha_2]$ if the configuration of the cut-points is such that $\alpha_2 < \overline{v}_2$.

²¹Obviously, a counteroffer by S_1 further reveals her valuation to be $v_1 \ge \gamma_1$ if it is nonacceptable offers and $v_1 \in [\beta_1, \gamma_1]$ if acceptable.

when the states receive an offer, the states are required to form the same posterior belief following any nonacceptable offers regardless of their content. Without loss of generality, I assume that there is a unique nonacceptable offer in each period. This assumption is implicit in the definition of a stationary sequential equilibria, and is sometimes called the "no free screening" condition (Gul and Sonnenschein 1988; see also Ausubel and Deneckere 1992).²²

Hence, the stationary strategies and beliefs should have the above cut-point structure that describes the equilibrium. Assuming that S_1 believes that S_2 's valuation is distributed over the interval $[\underline{v}_2, \overline{v}_2]$ and that the cut-point configuration is such that $\underline{v}_2 < \beta_2 < \gamma_2 < \alpha_2 < \overline{v}_2$, the stationary strategy for S_2 has the cut-point structure summarized in Figure 4.3.



Figure 4.3: A general cut-point structure of the stationary strategy for S_2 with the cut-point relationship such that $\underline{v}_2 < \beta_2 < \gamma_2 < \alpha_2 < \overline{v}_2$, with the assumption that S_1 believes that S_2 's valuation is distributed in $[\underline{v}_2, \overline{v}_2]$.

The equilibrium path and equilibrium outcomes depend on the configurations of the cut-points discussed here, α_i , β_i , and γ_i as well as κ_i and λ_i that characterize S_i 's behavioral strategies in military coercion subgames Γ_i for i = 1, 2. To state the equilibrium, we must verify that the above strategies and beliefs indeed form an equilibrium for each of such configurations. Note, however, that

²²This assumption is standard in the bargaining literature not only in economics (e.g., Grossman and Perry 1986) but also in political science (e.g., Slantchev 2003b). Observe that this assumption allows the receiver to signal her valuation type by making an offer that is not accepted; however, it does not allow her to distinguish between types that are willing to make an acceptable offer and types that are willing to reach an agreement faithfully.

not all subsets of valuation types described above can exist; some of them may be empty, depending on the the relationships between these cut-points.

Lemma 3. If $\alpha_2 \leq \beta_2$, then all $v_2 < \alpha_2$ accept the current offer x_1 and all $v_2 > \alpha_2$ opt out for military coercion, upon receiving x_1 .

Lemma 3 indicates that, when $\alpha_2 \leq \beta_2$, S_2 's optimal response to S_1 's offer can take only one form, as S_2 will not make a counteroffer in equilibrium.²³ Hence, the location of γ_2 relative to α_2 and β_2 is irrelevant to the equilibrium outcome.

If $\alpha_2 \geq \beta_2$, there are three other possibilities in S_2 's optimal response to S_1 's offer. First, if $\gamma_2 < \alpha_2$, then we obtain the most general configuration case, where all $v_2 \in [\gamma_2, \alpha_2]$ make a nonacceptable counteroffer of $x_2 > \hat{x}_2$ in equilibrium, and all $v_2 \in [\beta_2, \gamma_2]$ make an acceptable counteroffer of $x_2 \leq \hat{x}_2$. This cut-point configuration leaves α_2 indifferent between opting out of diplomacy immediately for military coercion and making a nonacceptable offer. Countering with a non-serious offer reveals that S_2 is of type $v_2 \in [\gamma_2, \alpha_2]$ and hence at the next stage S_1 decides with this updated belief whether to opt out for a military coercion subgame Γ_1 immediately or counter back with an offer x_1 in the next period.

Second, if $\gamma_2 \leq \beta_2$, then all "rejecting" types of S_2 (i.e., $v_2 \in [\beta_2, \alpha_2]$) will make nonacceptable offers in equilibrium, to which S_1 responds by either opting for military coercion or moving into the next period where S_1 offers $x_1(\gamma_2, \alpha_2)$. This leaves the marginal (i.e., highest) type γ_2 in this case prefers the immediate diplomatic settlement with the current offer x_1 to the continuation of negotiation, which ends up either with the immediate military crisis initiated by S_1 or with another offer x_1 two periods forward and so on.²⁴

²³This case corresponds to the bargaining shutdown observed in the main result of Powell (1996a, 1999). This implies that the necessary condition for the continuation of diplomacy is that $\beta_2 < \alpha_2$.

²⁴More precisely, this equilibrium behavior is generated by $\gamma_2 = \beta_2$.

Third, if $\gamma_2 \geq \alpha_2$, then all "rejecting" types make acceptable counteroffers $x_2 \leq \overline{x}_2$ in equilibrium, ending the negotiation game with S_1 's acceptance in the next period.²⁵ Hence, α_2 in this case is the highest type that prefers a diplomatic resolution tomorrow to coercive bargaining in a military crisis subgame Γ_2 today, while β_2 is the highest type that prefers accepting x_1 now to delaying a diplomatic resolution with the acceptable counteroffer $x_2 \geq \overline{x}_2$ for one period.

4.5 Bargaining Shutdown in Powell (1996, 1999)

Observe that the present negotiation game is a modification of a canonical crisis bargaining game studied by Powell (1996a, 1999). The primary difference between Powell's model and the present model is that in the former the interaction in military coercion is not explicitly modeled but is reduced to an *outside option point* with the usual costly-lottery payoffs. This reduced-form assumption implies that war ensues immediately when one of the states opts out of diplomacy. Instead, once diplomatic negotiation breaks down, the negotiation game allows the states to play the military coercion subgames, Γ_1 and Γ_2 , rather than the game-ending costly-lottery.

As I mentioned earlier, the main result obtained by Powell (1996a, 1999) is that in equilibrium diplomatic bargaining is shutdown following the initial offer and ended up either in a diplomatic settlement immediately or costly fighting. This means that although players in Powell's alternating-offer bargaining game are allowed to continue diplomatic negotiation indefinitely, S_1 's initial offer effectively takes the form of a "take-it-or-leave-it" offer and continuous diplomacy does not occur in equilibrium.

Powell derives this surprising result by first setting up the upper bounds of

²⁵The condition for this case is $\gamma_2 = \alpha_2$. For the sake of completeness, we supposed $\gamma_2 \ge \alpha_2$, but the difference is substantially inconsequential.

offers and acceptances. Using these bounds, he claims that no dissatisfied type of S_2 ever rejects an offer x_1 to make a counteroffer. That is, S_2 either accepts the initial offer or attacks. As we shall see shortly, however, this claim cannot hold in the present model: the upper bounds on S_1 's offers and acceptances do not necessarily rule out the S_2 's incentives to continue diplomacy by making a counteroffer as in Powell's model. This is because these upper bounds are not strictly less than the military "outside option" for \overline{v}_2 .

In this section I shall examine the conditions under which diplomatic negotiation can continue without a shutdown in bargaining in the shadow of power.²⁶ In doing so, to facilitate the comparison, I adopt the method that Powell (1996a, 1999) used to derive the bargaining-shutdown result. In particular, I introduce two definitions. The first definition is concerned with whether an offer is favorable to the receiver of the offer, distinguishing "favorable offers" from "unfavorable" offers; and the second regarding player types' evaluation of the status quo.

Definition 2 (Favorable and Unfavorable Offers). S_i 's offer x_i is said to be favorable to S_j if this offer is at least as good as S_j 's status quo allocation. That is, a favorable offer is subject to the constraint that $U_j(x_i) \ge U_j(q_j)$, or $v_j - x_i \ge q_j$. The complementary constraint $v_j - x_i < q_j$ defines unfavorable offers.²⁷

The second definition is concerned with each state's evaluations of the status quo, which categorizes player-types into two depending on their status quo evaluation relative to their military outside option.

Definition 3 (Satisfied and Dissatisfied States). For any $i = k \in \{1, 2\}$, state *i* is of a *satisfied type* if the status quo division (the inside option) provides at

²⁶Using the language of the bargaining literature in economic, the continuation of bargaining amounts to delay in reaching an agreement.

²⁷Note that if $v_1 = v_2 = v$, S_1 's offer is favorable to S_2 if $x_1 \le q_1$ because $v_2 - x_1 = v_1 - x_1 \ge q_2 \Leftrightarrow x_1 \le v_1 - q_2 \Rightarrow x_1 \le q_1$.

least as much utility as its payoff from resorting to military coercion (the outside option), i.e., $q_i \ge \pi_i(\Gamma_i)$. Conversely, a state *i* is of a *dissatisfied* type if it strictly prefers to resort to military coercion rather than live with the status quo i.e., $q_i < \pi_i(\Gamma_i)$.

As Tarar and Leventoğlu (2006) note, since the present model is a bargaining game with both the outside and inside options, it necessarily entails a distinction between satisfied and dissatisfied states, a player-type first put forward by Powell (1996a, 1999). If state *i* is satisfied, she cannot credibly threaten to exercise her coercive outside option because she prefers the inside option (the status quo) to the outside option (military coercion). In contrast, if state *i* is dissatisfied, her threat to exercise her outside option (military coercion) is credible because by definition a dissatisfied state prefers the outside option (military coercion) to living with the inside option (the status quo).²⁸

Upper Bounds on Offers and Acceptances: Since the goal here is to demonstrate that continuous diplomacy is possible, it is sufficient to specify the condition under which some type of S_2 has incentives to continue diplomatic negotiations, forgoing her military outside option as well as a diplomatic solution currently on the table. To begin with, I redefine the upper bounds on S_1 's offers and acceptances.

Suppose that the satisfied state, S_1 , is deciding what to offer S_2 at any time t in the *negotiation game*, conditional on the offers S_2 has previously made (i.e., a history h_t). There are two cases to consider depending on whether the potentially

²⁸The usual properties of the satisfied-dissatisfied player-type apply here in the present model, and as in Powell's model (1999) at most only one state can be *potentially* dissatisfied. A state *i* is potentially dissatisfied if its one of types—usually its highest type \overline{v}_i —is actually dissatisfied. To see this, suppose that $\overline{v}_1 = \overline{v}_2 = \overline{v}$. Suppose further that both states are dissatisfied. Then it must follow that $\overline{v}_1 p - c_1 > q$ and $\overline{v}_2(1-p) - c_2 > \overline{v}_2 - q$. Combining these two inequalities, simple algebra and substitution yield $(\overline{v}_1 - \overline{v}_2)p > c_1 + c_2 \Rightarrow 0 > c_1 + c_2$. This contradicts our assumption about strictly positive costs of fighting, $c_i > 0$ for $i \in \{1, 2\}$.

dissatisfied state, S_2 , is actually satisfied or dissatisfied. First, consider the case where \overline{v}_2 is a dissatisfied type of S_2 (i.e., $\pi_2(\Gamma_2) > q_2$ for \overline{v}_2).

Note, however, that for the highest type \overline{v}_2 of dissatisfied S_2 , for which $\pi_2(\Gamma_2) > q_2$, the military outside option strictly dominates the counteroffer because $\overline{\pi}_2(\Gamma_2)$ is strictly increasing in v_2 . In consequence, provided that S_2 is of a dissatisfied type, the upper bound on S_1 's offer is determined solely by \overline{v}_2 's the outside option. Therefore, expression (??) is reduced to $U_2(\overline{x}_1) = \pi_2(\Gamma_2)$. Since $U_2(\overline{x}_1) = \overline{v}_2 - \overline{x}_1$ with the risk-neutrality assumption, the upper bound on what S_1 will offer in equilibrium conditional on \overline{v}_2 being dissatisfied is:

$$\overline{x}_1 = \overline{v}_2 - \overline{\pi}_2(\Gamma_2). \tag{4.5.1}$$

Second, consider the case where \overline{v}_2 is a satisfied type (i.e., $\pi_2(\Gamma_2) \leq q_2$ for \overline{v}_2). Then S_1 is sure that all types of S_2 are unwilling to resort to military coercion to alter the status quo, although he is uncertain of S_2 's exact valuation—i.e., regardless of his beliefs about S_2 's exact type, S_1 is sure that all types of S_2 are satisfied as long as the highest type is satisfied (that is, as long as it holds that $\pi_2(\Gamma_2) \leq q_2$ at the supremum of the support of his belief in this case). Hence, the outside "military" option has no effect on what S_1 would offer, and he will never offer more than what S_2 would accept in the absence of the outside option—that is, no more than the limiting SPE payoff \overline{b}_2 . Therefore, if \overline{v}_2 is satisfied, the upper bound on S_1 's optimal offer is given by $U_2(\overline{x}_1) = \overline{b}_2$, or

$$\overline{x}_1 = \overline{v}_2 - \overline{b}_2, \tag{4.5.2}$$

where $\overline{b}_2 = \frac{\overline{v}_2 - \delta v_1}{1 - \delta^2} - \frac{q_1 - \delta q_2}{1 + \delta}$ by Proposition 3.

In sum, at the information set following the initial sequence of offers and counteroffers h_t , S_1 would never offer more than $\overline{\pi}_2(\Gamma_2)$ if S_2 is of a dissatisfied type, or \overline{b}_2 if she is of a satisfied type.

Now to put an upper bound on the demands that S_1 might accept following h_t , two cases must also be considered. First, consider the case where \overline{v}_2 is satisfied. Because a satisfied type is unwilling to resort to military coercion and hence her threat to make a threat is not credible, the largest demand that S_1 will accept is b_1 (because S_1 is also satisfied by definition, he is unwilling to use military coercion to impose a settlement).²⁹ If \overline{x}_2 denotes the smallest offer (i.e., the largest demand) that S_1 will accept, then we have $U_2(\overline{x}_2) = b_1$, or

$$\overline{x}_2 = v_1 - b_1, \tag{4.5.3}$$

where $b_1 = \frac{v_1 - \delta v_2}{1 - \delta^2} - \frac{q_2 - \delta q_1}{1 + \delta}$.

Second, consider the case where \overline{v}_2 is of a dissatisfied type. Suppose hypothetically that if S_1 rejects the counteroffer x'_2 made by a dissatisfied type of S_2 , and counters with his maximal offer of \overline{x}_1 , then this counter will be accepted immediately by \overline{v}_2 (obtaining the assured acceptance outcome). To see why this counteroffer is accepted immediately, recall that \overline{x}_1 is designed to ensure that \overline{v}_2 cannot do better than accepting \overline{x}_1 by resorting to military coercion instead. In equilibrium, S_2 will never reject \overline{x}_1 in order to use coercion (the assured acceptance). Also recall that the best offer that \overline{v}_2 can get in the next period is also \overline{x}_1 because S_1 will never offer more than \overline{x}_1 . Hence \overline{v}_2 cannot gain anything more by holding out for a better offer. Indeed, there is no better offer than \overline{x}_1 s. Further, \overline{v}_2 will reduce her payoff by a discount factor if she waits until the next period (constituting a costly delay)—i.e., $\delta U_2(\overline{x}_1)$ rather than $U_2(\overline{x}_1)$.

Given S_2 's immediate acceptance of \overline{x}_1 , S_1 's (time-averaged) payoff from re-

²⁹Since there is no restrictive assumption that offer x_i is bounded above by the status quo share q_i (e.g., $x_2 : v_1 - x_2 > q_1$), the largest demand b_1 that satisfied S_1 will accept may possibly undermine his status quo allocation q_1 .

jecting S_2 's counteroffer x'_2 and then countering back with \overline{x}_1 in the next period is equivalent to the (time-averaged) payoff from having the status quo q_1 for one more period: $(1 - \delta)U_1(q_1) + \delta U_1(\overline{x}_1)$. This is the smallest payoff that S_1 can certainly obtain. In consequence, S_1 would never accept S_2 's counteroffer x'_2 that leaves S_1 with less than this payoff, because S_1 could do strictly better by rejecting x'_2 and countering with \overline{x}_1 (i.e., the assured acceptance in the next period). This implies that the only demand (i.e., the smallest offer) \overline{x}_2 that S_1 might accept must satisfy

$$U_1(x_2) \ge (1-\delta)U_1(q_1) + \delta U_1(\overline{x}_1).$$
(4.5.4)

Solving for x_2 yields the upper bound on S_2 's demand that S_1 will accept as follows:

$$x_2 \le \overline{x}_2 = v_1 - (1 - \delta)q_1 - \delta(v_1 - \overline{x}_1) \tag{4.5.5}$$

where $\overline{x}_1 = \overline{v}_2 - \overline{\pi}_2(\Gamma_2)$.

The following lemma summarizes this analysis on the upper bound on what S_1 will offer and accept in the period where he is making an offer.³⁰

Lemma 4 (Upper Bounds on Offers and Acceptances). Consider any equilibrium in the negotiation game and any information set following history h_t at which S_1 is making an offer. Let $\overline{b}_2 = \frac{\overline{v}_2 - \delta v_1}{1 - \delta^2} - \frac{q_1 - \delta q_2}{1 + \delta}$. Then S_1 will never offer to \overline{v}_2 more than $\max\{\overline{\pi}_2(\Gamma_2), \overline{b}_2\}$, which leaves S_1 with $\overline{v}_2 - \overline{\pi}_2(\Gamma_2)$ if \overline{v}_2 is dissatisfied or with $\overline{v}_2 - \overline{b}_2$ if \overline{v}_2 is satisfied. Further, let $b_1 = \frac{v_1 - \delta v_2}{1 - \delta^2} - \frac{q_2 - \delta q_1}{1 + \delta}$ and $z = q_1(1 - \delta) + \delta(v_1 - \overline{\pi}_2(\Gamma_2))$. Then, S_1 will never accept any offer of less than $\min\{b_1, z\}$, which leaves S_2 with $v_1 - b_1$ if \overline{v}_2 is satisfied or with $v_1 - z$ if \overline{v}_2 is dissatisfied.

Conditions for Continuous Diplomacy: Suppose that there is an equi-

³⁰The analysis is closely related to Lemma 3.1 of Grossman and Perry (1986), Lemma 3.1 of Ausubel and Deneckere (1992), and Lemma 2 of Fudenberg, Levine and Tirole (1985).

librium in which S_1 makes an offer x_1 at h_t and S_2 rejects this offer to make a counteroffer x_2 . In such an equilibrium the payoff for some type of S_2 from countering is at least as good as the payoff from resorting to the military outside option or from assured acceptances, given the upper bounds on S_1 's offers and acceptances. To characterize the conditions under which continuous diplomacy can be supported in equilibrium, we must consider two cases, as before, depending on whether S_2 is satisfied or dissatisfied. I begin with the case where she is dissatisfied (i.e., $q_2 < \pi_2(\Gamma_2)$).

It is convenient to divide the analysis of S_2 's response to S_1 's offer into two cases according to whether the offer satisfies this constraint. To begin with, suppose that S_1 has made an offer *not* in favor of S_2 . Then, given S_2 's dissatisfaction with the status quo and the constraints on S_1 's offer, it is trivial to show that accepting an unfavorable offer is strictly dominated by resorting to the "military" outside option. Then, the following property of this type of equilibrium will be useful, as it simplifies the analysis.

Lemma 5. Consider any equilibrium to the negotiation game. If S_2 is of a dissatisfied type and the current offer to her is x_1 , then she never accepts x_1 if $U_2(x_1) < q_2$ (i.e., unfavorable offers).

This lemma reduces the decision of a dissatisfied type S_2 , and she either makes a counteroffer x_2 or resorts to military coercion in response to an unfavorable offer. In equilibrium, S_2 is willing to make a counteroffer if and only if there is some chance that doing so brings her at least as much as what she can obtain by simply quitting diplomacy to opt out for a military option: $U_2(RJ, x_1) \ge \overline{\pi}_2(\Gamma_2, x_1)$.

To characterize S_2 's expected utility from rejecting x_1 and countering with x_2 , note that the game could end in one of three ways if she rejects an offer to make a counteroffer: First, in response to S_2 's counteroffer, S_1 could resort to military coercion, and so the game could end in Γ_1 in some future period. If S_1

resorts to military coercion in the next period in response S_2 's counteroffer, then $U_2(\text{RJ}, x_1)$ is equivalent to the payoff from keeping the status quo for one more period and then opting out for military coercion, or formally, $(1 - \delta)U_2(q_2) + \delta\pi_2(\Gamma_1)$. Therefore, this payoff must be strictly less than the payoff from opting out for military coercion now for S_2 to optimally quit diplomacy and resort to military coercion, rather than continue diplomacy, in this eventuality:

$$\pi_2(\Gamma_2) > (1-\delta)q_2 + \delta\pi_2(\Gamma_1).$$
(4.5.6)

If this inequality holds, S_2 strictly prefers resorting to military coercion rather than countering, provided that the game is eventually going to end in war.³¹

To see under what condition the inequality (4.5.6) holds, we first define S_2 's payoff in a military coercion subgame Γ_1 in period t = 1.

$$\pi_2(\Gamma_1) = \begin{cases} G_1(\kappa_1)((1-p)v_2 - c_2) + (1 - G_1(\kappa_1))v_2 & \text{if } v_2 \ge \kappa_2 \\ -a_2 & \text{if } v_2 < \kappa_2 \end{cases}.$$
(4.5.7)

Her payoff $\pi_2(\Gamma_2)$ in period t = 0, on the other hand, is given by eq (4.4.5), which is simplified as follows:

$$\pi_2(\Gamma_2) = \begin{cases} v_2 - H_1(\lambda_1)(pv_2 - c_2) & \text{if } v_2 \ge \kappa_2 \\ v_2 - H_1(\lambda_1)(v_2 + a_2) & \text{if } v_2 < \kappa_2 \end{cases}.$$
(4.5.8)

³¹Note that this inequality always holds in Powell's (1996a; 1999) bargaining model because $\pi_i(\Gamma_j) = \pi_j(\Gamma_j)$ for any $i, j \in \{1, 2\}$. That is, for each state S_i , every outside option is of the same value regardless of who has opted out (in an attempt to impose a settlement). However, unlike Powell's model, this is not always the case in the present model. As we shall see, the claim that $\pi_2(\Gamma_2) > (1 - \delta)U_2(q_2) + \delta\pi_2(\Gamma_1)$ holds under a certain condition.

Given these payoffs, the inequality (4.5.6) holds when:

$$\begin{aligned} v_2 - H_1(\lambda_1)(pv_2 - c_2) &> (1 - \delta)U_2(q_2) + \delta[v_2 - G_1(\kappa_1)(pv_2 - c_2)] & \text{if } v_2 \geq \kappa_2 \\ v_2 - H_1(\lambda_1)(v_2 + a_2) &> (1 - \delta)U_2(q_2) + \delta(-a_2) & \text{if } v_2 < \kappa_2 \end{aligned}$$

Solving these inequalities for v_2 , we get

$$\alpha_{2}^{\dagger} \equiv v_{2} > \begin{cases} \frac{q_{2}(1-\delta)-c_{2}(H_{1}(\lambda_{1})-\delta G_{1}(\kappa_{1}))}{1-\delta-p(H_{1}(\lambda_{1})-\delta G_{1}(\kappa_{1}))} & \text{if } v_{2} \ge \kappa_{2} \\ \frac{q_{2}(1-\delta)-a_{2}(\delta-H_{1}(\lambda_{1}))}{1-H_{1}(\lambda_{1})} & \text{if } v_{2} < \kappa_{2} \end{cases},$$

$$(4.5.9)$$

where α_2^{\dagger} denotes the marginal type of S_2 that is indifferent between the continuation of diplomacy and the military outside option if S_1 responds to S_2 's counteroffer by opting out for military coercion. However, if $v_2 \ge \kappa_2$, S_2 cannot reject the current offer to continue diplomatic negotiation. This is because the condition in (4.5.9) implies that for S_2 to reject x_1 to continue diplomacy, it must satisfy³²

$$\delta > \frac{v_2 - H_1(\lambda_1)(pv_2 - c_2) - q_2}{v_2 - G_1(\kappa_1)(pv_2 - c_2) - q_2}$$

$$\delta > 1.$$
(4.5.10)

The last inequality clearly does not hold for $\delta \in (0, 1)$.

The second way in which the game could end following S_2 's counteroffer is another round of counteroffer by S_1 , which S_2 immediately accepts. That is, in response to S_2 's counteroffer, S_1 can counter back with x_1 in period t = 2, which she will accept, and the game ends. Note that, by Lemma 4, S_1 never offers more than \overline{x}_1 in any period, where $\overline{x}_1 = \overline{v}_2 - \overline{\pi}_2(\Gamma_2)$ if S_2 is dissatisfied.

³²Note that, if we assume that $F_1(\cdot)$ and $G_1(\cdot)$ are the uniform distribution, we have $H_1(\lambda_1) = G_1(\kappa_2) = \frac{c_1 - a_1}{p}$ if $v_2 \ge \kappa_2$.

Thus, S_2 's maximum payoff from countering with x_2 if the game subsequently ends with S_2 's acceptance of \overline{x}_1 is equivalent to the payoff from keeping the status quo for two periods—i.e., the period in which \overline{v}_2 counters with x_2 and then the period in which S_1 rejects this counteroffer to counter with \overline{x}_1 —and then having \overline{x}_1 thereafter. That is

$$\max U_2(\mathrm{RJ}, x_1) = (1 - \delta)[U_2(q_2) + \delta U_2(q_2)] + \delta^2 U_2(\mathrm{AC}, \overline{x}_1)$$
$$= (1 - \delta^2)q_2 + \delta^2 \overline{\pi}_2(\Gamma_2).$$
(4.5.11)

This payoff must be strictly less than $\overline{\pi}_2(\Gamma_2)$ for S_2 to optimally quit diplomacy and resort to military coercion, rather than continue diplomacy, when S_2 's counteroffer is followed by another counteroffer by S_1 , which S_2 accepts: $\overline{\pi}_2(\Gamma_2) > (1 - \delta^2)q_2 + \delta^2\overline{\pi}_2(\Gamma_2)$. Notice, however, that because S_2 is of a dissatisfied type (i.e., $q_2 < \pi_2(\Gamma_2)$), this inequality always holds. It does not pay to haggle only to delay the eventual "military" outside option.

The third way in which the negotiation game ends is S_1 's acceptance of S_2 's counteroffer in period t = 1. The payoff for S_2 in this scenario, $U_2(RJ, x_1)$, is maximized when S_2 immediately counters with the maximal acceptable demand \overline{x}_2 given by (4.5.5), which S_1 accepts. This payoff, thus, is equivalent to the payoff from keeping the status quo for the period in which she rejects x_1 to counter with \overline{x}_2 and having \overline{x}_2 thereafter: $U_2(RJ, x_1) = (1 - \delta)U_2(q_2) + \delta U_2(\overline{x}_2)$, where $\overline{x}_2 = v_1 - z$ because S_2 is of a dissatisfied type. In consequence, given this eventual outcome, S_2 quits diplomacy to start a military crisis if and only if this payoff is strictly less than the payoff from the coerced outcome in Γ_2 . That is,

 $\pi_2(\Gamma_2) > (1-\delta)q_2 + \delta(v_1 - z), \text{ or }$

$$v_2 - H_1(\lambda_1)(pv_2 - c_2) > (1 - \delta)q_2 + \delta(v_1 - z)$$
 if $v_2 \ge \kappa_2$
$$v_2 - H_1(\lambda_1)(v_2 + a_2) > (1 - \delta)q_2 + \delta(v_1 - z)$$
 if $v_2 < \kappa_2$

Solving for v_2 yields

$$\alpha_{2}^{\ddagger} \equiv v_{2} > \begin{cases} \frac{q_{2}(1-\delta) - \delta(v_{1}-z) - H_{1}(\lambda_{1})c_{2}}{1-H_{1}(\lambda_{1})p} & \text{if } v_{2} \ge \kappa_{2} \\ \frac{q_{2}(1-\delta) - \delta(v_{1}-z) + H_{1}(\lambda_{1})a_{2}}{1-H_{1}(\lambda_{1})} & \text{if } v_{2} < \kappa_{2} \end{cases}$$
(4.5.12)

where α_2^{\ddagger} denotes the marginal type of S_2 that is indifferent between the continuation of diplomacy and the military outside option if S_1 subsequently accepts S_2 's counteroffer, and $z = q_1(1 - \delta) + \delta \overline{x}_1$ and $\overline{x}_1 = v_1 - \pi_2(\Gamma_2)$.

Now suppose that S_1 's offer x_1 is in favor of S_2 of a dissatisfied type (i.e., $q_2 < \pi_2(\Gamma_2)$). As before, S_2 has three choices in responding to x_1 : $a_2(x_1) = \{\text{TH, AC, RJ}\}$. Her payoff from opting out of diplomacy to resort to coercion is $U_2(\text{TH}) = \pi_2(\Gamma_2)$ and the payoff from accepting it is bounded above by $U_2(\text{AC}, \overline{x}_1) = \overline{\pi}_2(\Gamma_2) > q_2$. This upper bound on S_2 's payoff from accepting x_1 implies that accepting a favorable offer x_1 is weakly dominated by the military outside option. Hence, S_2 only accepts the maximal offer $\overline{x}_1 = \pi_2(\Gamma_2)$ and rejects anything less than the equivalent of her military outside option $\pi_2(\Gamma_2)$.

 S_2 's payoff from rejecting x_1 to make a counteroffer x_2 , as before, is conditional on S_1 's response x_2 and the game could end in one of three ways. First, S_1 could make a threat, in which case S_2 obtains the (discounted) time-average payoff of $q_2(1-\delta) + \delta \pi_2(\Gamma_1)$. Given this, S_2 will optimally continue diplomacy by rejecting the current offer to make a counteroffer if and only if this payoff is at least as good as the equivalent of her military outside option $\pi_2(\Gamma_2)$. This condition is identical with the case with unfavorable offers, and S_2 's decision rule is characterized by the cutoff point α_2^{\dagger} . All types above α_2^{\dagger} accept the current offer if it is the maximal offer $(x_1 = \overline{x}_1)$ and quit diplomacy and resort to military coercion if the current offer is anything less than that $(x_1 < \overline{x}_1)$. All credible types below α_2^{\dagger} however reject the current offer to make a counteroffer.

As the second and third ways to respond to S_2 's counteroffer, S_1 could either reject x_2 to counter back with \overline{x}_1 again, or accept S_2 's counteroffer. In the former case, S_2 's payoff is $(1 - \delta^2)q_1 + \delta^2 U_2(\overline{x}_1)$ and, in the latter case, her payoff is bounded above by $(1 - \delta)q_2 + \delta U_2(\overline{x}_2)$. The appendix shows that, in both cases, S_2 never rejects the current offer to counter with x_2 because doing so is dominated by resorting to military coercion. In consequence, S_2 accepts the current offer if it is the maximal offer $(x_1 = \overline{x}_1)$ and opts out of diplomacy for military coercion if the current offer is anything less than that $(x_1 < \overline{x}_1)$.

The following lemma summarizes the behavioral strategy for S_2 of a dissatisfied type (i.e., $U_2(q_2) < \pi_2(\Gamma_2)$) in response to different types of S_1 's initial offer x_1 .³³

Lemma 6. Consider any equilibrium in the negotiation game. If S_2 is dissatisfied with the status quo (i.e., $q_2 < \pi_2(\Gamma_2)$), then S_2 plays following behavioral strategy in response to S_1 's offer in t = 0. In response to S_1 's favorable offer (i.e., any $U_2(x_1) \ge q_2$), S_2 rejects the offer to make a counteroffer if $v_2 < \alpha_2^{\dagger}$. Otherwise, she accepts the offer if $x_1 = \overline{x}_1$ and threatens if $x_1 < \overline{x}_1$, provided that S_1 opts out in t = 1; she accepts the offer if $x_1 = \overline{x}_1$ and threatens if $x_1 < \overline{x}_1$, provided that S_1 counters with \overline{x}_1 or accepts \overline{x}_2 in t = 1. In response to S_1 's unfavorable offer (i.e., any $U_2(x_1) < q_2$), she threatens if $v_2 \ge \alpha_2^{\dagger}$, and rejects the offer to make a counteroffer otherwise, conditional on S_1 opting out of diplomacy to resort to

³³In Powell's (1996a, 1999) alternating-offer bargaining game with the infinite-horizon and the outside option, the behavioral strategy of S_2 of a dissatisfied type in response to S_1 's initial offer x_1 is as follows. S_2 accepts x_1 if $U_2(x_1) \ge \pi_2(\Gamma_2)$ and resorts to military instruments if $U_2(x_1) < \pi_2(\Gamma_2)$.

coercion in t = 1; she always opts out of diplomacy to make a threat, conditional on S_1 countering with \overline{x}_1 in t = 1; she threatens if $v_2 \ge \alpha_2^{\ddagger}$, and rejects the offer, conditional on S_1 accepting \overline{x}_2 in t = 1.

I now turn to the case where S_2 is of a satisfied type (i.e., $q_2 \ge \pi_2(\Gamma_2)$). It is convenient to divide the analysis into two cases according to whether S_1 's offer to S_2 is in her favor or not. First, suppose that S_1 has offered to revise the status quo in favor of a satisfied type of S_2 (i.e., $v_2 - x_1 \ge q_2$). In this case, it is trivial to show that S_2 will never opt out of diplomacy to make a threat.

Lemma 7. If S_2 is of a satisfied type, then she will never opt out for military coercion, conditional on a favorable offer x_1 that improves on her status quo.

This lemma simplifies the analysis by reducing S_2 's decision to the choice between accepting a favorable offer $x_1 \geq v_2 - q_2$ and rejecting it to make a counteroffer x_2 . To characterize the condition under which S_2 has an incentive to make a counteroffer, forgoing the current favorable offer on the negotiation table, note that the game could end, as before, in one of three ways following S_2 's counteroffer. First, in response to S_2 's counteroffer, S_1 could resort to military coercion, and so the game could end in Γ_1 in some future period. In this case, S_2 has an incentive to reject the current offer to make a counteroffer if and only if her expected utility from keeping the status quo for (at least) one more period and then playing the military coercion subgame (Γ_1) is at least as good as her payoff from accepting a favorable offer now. This condition holds when

$$U_2(AC, x_1) \le (1 - \delta)U_2(q_2) + \delta \pi_2(\Gamma_1).$$

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Using (4.5.7), we can rewrite this condition as follows:

$$v_2 - x_1 \le \begin{cases} (1 - \delta)q_2 + \delta[v_2 - G_1(\kappa_1)(pv_2 - c_2)] & \text{if } v_2 \ge \kappa_2 \\ (1 - \delta)q_2 + \delta(-a_2) & \text{if } v_2 < \kappa_2 \end{cases}$$

Solving these conditions for v_2 yields

$$\beta_2^{\dagger} \equiv v_2 > \begin{cases} \frac{q_2(1-\delta)+\delta G_1(\kappa_1)c_2+x_1}{1-\delta(1+G_1(\kappa_1)p)} & \text{if } v_2 \ge \kappa_2 \\ q_2(1-\delta)-\delta a_2+x_1 & \text{if } v_2 < \kappa_2 \end{cases}$$
(4.5.13)

where β_2^{\dagger} denotes the marginal type of S_2 that is indifferent between the immediate diplomatic settlement (by accepting x_1) and the continuation of diplomacy (by rejecting x_1) if S_1 responds to S_2 's counteroffer by opting out for military coercion.

Second, in response to S_2 's counteroffer, S_1 can make another counteroffer in period t = 2, which S_2 would accept, and the game ends. As before, because S_1 never offers more than \overline{x}_1 in any period, S_2 should not expect to gain more than $U_2(\overline{x}_1)$ after two periods. This maximum (time-averaged) payoff S_2 can hope for in this case is $U_2(RJ, \overline{x}_1) = (1 - \delta)[U_2(q_2) + \delta U_2(q_2)] + \delta^2 U_2(AC, \overline{x}_1)$. Hence, S_2 has an incentive to reject the current offer x_1 to make a counteroffer if and only if

$$v_2 - x_1 \le (1 - \delta^2)q_2 + \delta^2(v_2 - \overline{x}_1).$$

Given a favorable offer (i.e., $U_2(x_1) > q_2$), however, this condition obviously never holds because, by Lemma 4, S_1 's initial offer in period t = 0 is bounded above by \overline{x}_1 . As a consequence, S_2 has no incentive to forgo the current favorable offer and continue negotiations for a better deal if S_1 counters back.

Third, the game could also end with S_1 's acceptance of S_2 's counteroffer in

period t = 1. In this case, S_2 's maximum payoff occurs if she counters with the maximal acceptable demand \overline{x}_2 , which is given by $(1-\delta)U_2(q_2) + \delta U_2(\overline{x}_2)$. Hence, S_2 has an incentive to reject the current offer x_1 to make a counteroffer if and only if

$$v_2 - x_1 \le (1 - \delta)q_2 + \delta(v_1 - b_1).$$

where $b_1 = \frac{v_2 - \delta v_1}{1 - \delta^2} - \frac{q_2 - \delta q_1}{1 + \delta}$. Solving for v_2 yields

$$\beta_2^{\ddagger} \equiv v_2 \le q_2(1-\delta) + \delta(v_1 - b_1) + x_1, \qquad (4.5.14)$$

where $b_1 = q_1$ and β_2^{\ddagger} denotes the marginal type of S_2 that is indifferent between the immediate diplomatic settlement (by accepting x_1) and the continuation of diplomacy (by rejecting x_1) if S_1 subsequently accepts S_2 's counteroffer.

As the final step in the analysis of S_2 's response to S_1 's offer, I now turn to the case where S_1 's current offer to a satisfied type of S_2 (i.e., $q_2 \ge \pi_2(\Gamma_2)$) is not in her favor and does not improve on the status quo. An offer that is unfavorable to a satisfied type of S_2 is subject to the constraint $U_2(x_1) < q_2 \Rightarrow x_1 > v_2 - q_2$. Then, S_2 's equilibrium response $a_2(x_1)$ in period t = 0 is determined the following decision rule:

$$a_{2}(x_{1}) = \begin{cases} \text{TH} & \text{iff} \quad U_{2}(\text{TH}) > \max\{U_{2}(\text{AC}), U_{2}(\text{RJ})\} \\ \text{RJ} & \text{iff} \quad U_{2}(\text{RJ}) > \max\{U_{2}(\text{AC}), U_{2}(\text{TH})\} \\ \text{AC} & \text{iff} \quad U_{2}(\text{AC}) > \max\{U_{2}(\text{TH}), U_{2}(\text{RJ})\} \end{cases}$$

Although $U_2(\text{TH})$ and $U_2(\text{AC})$ are uniquely identified, $U_2(\text{RJ})$ varies depending on S_1 's response to S_2 's counteroffer.³⁴ As before, S_1 's behavioral strategy chooses from three possible responses. First, S_1 could resort to military coercion and the game ends in Γ_1 in some future period t = n. In this scenario, S_2 's maximal $\overline{^{34}\text{That is, } U_2(\text{TH}, x_1) = \pi_2(\Gamma_2)}$ and $U_2(\text{AC}, x_1) = v_2 - x_1$.

payoff occurs if S_1 opt out for military coercion immediately in period t = 1, which yields the payoff of $(1 - \delta)U_2(q_2) + \delta\pi_2(\Gamma_1)$. A simple inspection of the payoffs assigned to each choice shows that $U_2(AC) > U_2(TH) \ge U_2(RJ)$, which implies that accepting the current offer \hat{x}_1 dominates her military outside option as well as continuous diplomacy. In consequence, a satisfied type of S_2 always accept the unfavorable offer \hat{x}_1 on the table if S_1 's off-the-equilibrium-path response to S_2 's counteroffer is to opt out of diplomacy to compel S_2 to capitulate to a demand through military coercion.

Second, in response to S_2 's counteroffer, S_1 could make another counteroffer in period t = 2, which S_2 will accept and the game ends. As before, because S_1 never offers more than \overline{x}_1 in any period, S_2 should not expect to gain more than the maximum offer after two periods with the inside option. In this case, S_2 's payoff from rejecting the current unfavorable offer amounts to $(1 - \delta^2)U_2(q_2)(1 + \delta) + \delta^2 U_2(\overline{x}_1)$, where $\overline{x}_1 = \overline{b}_2$ because S_2 is of a satisfied type. Given this, it is straightforward to show that rejecting the current unfavorable offer \hat{x}_1 to make a counteroffer (i.e., continuous diplomacy) dominates the military outside option $(a_2 = {\text{TH}})$ as well as the immediate settlement $(a_2 = {\text{AC}})$. In consequence, a satisfied type of S_2 always counters with x_2 in response to an unfavorable offer x_1 if S_1 's equilibrium response to x_2 is to continue yet another round of bargaining.³⁵.

Third, following an unfavorable offer \hat{x}_1 , the game could also end with S_1 's acceptance of S_2 's counteroffer in period t = 1. S_2 's maximum payoff occurs if she counters with the maximal acceptable demand of \overline{x}_2 (i.e., the smallest offer), where $\overline{x}_2 = v_1 - b_1$ because S_2 is of a satisfied type. This outcome, thus, leaves S_2 with the (maximal) payoff of $(1 - \delta)U_2(q_2) + \delta(v_1 - b_1)$. In consequence, S_2 's

³⁵The proof of this claim is as follows. Since $U_2(\text{RJ}) = (1 - \delta^2)U_2(q_2) + \delta^2 U_2(\overline{x}_1)$, it suffices to invoke the definition of a satisfied type, $U_2(q_2) \ge U_2(x_1)$, to show that $U_2(\text{RJ}) > U_2(\text{AC})$. Similarly, because $U_2(\overline{x}_1) = \overline{b}_2$, to prove that $U_2(\text{RJ}) > U_2(\text{TH})$, it suffices to show that $\overline{b}_2 > \pi_2(\Gamma_2)$. Note that, by Proposition 3, for the limiting SPE allocation to be sustained in any equilibrium, it must be the case that $b_2 > \pi_2(\Gamma_2)$. Hence, the result follows.

best response $a_2(\hat{x}_1)$ is determined by the set of the following cut-point rules.

• Let α_2^{\ddagger} denote the critical (or, highest) type of S_2 that prefers making a counteroffer to opting for coercion, provided that S_1 will accept her counteroffer in the next period. Hence, all types above α_2^{\ddagger} prefer threatening to rejecting the current unfavorable offer x_1 in equilibrium and all types below α_2^{\ddagger} prefer otherwise, where

$$\alpha_{2}^{\ddagger} = \begin{cases} \frac{q_{2}(1-\delta)-\delta b_{1}-H_{1}(\lambda_{1})c_{2}}{1-H_{1}(\lambda_{1})p-\delta} & \text{if } v_{2} \ge \kappa_{2} \\ \frac{q_{2}(1-\delta)-\delta b_{1}+H_{1}(\lambda_{1})a_{2}}{1-H_{1}(\lambda_{1})-\delta} & \text{if } v_{2} < \kappa_{2} \end{cases}$$
(4.5.15)

• Let β_2^{\ddagger} denote a critical type of S_2 that is indifferent between rejecting x_1 and accepting it, provided that S_1 will accept her counteroffer in the next period. Then, all types above β_2^{\ddagger} prefer rejecting to accepting x_1 in equilibrium and all types below β_2^{\ddagger} prefer otherwise, where

$$\beta_2^{\dagger} = v_1 - b_1 - q_1 \tag{4.5.16}$$
$$= v_1 - 2q_1.$$

Let θ₂ denote the critical type of S₂ that prefers accepting the current unfavorable offer to threatening, provided that S₁ will accept her counteroffer in the next period. Hence, all types above θ₂ prefer threatening to accepting x₁ in equilibrium and all types below θ₂ prefer otherwise, where

$$\theta_2 = \begin{cases} \frac{q_2 - H_1(\lambda_1)c_2}{1 - H_1(\lambda_1)p} & \text{if } v_2 \ge \kappa_2\\ \frac{q_2 + H_1(\lambda_1)a_2}{1 - H_1(\lambda_1)} & \text{if } v_2 < \kappa_2 \end{cases}$$
(4.5.17)

The following proposition and summarizes the behavioral strategy of S_2 of a

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satisfied type (i.e., $U_2(q_2) \ge \pi_2(\Gamma_2)$) in response to different types of S_1 's initial offer x_1 (see also Table 4.1).

Lemma 8. Consider any equilibrium in the negotiation game. If S_2 is satisfied with the status quo (i.e., $q_2 \ge \pi_2(\Gamma_2)$), then S_2 plays following behavioral strategy in t = 0. In response to S_1 's favorable offer (i.e., any $x_1 \le v_2 - q_2$), she rejects it to make a counteroffer if $v_2 \ge \beta_2^{\dagger}$, and accepts it otherwise, conditional on S_1 opting out of diplomacy to resort to coercion in t = 1; she always accepts it, conditional on S_1 countering with \overline{x}_1 in t = 1; she rejects it if $v_2 \ge \beta_2^{\ddagger}$, and accepts it, conditional on S_1 accepting \overline{x}_2 in t = 1. In response to S_1 's unfavorable offer (i.e., any $x_1 > v_2 - q_2$), she always accept it, conditional on S_1 opting out of diplomacy to resort to coercion in t = 1; she always reject it to make a counteroffer, conditional on S_1 countering with \overline{x}_1 in t = 1; her best response is determined by the configurations of the cut-points α_2^{\ddagger} , β_2^{\ddagger} , and θ_2 , conditional on S_1 's acceptance of \overline{x}_2 in t = 1.

	S_2 's Status Quo Orientation	
	$egin{array}{llllllllllllllllllllllllllllllllllll$	$egin{array}{llllllllllllllllllllllllllllllllllll$
Unfavorable Offers $U_2(x_1) < q_2$	Dissatisfied S_2 never accepts unfavorable offers (Lemma 5). (1) If S_1 opts out, S_2 threatens if $v_2 > \alpha_2^{\dagger}$, and rejects x_1 otherwise.	(1) If S_1 opts out, S_2 always accept x_1 .
	(2) If S_1 counters with \overline{x}_1 , S_2 always threatons immediately	(2) If S_1 counters with \overline{x}_1 , S_2 always rejects to \overline{x}_1 counter
	(3) If S_1 accepts \overline{x}_2 , S_2 threatens	(3) If S_1 accepts \overline{x}_2 , S_2 's response
	if $v_2 \ge \alpha_2^{\ddagger}$, and rejects x_1 otherwise.	is determined by the configurations of α_2^{\ddagger} , β_2^{\ddagger} , and θ_2 .
		A satisfied type of S_2 never
		opts out for coercion (Lemma 7).
Favorable Offers		
$U_2(x_1) \ge q_2$	(1) If S_1 opts out, S_2 rejects x_1	(1) If S_1 opts out, S_2 rejects x_1
	if $v_2 < \alpha_2^{\dagger}$. Otherwise S_2 accepts	if $v_2 \ge \beta_2^{\dagger}$, and accepts it otherwise.
	if $x_1 = \bar{x}_1$ and threatens if $x_1 < \bar{x}_1$.	(a) If C counters with $\equiv C$ shows
	(2) If S_1 counters with x_1 , S_2 accepts	(2) If \mathcal{S}_1 counters with x_1 , \mathcal{S}_2 always
	(3) If S_1 accepts \overline{x}_2 , S_2 accepts x_1	(3) If S_1 accepts \overline{x}_2 , S_2 rejects x_1
	if $x_1 = \bar{x}_1$ and threatens if $x_1 < \bar{x}_1$.	if $v_2 \ge \beta_2^{\ddagger}$, and accepts it otherwise.

Table 4.1: S_2 's Response to the Initial Offer (Lemmas 6 & 8).

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4.6 Discussion

Powell (1996a, 1999) argues that S_2 will never reject the current offer x_1 to counter with another diplomatic offer in equilibrium, regardless of whether S_2 is satisfied or dissatisfied. Dissatisfied S_2 will always fight, given unfavorable offers, and satisfied S_2 will always accept offers regardless of whether the offer is in her favor or not. The only condition under which dissatisfied S_2 may counter and continue diplomatic negotiation given a favorable offer is when there are (unrealistically) no joint gain from a diplomatic settlement (Powell 1996a, 267). Hence, as long as there are (more realistically) join gains from a diplomatic solution, S_2 either accepts S_1 concession on the table or immediately attacks S_1 . In the end, this effectively truncates the infinite-horizon bargaining to single-shot take-it-or-leaveit offer bargaining.

As we have seen, the preceding analysis of S_2 's response to the current offer (proposition 4.1) indicates that the continuation of diplomatic negotiation is not strictly dominated by the military outside option for a dissatisfied type of S_2 . The immediate reason why the bargaining shutdown does not necessarily occur in the present model is that the reservation value $\delta \pi_i(\Gamma_k)$ does not yield the unilateral benefit to the bargainer who chooses to opt out of diplomacy.³⁶ In contrast, as Leventoğlu and Tarar (N.d.) point out, in Powell's model, the bargainers can be rewarded for shutting down diplomacy to start a war. That is, all the benefit from opting out of diplomacy to initiate a war is exclusively allocated to the ones who choose to opt out by construction. Hence, the bargaining shutdown result in Powell's model is caused by the fact that the reservation value is structured in a way that all the bargaining power is given to the one who is opting out.

Although Leventoğlu and Tarar (N.d.) argue that this "benefit from attack-

³⁶Lemma 2 states that $\pi_i(\Gamma_i)$ is the reservation point for each state, and Corollary 2.1 indicates the "surplus" from the military outside option.

ing" in Powell's model represents the asymmetrical bargaining power between S_1 and S_2 , such asymmetrical bargaining power is not due to the lack of the opportunity for S_1 (i.e., the offeror) to jump on the gun and resort to war before the opponent does. As the preceding analysis in this chapter has demonstrated, it is not necessarily the lack of S_1 's opportunity to initiate fighting in response to S_2 's rejection of his offer that gives rise to the asymmetrical bargaining power. Rather, all we need to ensure that S_2 is not rewarded for terminating diplomatic efforts is to make sure that it is costly to engage in military coercion in an attempt to impose her preferred settlement, *relative* to the pursuit of diplomatic settlements. In particular, by allowing the bargainers to engage in dynamic coercive bargaining after S_2 's opts out of diplomacy, the lower type of S_2 (bluffers in particular) cannot optimally opts out of diplomacy to make a threat. This is because unlike in Powell's (19996, 1999) model, upon seeing a threat, S_1 can assess the credibility of her threat, the lower types of S_2 can be caught bluffing. If there were no opportunity for S_1 to decide whether to resist or concede based on his posterior beliefs, then the lower types of S_2 , who would back down if their bluffs are called, can jump into the war outcome, avoiding the chance of their bluffs being caught.

For example, one of the conditions under which dissatisfied S_2 has incentives to reject unfavorable offers $x_1 < v_2 - q_2$ to continue diplomatic negotiation is that S_2 's valuation is not too high.³⁷ That is, condition in (4.5.9) shows that α_2 † is the highest type that rationally rejects the current offer to continue diplomacy with a counteroffer in equilibrium. Note that this inequality cannot hold for $v_2 \ge \kappa_2$; it can hold only for the types would would not follow through on a threat if they were to resort to military coercion. This supports the idea that the reason why bargaining shutdown is prevalent in Powell's model is that these bluffers (i.e.,

 $^{^{37}}$ Or an unfavorable offer here is equivalent to a "low" offer in the language of Leventoğlu and Tarar (N.d.).

 $v_2 < \kappa_2$) can profitably quit diplomacy and start a war before S_1 has a chance to call a bluff. Restating this condition in terms of δ , we have

$$\delta > \frac{H_1(\lambda_1)(v_2 + a_2) - v_2 + q_2}{q_2 + a_2}.$$
(4.6.1)

Hence, as the bargainers with low valuation types (i.e., $v_2 < \kappa_2$) become more patient, the more likely they will continue diplomatic bargaining. Interestingly, the more S_2 values the issue at stake, the more likely is this condition to be satisfied. For this reason, it is possible for dissatisfied S_2 to rationally continue diplomatic negotiation even without the opportunity for S_1 to jump on the gun and resort to war.

4.7 Conclusion

Many scholars of diplomacy argue that a main instrument of diplomacy is negotiation (e.g., Berridge, Keens-Soper and Otte 2001, (Bull 1977), (Callières 1983), (Kissinger 1979), (Iklé 1964), (Nicolson 1963), (Hill 1961), (Stearns 1996), and (Wight 1978) among others.

Fred C. Iklé (1964) notes that diplomacy can be defined as "a process in which explicit proposals are put forward ostensibly for the purpose of reaching agreement on an exchange or on the realization of a common interest where conflicting interests are present." This definition marks a contrast to Thomas Schelling's (1960, 1966) broader definition that subsumes negotiation within bargaining and communication, as it is the "confrontation of explicit proposals that distinguishes negotiation from tacit bargaining and other forms of conflict behavior" (Iklé 1964, 3-4). Such broader conceptions have tended to ignore or obscure features of the negotiating process, such as agenda setting and the impact of the negotiating process on outcomes. As I argued earlier, the gist of Ikle's definition is that diplomatic negotiation is a peaceful method and should be distinguished from coercive bargaining. Because any successful negotiation must be based on a "balance of mutual concessions" (Kissinger 1979, 803) and therefore "a negotiation is about trading concessions" (Kissinger 1994, 744), it differs from military coercion in which a crisis will typically end with forceful concession by the only one side or a unilateral victory by the other side.

Diplomatic negotiation is the art of sorting through states' preferences. It inevitably involves compromises on both sides to a dispute. It is only when reasoned persuasion through offers and counteroffers prove impossible to settle a dispute that states resort to military might and coercion in order to compelle the other side to concede.

States in a dispute engage in a diplomatic negotiation primarily because precrisis diplomatic communication has failed to settle a conflict of interest, according to our stylization of the basic machineries of diplomacy developed in Chapter 2. Now that diplomatic negotiation has failed to produce a negotiated settlement, does diplomacy cease to be functioning? In the next chapter, it is still possible for states to use diplomacy to mitigate the risk of war even if diplomatic negotiation breaks down into a military crisis.

4.8 Appendix

Proof of Lemma 1. The result immediately follows from the analysis in the preceding text and conditions (4.3.1) and (4.3.2), and hence the proof is omitted. \Box

 \Box

Proof of Corollary 2.1. By the proof of Lemma 1.

Proof of Proposition 3. The negotiation game is a straightforward adoption of the Rubinstein model of alternating-offer bargaining in the presence of both inside and outside options, and the proof involves a minor modification of Muthoo's (1999, 148) Proposition 6.2. Specifically, equilibrium offers and acceptances generally follow the outside option principle, and each player's outside options $\pi_i(\Gamma_i)$, $i \in \{1, 2\}$ are given by Corollary 2.1. Observe that if $\pi_1(\Gamma_1) \leq b_1$ and $\pi_2(\Gamma_2) \leq b_2$, the negotiation game is reduced to the underlying Rubinstein bargaining game only with inside options (without outside options). Thus, it suffices to derive $(x_1^*, x_2^*) = (b_1, b_2)$ in this reduced game.

Suppose that x_1^* denotes S_1 's optimal offer in any subgame perfect equilibrium (SPE) of this underlying game, which is stationary (i.e., independent of time and history) and without delay. Then, consider any period, say t = 2, when S_1 makes an offer. He should be able to get the *instantaneous* payoff of $U_1(x_1^*)$ in that period by playing his equilibrium strategy. Discounting *back* one period to t = 1when S_2 makes a counteroffer, she anticipates that S_1 can command the present value of the discounted sum of the payoff of $U_1(x_1^*)$ at t = 2 and thereafter plus the status quo payoff for one period; that is,

$$\sum_{t=0}^{n-1} \delta^t q_1 + \sum_{t=n}^{\infty} \delta^t U_1(x_1^*) = q_1 + \frac{\delta U_1(x_1^*)}{1-\delta}$$

for n = 1. Given this, S_2 's best response is to ask for the remaining share of the good; that is, in equilibrium S_2 must offer S_1 at least the present value of

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what he expects to obtain by rejecting her proposal $(1 - \delta)q_1 + \delta U_1(x_1^*)$ and keep the remaining to herself; otherwise the continuation of the bargaining game yields S_1 a greater payoff (e.g., the equilibrium payoff $U_1(x_1^*)$ in the next period). Analogous argument establishes that S_1 in any period must offer S_2 at least $(1 - \delta)q_2 + \delta U_2(x_2^*)$. However, offering the opponent more than the necessary minimum is not optimal; otherwise each player can profitably deviate by instead offering x'_1 such that for $i, j = 1, 2, v_i - x_i^* > v_i - x'_i > \delta U_j(x_i^*)$. Hence, noting that $U_i(x_i) = x_i$ for $i = \{1, 2\}$ with the usual assumption that both states i and j are risk neutral, the offers sustained in a stationary SPE without delay must satisfy

$$x_2^* = v_2 - (1 - \delta)q_1 - \delta x_1^*$$
$$x_1^* = v_1 - (1 - \delta)q_2 - \delta x_2^*.$$

The unique solution to these equalities yields the stationary SPE offers in the reduced game underlying the *negotiation game*. Because this system of equations has the unique solution, there exists at most one stationary SPE. And the result immediately follows. $\hfill \Box$

Proof of Lemma 4. Defining the bounds on offers is a standard result in alternatingoffer bargaining games (e.g., Ausubel and Deneckere 1992; Grossman and Perry 1986; Powell 1996a; and Slantchev 2003b), and so the proof is omitted. \Box

Proof of Lemma 3. If $\alpha_2 \leq \beta_2$, then the subinterval of S_2 's valuation type $[\beta_2, \alpha_2] = \emptyset$. Since $\gamma_2 \in [\beta_2, \alpha_2]$ by definition, the equilibrium outcome is independent of the location of γ_2 , implying that S_2 will not make a counteroffer in equilibrium; she will either accept the current offer or opt for military coercion.

Proof of Lemma 5. To prove that \overline{v}_2 will never accept any unfavorable offer, it

suffices to show that accepting the unfavorable offer is strictly dominated for a dissatisfied type of S_2 . Note that by definition (i) $\pi_2(\Gamma_2) > q_2$ (dissatisfaction) and (ii) $v_2 - x_1 < q_2$ (unfavorable offer). Combining (i) and (ii) yields $\pi_2(\Gamma_2) > q_2 > v_2 - x_1$, implying $U_2(\text{TH}) > q_2 > U_2(\text{AC})$. Hence, the result follows. \Box

Proof of Lemma 6. Lemmas 4 & 5 and the preceding discussion in the text suggest that it is sufficient to show that S_2 never rejects a favorable offer to make a counteroffer because doing so is dominated by the outside option. I first show that S_2 strictly prefers resorting to military coercion now to making a counteroffer if S_1 makes another counteroffer. Note that because S_2 is dissatisfied, S_1 's maximal offer is equivalent to S_2 's outside option (i.e., $\overline{x}_1 = \pi_2(\Gamma_2)$). Then, it is trivial to show that S_2 's dissatisfaction with the status quo $(q_2 < \pi_2(\Gamma_2))$ and discounting $(\delta > 0)$ ensure that it does not pay to delay to receive $\pi_2(\Gamma_2)$. Next, to see why the outside option dominates continuous diplomacy if S_1 accepts S_2 's counteroffer, first recall that S_2 's payoff in this case is bounded above by $q_2(1-\delta) + \delta U_2(\overline{x}_2)$. Recall from eq. (4.5.4) that \bar{x}_2 solves $U_1(\bar{x}_2) = q_1(1-\delta) + \delta U_1(\bar{x}_1)$. Because $q_2 = v_2 - q_1$, S_2 's dissatisfaction condition $\pi_2(\Gamma_2) > q_2$ is equivalent to $\pi_2(\Gamma_2) > q_2$ $v_2 - q_1$, which implies $v_2 - \pi_2(\Gamma_2) < q_1$. Because Lemma 4 shows that the maximal offer leaves S_1 with $v_2 - \pi_2(\Gamma_2)$, the last inequality is equivalent to $U_1(\overline{x}_1) < q_1$. But because eq. (4.5.4) is a convex combination of δ , $U_1(\overline{x}_1) < q_1$ implies $U_1(\bar{x}_2) > U_1(\bar{x}_1) \Rightarrow v_1 - \pi_2(\Gamma_2) < v_1 - \bar{x}_2 \Rightarrow \pi_2(\Gamma_2) > \bar{x}_2$. Because $\pi_2(\Gamma_2) > q_2$ by definition and S_2 's payoff from countering is a convex combination, we have $\pi_2(\Gamma_2) > q_2(1-\delta) + \delta U_2(\bar{x}_2)$. Thus, the result follows.

Proof of Lemma 7. Because S_2 is satisfied, we have $q_2 \ge \pi_2(\Gamma_2)$. Also because the offer is in favor of S_2 , we have x_1 such that $v_2 - x_1 \ge q_2$. Combining these inequalities, we have $v_2 - x_1 \ge q_2 > \pi_2(\Gamma_2) \Rightarrow U_2(AC, x_1) > U_2(TH, x_1)$. This implies that AC strictly dominates TH.

Proof of Lemma 8. Lemmas 4 & 7 as well as the preceding discussion in the text indicate that it remains to show that $U_2(AC) > U_2(TH) \leq U_2(RJ)$. The proof of this claim proceeds in two steps. I first show that $U_2(RJ) \ge U_2(TH)$. If $v_2 \ge \kappa_2$, this inequality becomes $(1 - \delta)q_2 + \delta\pi_2(\Gamma_1) \geq \pi_2(\Gamma_2)$. Because $q_2 \geq \pi_2(\Gamma_2)$ by assumption, it is sufficient to show that $\pi_2(\Gamma_1) \ge \pi_2(\Gamma_2)$, or $v_2 - G_1(\kappa_1)(pv_2 - c_2) \ge c_2$ $v_2 - H_1(\lambda_1)(pv_2 - c_2)$. This inequality holds if $G_1(\kappa_1) \leq H_1(\lambda_1)$, where $\lambda_1 =$ $\frac{G_2(\kappa_2)c_1-a_1}{1-G_2(\kappa_2)(1-p)}$ by condition (4.4.4). Note that $H_1(\lambda_1)$ is decreasing in λ_1 , so the minimal $H_1(\lambda_1)$ is obtained with max $G_2(\kappa_2)$. Because max $G_2(\kappa_2) = 1$ if $v_2 \ge \kappa_2$, $H_1(\frac{G_2(\kappa_2)c_1-a_1}{1-G_2(\kappa_2)(1-p)})$ is reduced to $H_1(\frac{c_1-a_1}{p})$ in this case. With the usual assumption that $G_i(\cdot)$ and $H_i(\cdot)$ are uniformly distributed, we have $G_1(\kappa_1) = H_1(\lambda_1) = \frac{c_1 - a_1}{p}$. This implies that $\pi_2(\Gamma_1) = \pi_2(\Gamma_2) \leq q_2$. Hence, we have $U_2(RJ) \geq U_2(TH)$ if $v_2 \geq \kappa_2$. Now consider the case where $v_2 < \kappa_2$. Because the inequality $U_2(RJ) \geq$ $U_2(TH)$ holds for higher types $v_2 \ge \kappa_2$, the same holds for lower types $v_2 < \kappa_2$ as well. This is due to the fact that the military outside option $\pi_i(\Gamma_i)$ is strictly increasing in one's valuation v_i . Next, to see that $U_2(AC) > U_2(RJ)$, note that satisfied S_2 's maximum payoff from accepting an unfavorable offer occurs when S_1 makes the maximal unfavorable offer $\lim x_1 = q_2$ (as long as there exists ϵ such that $|q_2 - x_1| < \epsilon$), in which case we have $U_2(AC, x_1) = q_2$ in the limit. Also, we have $U_2(\mathrm{RJ}, x_1) = (1-\delta)q_2 + \delta\pi_1(\Gamma_2)$. Note here that $\pi_1(\Gamma_2) = \pi_2(\Gamma_2)$ for $v_2 \ge \kappa_2$. Hence because $q_2 \ge \pi_2(\Gamma_2)$, we have $q_2 \ge \pi_2(\Gamma_2)$, implying that $U_2(AC) > U_2(RJ)$ if $v_2 \ge \kappa_2$. On the other hand, if $v_2 < \kappa_2$, because $\pi_1(\Gamma_2) = -a_2 < 0$, it is trivial to show $U_2(AC) > U_2(RJ)$ unless $a_2 = 0$.

CHAPTER 5

Diplomatic Manipulation: The Role of Secrecy in Crisis Diplomacy¹

Secrecy is the very soul of diplomacy.

- François de Callières, The Art of Diplomacy, 1716

Why do wars occur? History shows that wars are often preceded by a period of coercive bargaining commenced by a state's attempt to coerce an imposed settlement by military instruments when diplomatic negotiation collapse. The common rationalist explanation suggests that because states have private information and incentives to strategically misrepresent it, they often resort to costly signals in the form of military coercion in order to establish credible revelation of information. Once an international dispute escalates to a military crisis, the common explanation implies that normal forms of diplomacy are ineffective in settling a dispute.

What role does diplomacy play to settle a dispute short of war once diplomatic negotiation breaks down in a military crisis? As I alluded to in Chapter 2, there still exists the third leg of diplomacy that states can utilize to avoid war: *diplomatic manipulation*. There are several institutionalized "tactics" or "manipulative" techniques that diplomacy has to offer. Among others, in this chapter,

¹A shorter version of this chapter, along with part of Chapter 6, has been published as "Efficient Secrecy: Public versus Private Threat in Crisis Diplomacy." *American Political Science Review*, Vol. 101, No 3 (August).

I focus on the role of secrecy partly because although it seems as though the use of secrecy is ubiquitous as we occasionally come across some scattered reports that reveal some traits of the use of secrecy by state leaders, the literature has not addressed this subject in a rigorous theoretical analysis.

The theoretical investigation of secrecy is attractive also because the existing set of theoretical results points to the opposite of our intuition that there is some rationality behind the historical use of secrecy. Although chapter 2 briefly documented ways in which secrecy might favored by political leaders, it is hard to make sense of why secrecy can actually be effective. The fact that political leaders favor secrecy does not necessarily guarantee that secrecy can actually work and resolve an international disputes short of war. Hence, this chapter explores the role of secrecy in crisis diplomacy with the focuses on when and why private communication can facilitate peaceful settlement of international disputes.

5.1 Introduction

To elucidate the theoretical problems and challenge that we face in addressing the role of secrecy in crisis diplomacy, let us revisit the two crises over Cuba from a different perspective and consider how the Kennedy and Nixon administrations approach the publicity versus secrecy apparatus in dealing with the crises.

During the Cuban Missile Crisis, President Kennedy went on TV and caused a public crisis in confronting Chairman Khrushchev. Going public with threats of the air strike and the blockade, coupled with military mobilizations, Kennedy opted for a risky course of actions before international and domestic audiences. Eight years later, when the United States discovered that the Soviet Union was constructing a submarine base in Cuba, Henry Kissinger and President Nixon settled the Cienfuegos Submarine Base Crisis through diplomacy that was almost entirely private. Kissinger (1979, 651) later wrote, "Rather than a dramatic confrontation on the order of 1962, we considered that quiet diplomacy was best suited to giving the USSR an opportunity to withdraw without humiliation." This incident could have escalated to a second Cuban crisis, but secret diplomacy successfully persuaded the Soviet Union to concede without raising the risk of war.

According to the recent rationalist literature on crisis bargaining, the Cienfuegos crisis should not have ended in the way it did. This literature turns to credible revelation of commitments as key to understanding state behavior in crises (e.g., Powell 2002; Schultz 2001a). A well established way to reveal information or to establish commitments is to invoke the so-called *tying-hands mechanism* (Schelling 1966), and a common method of doing so is to generate *audience costs* (e.g., Fearon 1997).² Recent audience-cost models typically claim that state leaders should go public with their demands and engage their domestic audience to communicate their levels of resolve or capabilities. In doing so, leaders generate political costs that they would have to pay *ex post* if they fail to carry through on their commitment. Because private diplomacy is relatively costless and non-binding, these models further suggest that normals form of diplomacy, such as the one Nixon and Kissinger turned to, cannot credibly convey one's resolve in crisis bargaining in the presence of strategic incentives to misrepresent or withhold private information (e.g., Fearon 1994a, 1995; Ramsay 2004).

The audience costs story helps us explain why state leaders go public with military coercion and provoke public confrontations. However, it has yet to explain another class of cases, including the 1970 Cienfuegos crisis, where state leaders go against the logic of the tying-hands mechanism and secrecy plays an

²Fearon (1997) also shows that the so-called sunk-cost mechanism can also transmit information in international disputes. Slantchev (2005) shows that state leaders can also tie their hands with purely military instruments, such as mobilization, without audience costs.

important role in settling a dispute. The historical record shows that the use of private tactics and quiet maneuvers is common practice in crisis diplomacy, and raises serious concerns about the robustness of the conclusions on private diplomacy derived from existing studies. This presents a puzzle: When and why do state leaders rationally conclude that staying private is desirable, as opposed to going public, despite the suggested benefits of the tying-hands mechanism?

Despite the importance and prevalence of the private signaling in international crises, few if any studies in international relations address this puzzle. While existing audience-cost models offer some idea about the incentives that leaders face in deciding to go private (e.g., Leventoğlu and Tarar 2005), these models are not best suited for a rigorous investigation of this puzzle because they are not explicit about how crisis diplomacy unfolds in private, but instead assume that crises are public events (Fearon 1994a).

This chapter presents a formal model to bridge this gap by exploring the rationality and effectiveness of private signaling in international crises. Building on a standard audience cost model, I show that going private with one's challenge not only can effectively compel an opponent to capitulate, but also can make both parties to a crisis better off. The model offers a reason why leaders cannot rationally ignore private threats simply because they avoid costs of going public. In a way, the implication of the model is troublesome for empirical international relations studies because it implies that we should expect private threats being made frequently, although we can observe (at least theoretically) the only partial set of cases where leaders have decided to make the crisis a public affair.

The model augments the literature on crisis bargaining and audience costs by bringing in several perspectives. First, the explicit analysis of actors' decisions to go public or private allows us to simultaneously explain why earlier models concluded that quiet diplomacy is ineffective in crises and when such a conclusion
does not hold. In doing so, I show how the empirical scope of the audiencecost literature can be extended to the private aspect of crises in the presence of domestic audiences.

Second, making a threat in crises often has domestic political consequences for a defender as well as for a challenger. This obvious fact has gone unconsidered by the literature. The model is motivated by an empirical claim that crises are carried out before domestic audiences of both the challenger and the defender. As we shall see, the model establishes how the presence of multiple domestic audiences shapes both the challenger and the defender's incentives and gives rise to an interesting mechanism that is neglected by existing models that assume a single audience.

Finally, although audience costs can facilitate information transmission in crises only because they tie hands and raise the risk of war, the literature has mainly focused on their informational implications while paying little attention to their escalatory effects (e.g., Schultz 1998, 2001a; Smith 1998b). Taking the dual role of audience costs seriously, the model shows that engaging domestic audiences by going public can have both beneficial and detrimental effects on crisis outcomes. While audience costs can help leaders establish credible commitments, doing so can simultaneously increase the risk of inefficient outcomes such as costly fighting and public concessions. The model shows that it is this duality of audience costs that drives the rationality of private threats.

What emerges from this study is a theoretical rationale for secret diplomacy. Existing studies commonly suggest that quiet diplomacy is ineffective and secondary to military might in international crises, because leaders can always afford to disavow diplomatic exchanges under the surface (Fearon 1994a; Guisinger and Smith 2002; Sartori 2005) or because credible threats of military coercion are necessary to change an adversary's course of behavior Art and Cronin (2003); George (1991). This is puzzling when one considers the fact that diplomacy has evolved as a conflict-resolution institution (see Chapter 2), secrecy has been a central feature of diplomatic institutions ever since the establishment of diplomacy in the seventeenth century or perhaps earlier (Nicolson 1954, 75). The model shows that an extension of the conventional audience costs story helps explain why secrecy can be rational.

5.2 Signaling, Secrecy, and Diplomacy

Scholars have long suggested that uncertainty is a fundamental cause of war (e.g., Blainey 1988). Correspondingly, the literature on deterrence and crisis bargaining has searched for credible information-revealing mechanisms that help state leaders overcome uncertainty and hence avoid inefficient fighting (e.g., Powell 1990, 1999). The literature describes how uncertainty about an opponent's resolve can lead to the outbreak of war. In particular, the formal literature on crisis bargaining shows when and how war results from the conscious decisions of the bargainers, even though a mutually preferable peaceful settlement is available (e.g., Morrow 1989b; Fearon 1995).

Recent audience-cost models propose the linkage between domestic and international politics as a prominent mechanism that can rationalize a state leader's decision to go to war. By formalizing what is known as *tying-hands* signals, these models generally posit that the credibility of a threat can be established when leaders go public with their challenge and engage their domestic audiences, so that domestic political costs can be generated that would have to be paid *ex post* if they fail to carry through on their public commitment (Fearon 1994a, 1997; see also Schelling 1966). Because leaders can tie their hands with audience costs, going public helps leaders overcome communication barriers and reveal meaningful

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information in crises. These models then assert that private, or less public, diplomacy is ineffective because it is relatively costless and nonbinding (e.g., Fearon 1994a, 1995; Ramsay 2004; Schultz 1998).

Given this line of reasoning, it is quite logical to conclude that normal forms of diplomatic communication lack the credibility, as secrecy essentially "unlocks" leaders from inefficient outcomes and allows them to maintain their leeway to disavow their commitments. Since Fearon's influential rationalist account of war, diplomacy is routinely cited as "cheap talk" (Fearon 1995; Sartori 2005), which leads to a conventional conclusion that diplomacy by itself is inconsequential or secondary to military might.

Yet the 1970 Cienfuegos crisis challenges this conclusion. This anecdote suggests that President Nixon and Henry Kissinger rationally concluded that staying private was preferable to going public, fully recognizing the potentially adverse effects associated with engaging the American (and Russian) public. Historically, secrecy has been at the heart of modern diplomatic institutions which originate primarily as a conflict-resolution mechanism to overcome the security dilemma (Mattingly 1955; Nicolson 1954). Perhaps corresponding to this institutional origin, private tactics and secret dealing abound in historical accounts of crisis diplomacy.

How can we account for this gap between theoretical expectations and the empirical record? Note that the conventional account of "ineffective" private threats is inferred solely from the informational rationale of public threats. However, as we shall see, the fact that a threat lacks informational efficacy does not necessarily mean that the threat is ineffective in influencing an opponent's crisis behavior and ultimately crisis outcomes. To properly address the puzzle of private threats, it is crucial to fully appreciate the role of audience costs generated by public threats in crisis diplomacy. To establish the credibility of its threat in a crisis, a state leader can invoke the tying-hands mechanism by raising audience costs. Such credible informationrevelation, however, is possible because this mechanism requires "a rational state ... to run a real risk of (inefficient) war in order to signal that it will fight" (Fearon 1995, 397). That is, the gist of the tying-hands mechanism is a doubleedged sword: generating audience costs by going public simultaneously facilitates separation of types of an informed state (informational effects) and escalates a risk of costly fighting (escalatory effects). Accordingly, the audience costs story speaks to two closely related puzzles: (1) it helps explain why state leaders can optimally go to inefficient war (Fearon 1995); (2) it also helps explain why some states—typically democracies—can establish the credibility more effectively than others—typically nondemocracies (Fearon 1994a).

Although each of these dual effects of audience costs in crisis bargaining is well recognized, the existing conclusion about private diplomacy focuses exclusively on its informational role (or the lack thereof).³ As we shall see, the model shows that this duality of audience costs can establish the rationality of private threats. In particular, leaders should have incentives to go private when the negative (escalatory) effects of audience costs surmount their (informational) benefits (see also Baum 2004; Leventoğlu and Tarar 2005). Hence, in principle the *ex post* inefficiency of going public opens up an *ex ante* range of bargaining settlements through private communications, which makes staying private preferable to going public in a crisis.

However, describing the duality of audience costs by itself still falls short of addressing the puzzle of private threats. The fact that some states have incentives

³Analyzing a similar crisis game with complete information, Tarar and Leventoğlu (2006) also demonstrate that engaging domestic audiences has both beneficial and detrimental effects on crisis outcomes. Although generating audience costs helps leaders obtain greater bargaining power, it also increases the risk of inefficient outcomes, such as costly fighting and public concessions. I find the similar effects in the information role of audience costs.

against going public says nothing about how private threats in crisis diplomacy works. A satisfactory explanation for public versus private threats should not only account for disincentives to go public, but also how private communication can influence crisis behavior and outcomes. That is, to account for the mixed record of public and private diplomacy in crises, we must be able to explain both the 1962 Cuban Missile and the 1970 Cienfuegos crises. However, the existing audience-cost models are not suited for investigating the choice between a public versus a private threat, because these models do not capture the private aspect of crises that are carried out in the public eye, but instead simply assume that crises are public events (Fearon 1994a; Ramsay 2004; Schultz 1998). More broadly, the international relations literature has not addressed how a crisis unfolds in each of the public and private environments. A notable exception is Snyder and Diesing's (1977, 251-54) comparative analysis of public and private communication methods. However, they presume that a public threat is a better credibility-generating mechanism, and conclude that private communication best serves as a supplement to public threats. As we shall see, my model suggests that exactly the opposite can be the case.

The key to successful private crisis diplomacy is that, given a challenger's incentives to go private, a defender must also agree to capitulate in private, rather than dismiss a private threat as a bluff. Hence, to understand the puzzle of private threats, we need to know the incentives that the defender faces in deciding whether to capitulate in public or in private. Existing models, however, are not suitable for this purpose. Because these models postulate audience costs as *signaling costs* in crises, only the sender of signals can create domestic audience costs for itself. In effect, this implicitly assumes that a signaling action does not affect the subsequent bargaining environment because it has no consequences (or payoffs) on the opponent's side (see also Slantchev 2005). As a result, none of

the existing audience cost models capture the fact that both the challenger and the defender have domestic political audiences who observe how crises are carried out and evaluate the performance of their leadership.⁴

As we shall see, the model establishes how the interaction between the challenger's and defender's audience costs shapes the crisis behavior and gives rise to an interesting mechanism that is neglected by the existing account that assumes the single audience environment. In particular, because making crises public events may create audience costs for the defender as well as the challenger, public threats make it harder for the defender to capitulate even if it is certain that the challenger is willing to fight. In consequence, enhancing credibility by invoking the tying-hands mechanism by means of audience costs makes it more likely to lock in both the challenger and defender to inefficient fighting. This adverse effect of audience costs creates the defender's incentives to capitulate in private as well as the challenger's incentives against using public threats. Hence, the multiplicity of domestic audiences helps explain why private signals might be credible.

The remainder of this chapter is an attempt to explore these issues and to look for the credibility condition of private signals in crisis bargaining. The model studied here is a natural extension of common audience cost models, building on a canonical crisis bargaining game that shares basic strategic elements with previous models. I take a standard model and relax two common assumptions, on which the conventional conclusion crucially depends. Because the model is simple, one could easily add further complications. But this simplicity is designed to highlight the questions above, to clarify some of the less intuitive consequences

⁴Note that previous models by Fearon (1994a) and Schultz (2001b) also consider audience costs for both states in their models of international crises. Yet, the key difference here is that in Fearon's model, audience costs are automatically raised by the onset of a crisis, but not by a rational choice of any states. In Schultz's model, audience costs for both parties are signaling costs associated with the act of signaling, but not the receiver's political costs provoked by the opponent's signals.

of the strategic problems, and to facilitate comparisons with previous studies.

5.3 The Model

A crisis game involves two states—the challenger (C) and the defender (D) in a dispute over some good whose value to both is normalized to $1.^5$ This good belongs to D in the status quo. A crisis occurs when C challenges D by threatening to use force for possession of the good. Because crisis diplomacy takes place before domestic audiences on both sides, rather than only on the side of the sender of a signal, C's challenge might raise audience costs for D as well as C.

Sequence. At the onset of the crisis game, nature informs both C and D of their values for fighting, w_C and w_D , respectively. In making a challenge, C can choose whether to go public (*Pub*) or stay private (*Pri*). Without loss of generality, C has no option of retaining the status quo (*SQ*) at the outset of the game because the focus here is on C's incentives to make a private threat and the associated credibility condition.⁶ Upon receiving C's threat, D updates her beliefs about C's value of w_C according to Bayes' rule, and then either concedes (*CD*) or resists (*RS*).⁷ If C makes a private threat, D does not have an option to make it public. Hence, crisis diplomacy will be carried out in private, so that conceding to a public (private) threat constitutes a public (private) concession, where a public concession is observable to domestic audiences, but a private concession is not. If D concedes, then the status quo changes to C's favored position and the game ends. If, on the other hand, D resists, C must decide

⁵I refer to the challenger, C, as "he" and the defender, D, as "she" throughout this chapter.

⁶I will relax this assumption later and show that the main results effectively remain unchanged.

⁷The subscripts *pri* and *pub* denote whether the actions are taken in public or in private. For example, CD_{pri} stands for D's conceding in *private*.

whether to back down (BD) or stand firm (SF). If C stands firm, war occurs.

Outcomes and Payoffs. When D makes a public concession, C obtains the value for the good, and D not only loses the good but also incurs audience costs from suffering "diplomatic humiliation" (Fearon 1994a; O'Neill 1999). Thus, the payoffs are 1 for C and $-a_D \leq 0$ for D. If C backs down in public when resisted, C pays audience costs $-a_C \leq 0$ and D keeps the status quo payoff of 1. When C makes a private threat, neither side incurs audience costs by backing down or conceding. Hence, if D makes a private concession, C gets 1 and D gets 0. If C backs down in private, the game ends as if the crisis never happened, yielding the status quo payoffs 0 for C and 1 for D. In the event of a war, C's payoff is given by his expected value for war $w_C = p - c_C$, where $p \in [0, 1]$ and $c_C \geq 0$ represent C's probability of victory and expected costs, respectively. Notice that the costly lottery assumption underlies the definition of war payoffs, and that the c_C term captures C's costs of war relative to the value of the disputed good. Similarly, D's war payoff is given by $w_D = 1 - p - c_D$. Figure 1 illustrates the sequence of moves and the payoffs associated with each outcome in the crisis game.

Information and Beliefs. The crisis game involves two-sided uncertainty: each state has private information about its value for war, w_i . To generate this uncertainty, assume that nature randomly selects c_C and c_D from independent distributions on intervals $[0, \bar{c}_C]$ and $[0, \bar{c}_D]$, respectively. This assumption simplifies the expression for w_i and implies that the $w_i \in [\underline{w}_i, \overline{w}_i]$ are continuously distributed according to the cumulative distribution function $F_i(x) = Pr(w_i \leq x)$, whose support is the interval $[p - \bar{c}_C, p]$ for C and $[1 - p - \bar{c}_D, 1 - p]$ for D.⁸ Each state observes the value of its own w_i , but neither observes the other's value for war. The probability distributions are common knowledge, so each state forms precrisis beliefs about w_j , $j \neq i$. C's threat is said to be genuine or credible if

⁸Because continuity of the distribution $F_i(\cdot)$ means that $Pr(w_i = x) = 0$, it follows that the difference between $Pr(w_i \leq x)$ and $Pr(w_i < x)$ is immaterial.



Figure 5.1: Crisis Diplomacy with Public versus Private Threats

he follows through with it. Define p_{pub} and p_{pri} as D's precrisis beliefs that C's public and private threats are genuine, respectively.

5.4 Equilibria

All equilibria to this game can be described by a set of cutpoints along the continuum of possible types in the range $w_i \in [\underline{w}_i, \overline{w}_i]$, i = C, D. I first define these cutpoint strategies, and then turn to the formal characterization of two equilibria in this game.

By subgame perfection, C would stand firm at the final decision node if and only if his expected payoff from war is greater than or equal to that of backing down. Provided that C made a public threat, this condition holds when $w_C \ge$ $-a_C \equiv \alpha$, where α denotes a unique type that is indifferent between standing firm and backing down in public. All types with $w_C \ge \alpha$ stand firm (resolved types) in public, and all other types with $w_C < \alpha$ back down in public if resisted (public bluffers). Similarly, provided that C made a private threat, he would stand firm if and only if $w_C \ge 0 \equiv \beta$, where β denotes the critical type that is indifferent between standing firm and backing down in private. All types with $w_C \ge \beta$ stand firm (resolved types), and all other types with $w_C < \beta$ back down when resisted in private (private bluffers).

To complete the definition of C's strategy, consider his initial decision. Suppose that there is a unique type that is indifferent between going public and staying private when making a threat. Let κ denote this unique type's value for war such that all types with $w_C \geq \kappa$ make a public threat in equilibrium, and all other types with $w_C < \kappa$ make a private threat.

To define D's cutpoint strategy, suppose there exists a critical type that is indifferent between resisting and conceding, upon seeing a public threat. Let γ denote such a type, so that all types with $w_D \in [\gamma, 1]$ resist in public and all other types with $w_D \in [\underline{w}_D, \gamma)$ optimally make a public concession. Likewise, let δ be the type that is indifferent between resisting and conceding when a private threat is observed. All types with $w_D \in [\delta, 1]$ resist in private, and all types with $w_D \in [\underline{w}_D, \delta)$ optimally make a private concession.

Because α and β are determined only by the realized values of the exogenous parameters, there are six configurations of C's cut-points, for each of which an equilibrium may exist. But because $\alpha \equiv -a_C$ is bounded above by β by definition, we need only to look for solutions for three of these cutpoint configurations: (i) $\kappa < \alpha < \beta$; (ii) $\alpha < \kappa < \beta$, and (iii) $\alpha < \beta < \kappa$.⁹

I define the *public equilibrium* as a unique equilibrium with $\kappa < \beta$, which ⁹If we instead assume $\alpha > 0$, C would pool over a public threat and no type would have any incentives to make a private threat in equilibrium. encompasses two cases (i) and (ii) and takes a different form for each case. This equilibrium, however, is not mutually exclusive with the *private equilibrium* when it exists, which is defined for case (iii). As such, the solution for this crisis game is not unique, and these two equilibria exhaust all possible cutpoint configurations described previously.

This set of cutpoints partition C's possible types into four ranges, and D's into two, although all ranges of types need not exist for all possible configurations of cutpoints.

5.4.1 The Public Equilibrium

In the public equilibrium, a private threat is ineffective in crisis bargaining: all resolved types go public, and the status quo always prevails as a result of a private threat. Upon seeing a private threat, D always detects that the threat is a bluff and hence resists. In response, C always backs down quietly without being caught by his domestic audience. Observe that backing down in private has no consequences different from the status quo. Hence making a private threat is inconsequential in the public equilibrium. As such, C must go public to compel D to concede. Once C goes public, however, equilibrium behavior in the public equilibrium is equivalent to the crisis dynamics generally captured by common audience cost models (e.g., Fearon 1997; Ramsay 2004; Schultz 1998). ¹⁰ That is, by going public, C can attract the attention of his domestic audiences and thereby enhance the credibility of his threat by tying his hands. Because a public threat creates audience costs that C would suffer *ex post* if he backed down, credibility enhancement through hand-tying may have some perverse side effects

¹⁰One might argue that introducing C's option to retain the status quo (SQ) at the onset of the crisis game may change the solution. However, it is easy to show that that is not the case because the types that would retain SQ are a subset of the types that back down from a private threat in the public equilibrium. I discuss in greater details various extensions to the crisis diplomacy game, including this one, in the section (5.4.3).

that increase the risk of inefficient outcomes such as fighting unwanted wars and costly public concessions.

To understand this dynamic, consider the players' equilibrium strategies. A cutpoint strategy of C takes the following form in the public equilibrium. First, all types that make a private threat will back down if resisted because these types have low values for war (i.e., $w_C < \beta$). Although types below κ_{pub}^* will never go public in equilibrium, when $\alpha < \kappa$, there exist some types in $[\alpha, \kappa_{pub}^*]$ whose off-the-equilibrium-path strategy is to stand firm in public. Second, all types above κ_{pub}^* make a public threat. If $\alpha < \kappa$, all public threats are genuine because these types above κ_{pub}^* will carry through on the threat. If $\kappa < \alpha$, on the other hand, the mid-valuation types with $w_C \in [\kappa_{pub}^*, \alpha]$ will back down if resisted. Hence, public threats are genuine only if they are made by types above α , and the rest of public threats made by types in $[\kappa, \alpha]$ are bluffs. However, when $\kappa < \alpha$, some "publicly genuine" types in $[\alpha, \beta]$ would back down privately off the equilibrium path if resisted.

Given C's cutpoint strategy, whenever D observes a private threat, she forms the posterior belief that the threat is a bluff, and hence she always resist. When D receives a public threat, on the other hand, she will resist if and only if her expected payoff from doing so is greater than that from conceding. This means that all types of D above γ_{pub}^* will resist the public threat, while all types below γ_{pub}^* will make a public concession. D chooses her optimal resistance rate γ_{pub}^* so that that the type of C with $w_C = \kappa_{pub}^*$ is indifferent between public and private threats. This analysis is illustrated in Figure 2, and summarized in the following proposition.

To understand this dynamic, consider the players' equilibrium strategies. A cutpoint strategy of C takes the following form in the public equilibrium. First, all types that make a private threat will back down if resisted because these types



Figure 5.2: The Public Equilibrium

have low values for war (i.e., $w_C < \beta$). Although types below κ_{pub}^* will never go public in equilibrium, when $\alpha < \kappa$, there exist some types in $[\alpha, \kappa_{pub}^*]$ whose offthe-equilibrium-path strategy is to stand firm in public. Second, all types above κ_{pub}^* make a public threat. If $\alpha < \kappa$, all public threats are genuine because these types above κ_{pub}^* will carry through on the threat. If $\kappa < \alpha$, on the other hand, the mid-valuation types with $w_C \in [\kappa_{pub}^*, \alpha]$ will back down if resisted. Hence, public threats are genuine only if they are made by types above α , and the rest of public threats made by types in $[\kappa, \alpha]$ are bluffs. However, when $\kappa < \alpha$, some "publicly genuine" types in $[\alpha, \beta]$ would back down privately off the equilibrium path if resisted.

Given C's cutpoint strategy, whenever D observes a private threat, she forms the posterior belief that the threat is a bluff, and hence she always resist. When D receives a public threat, on the other hand, she will resist if and only if her expected payoff from doing so is greater than that from conceding. This means that all types of D above γ_{pub}^* will resist the public threat, while all types below γ_{pub}^{*} will make a public concession. *D* chooses her optimal resistance rate γ_{pub}^{*} so that that the type of *C* with $w_{C} = \kappa_{pub}^{*}$ is indifferent between public and private threats. This analysis is illustrated in Figure 2, and summarized in the following proposition.

Proposition 4. If $\kappa < \beta$, there exists a unique perfect Bayesian equilibrium of the crisis game with the following strategies. C makes a public threat if $w_C \ge \kappa_{pub}^*$, and a private threat otherwise. When $\kappa_{pub}^* \ge \alpha$, C always stands firm in public if resisted. When $\kappa_{pub}^* < \alpha$, on the other hand, C stands firm in public if $w_C \ge \alpha$, and backs down otherwise. D resists all private threats and resists a public threat if $w_D \ge \gamma_{pub}^*$.

Proposition 5. The public equilibrium exists if each of the following conditions is met: (i) $\kappa^* < \beta$; (ii) $\underline{w}_C < 0$; and (iii) $\underline{w}_D < 0$.

This crisis dynamic and its outcome depend on the relative magnitude of C's audience costs. If the audience costs for C are high, irresolute types with $w_C < \alpha$ will shy away from a public commitment, because a "punishment mechanism" effectively counteracts C's incentives to misrepresent his type. As Figure 5.2a illustrates, a public threat fully separates types of C in this case. If the audience costs are low, on the other hand, irresolute types will have an incentive to bluff and run a risk of backing down in public. As Figure 5.2b depicts, this gamble will work if D's valuation of war is low $w_D < \gamma^*_{pub}$, but otherwise it will result in costly diplomatic humiliation. Hence, as C's audience cost increases, a public threat conveys more credibility, and thereby the probability of D's resisting decreases.¹¹ The next result summarizes this argument.

Corollary 5.1. In the public equilibrium, bluffing may occur when $a_C < \frac{F_D(-a_D)}{1-F_D(-a_D)}$.

¹¹Define r_{pub} as D's probability of resisting a public threat. Then, $r_{pub}^* = 1/(1 + a_C)$, where $\partial r_{nub}^*/\partial a_C < 0$.

In the public equilibrium, if C's war value is low, it is impossible to communicate through private channels, and hence C can never alter the status quo by a private threat. Consequently, C must go public and engage his audience costs when sending signals, so that he can tie his hands to demonstrate his resolve. This hand-tying tactic will allow political leaders to reveal private information and to establish a credible commitment.

Before moving on to the private equilibrium, it is worth mentioning one other result, which is new to the conventional audience costs story. The introduction of audience costs for D gives rise to the comparative statics result regarding an additional informational effect of a public threat. A threat is said to be *informative* if it increases D's belief that C will follow through on his threat. Then, the next result follows.

Corollary 5.2. A public threat becomes more informative as audience costs for D get larger. Further, a public threat is fully informative when $a_D \ge -F_D^{-1}(\frac{a_C}{1+a_C})$.

When audience costs of a public concession are engaged, D finds it harder to concede. So the increase in the magnitude of D's audience costs raises the probability that D is induced to resist if challenged publicly. Facing a higher probability of resisting, only resolute types with $w_C \ge \alpha$ can afford to make a public threat. Accordingly, imposing audience costs on D improves the ability of higher types, for which $w_C \ge max\{\kappa^*, \alpha\}$, to distinguish themselves from lower types. This will cause less bluffing than if there were *no* audience costs for D (i.e., $a_D = 0$), as is the case with conventional audience-cost models. In fact, Corollary 5.2 shows that bluffing will never occur when D's audience costs are large enough (i.e., $a_D \ge -F_D^{-1}(\frac{a_C}{1+a_C})$). Hence, when D suffers from greater audience costs ex*post*, C can convey greater credibility.



Note: The shaded area represents peaceful outcomes due to private threats

Figure 5.3: The Private Equilibrium

5.4.2 The Private Equilibrium

There exists another equilibrium, the private equilibrium, to the crisis game, in which a private threat can compel D to concede under certain conditions. In principle, because signals essentially become costless and nonbinding when going private, the credibility problem would be a major obstacle that C faces in attempting to convey information through private communication. In this equilibrium, however, improving the credibility is not necessary for a private threat to persuade D to concede. In fact, a private threat induces D to revise downward her beliefs about the credibility of the threat. Nevertheless D concedes privately under broad conditions.

The driving force of the private equilibrium is the curious behavior of the midrange valuation types of C, both on and off the equilibrium path. In essence, these types could have gone public in making a threat to enhance the credibility of their threat, but in equilibrium they instead forgo this public option and go private. This "deviation" from a putative equilibrium path implicitly signals that some private threats are genuine and hence induces D to concede as effectively as a public threat.

To see this dynamic more formally, suppose $\kappa > \beta$. Because $\alpha \leq 0$ by definition, there is only one feasible cutpoint configuration that satisfies this condition: $\alpha \leq \beta < \kappa$. With this configuration, all public challenges are genuine in equilibrium because, by subgame perfection, C backs down privately if $w_C < \beta$, and backs down publicly if $w_C < \alpha$. Consequently, if q_{pub} denotes D's posterior belief that C will stand firm if resisted conditional on a public threat, C can induce D to form $q_{pub} = 1$ and hence eliminate uncertainty about his type by going public.

In contrast, complete revelation of information does not occur with a private threat in this equilibrium. Recall that C goes private if $w_C < \kappa$. Then, because $\alpha \leq \beta < \kappa$, there exist some types that make a private threat and stand firm if resisted in equilibrium. Hence, there is a positive probability that a private threat to use force is genuine. This leaves residual uncertainty about C's types, and therefore, upon seeing a private threat, D updates her beliefs such that $q_{pri} = (F_C(\kappa) - F_C(\beta))/(F_C(\kappa)) > 0.$

Given these beliefs, D resists in public if $w_D \ge \gamma$, and in private if $w_D \ge \delta$. Because $q_{pub} = 1$, D knows that war will ensue when she resists in public. Hence her choice reduces to a public concession or war. Subgame perfection implies that the highest type that concedes publicly is $w_D = -a_D \equiv \gamma_{pri}^*$. Likewise, because $q_{pri} > 0$, D can either concede privately for a certain payoff of 0 or resist for a gamble that C is bluffing. If C turns out to be a bluffer (i.e., $w_C < \beta$), this gamble pays off; if he is genuine (i.e., $w_C \ge \beta$), private resistance results in costly fighting. This dilemma then forces unresolved types of D with $w_D < \delta$ to concede because they cannot afford to gamble. Hence, letting δ_{pri}^* denote the highest type of D that concedes privately in equilibrium, it follows that in equilibrium δ_{pri}^* must solve the indifference condition between a private concession and a private resistance: $q_{pri}(w_D) + (1 - q_{pri}) = 0$.

Given D's optimal strategy, γ_{pri}^* and δ_{pri}^* , C decides whether to go public or private by choosing κ_{pri}^* so that the critical type $w_C = \kappa$ is indifferent between a public and private threat in equilibrium. Because $\kappa > \beta$, this indifference condition for $w_C = \kappa$ is given by $1 - F_D(\gamma_{pri}^*)(w_C) + F_D(\gamma_{pri}^*) =$ $1 - F_D(\delta_{pri}^*)(w_C) + F_D(\delta_{pri}^*)$. In equilibrium C's optimal κ_{pri}^* must solve this condition. This indifference condition also implies that, because D picks her optimal rate of resisting so that this condition holds, she must equalize the probability of public resistance to that of private resistance in equilibrium (i.e, $F_D(\gamma^*) = F_D(\delta^*)$). This analysis is summarized in the next proposition, and illustrated in Figure 5.3.

Proposition 6. If $\alpha \leq \beta < \kappa$, there exists a unique perfect Bayesian equilibrium with the following strategies. C makes a public threat if $w_C \geq \kappa_{pri}^*$ and a private threat otherwise. C always follows through with a public threat if resisted; he stands firm with a private threat if $w_C \geq \beta$ and backs down in private otherwise. D resists, upon receiving a threat, whether it be public or private, if $w_D \geq \gamma_{pri}^* = \delta_{pri}^*$.

This cutpoint strategy in the private equilibrium generates four sets of types for C, three of which send a private threat. These four sets of types and their corresponding behavior are summarized in Figure 5.4. First, if $w_C \ge \kappa_{pri}^*$, Calways goes public and never backs down from his public threats. This type is so willing to fight that he has no interest in diplomatic solutions whatsoever. I label this type of C "hard-liner."

Second, if $w_C \in [\beta, \kappa^*]$, C makes a private threat but stands firm (SF_{pri})





when resisted. I call types in this range "moderate." Although moderate types' level of resolve is high enough to stand firm both in public and in private, they instead seek private channels that enable low types of D, for which $w_D < \delta^*$, to concede privately. Because $\kappa > \beta$, no types in this range would do better by making a public threat.

Third, if $w_C \in [\alpha, \beta]$, C makes a private threat and backs down $(BD_{private})$ when resisted. I call this set of types "conciliatory." Although conciliatory types never make a public threat in equilibrium, subgame perfection implies that their off-the-equilibrium-path strategy is to stand firm (SF_{public}) should they face a choice between standing firm and backing down in public. Appendix A to this chapter shows that no conciliatory types can profitably deviate by making a public threat.

Finally, if $w_C < \alpha$, the "low" types of C behave in exactly the same manner as the conciliatory type in equilibrium: stay private and back down. But their off-the-equilibrium-path behavior is to back down had they made a public threat instead.

Recall that for private threats to work D must resist a public and private

threat with the same probability. This ensures that resolved types (i.e., all types above β) are indifferent between public and private threats. Otherwise, pooling among resolved types occurs, resulting in a higher probability that D faces the choice between a costly public concession and certain war. Yet, if all resolved types are indifferent between public and private threats, why does the cutpoint κ_{pri}^* partition these types into two regions: moderates going private and hardliners going public?

Observe that κ_{pri}^* is chosen to include some resolved types in the privatethreat-pool so that private resistance still entails a risk of war. Facing the choice between a risk of war and a private concession, D does not always resist in private as she would in the public equilibrium. This means that κ_{pri}^* splits up resolved types to ensure that D receives a "proper" message that private resistance carries some risk while a private concession incurs no audience cost. Hence, this split among resolved types by κ_{pri}^* is necessary to send D a private signal that induces *beliefs that rationalize private concessions*.

We now consider when a private threat works. The next proposition summarizes the conditions for existence of the private equilibrium.

Proposition 7. The private equilibrium exists if the following conditions are met: (i) a public threat is always credible $(\kappa_{pri}^* > \alpha)$; (ii) D's audience costs are reasonably high $(a_D \ge \frac{F_C(\beta)}{1-F_C(\beta)})$.

The first condition follows immediately from the cutpoint configurations: $\alpha \leq \beta < \kappa$. It is only "hard-liner" types that make a public threat, and therefore every public threat in the private equilibrium must be credible.¹² This condition further implies that a private threat can be effective only in the shadow of a

¹²This result depends on the assumption that $\kappa > \beta$, which states that it is possible that some (high) types of C value fighting over the disputed good more than living with the status quo.

credible public threat.¹³

The second condition states that D must incur reasonably high costs in the event of a public concession in front of her domestic audience.¹⁴ This condition highlights the key to the private equilibrium: D's sensitivity to her audience costs. As long as D incurs audience costs when conceding in public, a private concession becomes preferable for her, and consequently C can compel more types of D to concede optimally by relinquishing the credibility enhancement device of the public option. It is interesting to note that a viable domestic audience exists on D's side, although it need not exist on C's side (*i.e.*, $a_C \ge 0$, $a_D > 0$). Hence, if a public concession does not impose audience costs on D (i.e., $a_D = 0$), the private equilibrium collapses, regardless of C's audience costs.

Moreover, the lower bound on a_D illustrates the fact that the public and private equilibria are *not* mutually exclusive. Recall there is no upper bound on a_D for the existence of the public equilibrium, whereas $a_D = -F_D^{-1}\left(\frac{a_C}{1+a_C}\right) \ge 0$ partitions the public equilibrium into the bluffing and non-bluffing cases. Because the relative magnitudes of this threshold for the public equilibrium and the lower bound of the private equilibrium cannot be determined, the existence condition for any of the two cases of the public equilibrium can overlap with that of the private equilibrium as long as $a_D \ge \frac{F_C(\beta)}{1-F_C(\beta)}$. Hence, the two equilibria simultaneously exist except for $a_D \in [0, \frac{F_C(\beta)}{1-F_C(\beta)})$.

5.4.3 Threats to Go Public and the Status Quo

The analysis so far has confined to the simplest model to establish the rationality of private threats. Such simplicity, however, leaves out many strategic choices

¹³This result is analogous to Austen-Smith and Banks's (2000) result that the availability of costly signals (i.e., burned money in their model) renders cheap talk more informative.

¹⁴This lower bound on a_D is implied by the fact that D's war valuation is bounded above by the status quo value, $w_D \leq 1$.

that state leaders would make in particular diplomatic circumstances. How robust is the private equilibrium to alternative model specifications? The analysis of several extensions reveals that none of the results presented here depends on this simplicity. I present more detailed analysis in Appendix C at the end of this chapter and so here I briefly summarize the results.

An obvious restriction of the model is that, unlike common crisis bargaining games, C has no option to retain the status quo (SQ) at the onset of the game. However, it is easy to show that because backing down in private has no consequences for C different from retaining SQ, making private challenges weakly dominates SQ.

A more important assumption of the model is that once C goes private crisis diplomacy is carried on entirely in private because D cannot decide whether to go public or stay private. Yet one distinctive difference between public and private diplomacy is that both parties to a crisis would need to agree on keeping the matter private. Intuitively, if D could go public about C's private challenge, that would essentially tie C's hands and hence a private threat might not be costless for some lower types any more. It then follows that D's threat to go public might deter these types from making private threats. However, this does not hold in equilibrium. Suppose a modified game where D is allowed to go public in resisting C's private challenge. It can be shown that D will never go public once C makes a private threat in any equilibrium in which C carries through on his private threat with positive probability (e.g., the private equilibrium). Briefly, taking a private challenge public does not help D after all because many of the challenger types that make private threats (i.e., $w_C > \alpha$) are wiling to follow through with them to avoid paying audience costs if D made the crisis public. Consequently, even if the choices to keep crisis diplomacy private are fully endogenous, the rationality of private threat (C's optimal rate of going private) and its efficacy (D's optimal rates of private concessions) remain unchanged.

Third, one might argue that D's threat to go public can be effective only if C is allowed to stay out of a crisis. To examine this, suppose another modified crisis game that incorporates both D's option to go public and C's option to keep the status quo. It can be shown that even in this game D will never go public in equilibrium. Although the low types and some portion of the *conciliatory* types do retain SQ in this setting, this behavior is not induced by D's threat to tie their hands. Recall that *conciliatory* types' war value is high enough (i.e., $w_C \ge \alpha$) so that they would stand firm in public if D ever resists publicly off the equilibrium path. In fact, all the types that make private threats will stand firm in public if D goes public. This means that going public after C's private challenge effectively means that D would have to fight for sure. But because fighting a war is worse than gambling that C is a private bluffer, D will not go public. Since D's threat to go public is not credible, *conciliatory* types cannot be deterred by D's threat to go public. Recall also that backing down in private is strategically equivalent to retaining SQ. Hence, this alternation to the model is inconsequential and the private equilibrium effectively remains unchanged.

Finally, C can also threaten to go public in order to induce D to capitulate to his private challenge. Suppose yet another modified crisis game where C can make a public threat, rather than go to war, if D resists his private challenge. In this setting, C can try out a private threat first and then go public if a private route does not work. Observe that the subgame following C's decision to go public after D's private resistance is identical to the subgame following C's public threat at the onset. Given this game structure, it is not surprising that the equilibrium dynamic remains the same as in the original private equilibrium except that equilibrium behavior after C's decision to go back to public takes the form of the original public equilibrium. Although these results by no means attest to generality of the model, they suggest that the strategic logic of any variant of private diplomacy in this class of crisis bargaining may generally converge to the equilibrium logic presented in this chapter.

5.5 Efficient Secrecy

I have shown that there exist two equilibria and they exhaust three possible cutpoint configurations in the crisis game. Each equilibrium captures a distinctive equilibrium mechanism, through which state leaders can signal their private information in international crises: going public and staying private. Given the multiplicity of the equilibria, although the model does not allow us to predict which mechanism state leaders will choose in crisis diplomacy, we could at least ask the question of which mechanism will provide a more efficient solution to crises. I address this question by comparing the welfare values of the two equilibria.

Proposition 8 presents a simple efficiency result. From both an *ex ante* and "interim" perspective (Holmström and Myerson 1983), the private equilibrium is *Pareto* superior to the public equilibrium. In general, both C and D are always (at least weakly) better off with the private equilibrium (when it exists) than the public equilibrium regardless of types. In particular, the private equilibrium weakly *interim*-dominates the public equilibrium, in which all types of C above β strictly prefer the private equilibrium.¹⁵

Proposition 8 (Efficient Secrecy). For any types of C and D, the private equilibrium is ex ante efficient. For all types of C with $w_C < \beta$ and for any types

¹⁵On the other hand, types of C with $w_C > \beta$ are indifferent between the public and private equilibria, because their values for war always exceed their audience costs so that they have no need to worry about backing-down publicly.

of D, the private equilibrium strictly interim dominates the public equilibrium. If $w_C \ge \beta$, C is indifferent between the two equilibria.

Intuitively, when a private threat works, it can expand the range of peaceful settlements that are mutually acceptable. Comparing Figures 5.2 and 5.3, it is obvious that peaceful outcomes are possible under broader conditions in the private equilibrium than in the public equilibrium where only a public threat is credible. This result is driven by two facts. First, a private threat makes a private concession possible, which is unobtainable in the public equilibrium. Second, going private reduces the *ex ante* risk of war, compared to a public threat.¹⁶

Turning to the equilibrium probabilities of war in the two equilibria, note that the war outcome is limited to the higher types (i.e., $w_C \ge \beta$) in the private equilibrium, although it can occur even if C has a relatively low valuation of war in the public equilibrium (i.e., $w_C \in [\kappa_{pub}^*, \overline{w}_C]$, where $\kappa_{pub}^* < \beta$). To have a war outcome in the private equilibrium, C's value for war must be greater than or equal to his status quo valuation, but it is relatively easier to have war in the public equilibrium. Moreover, a public threat is more likely to induce D to resist at a higher rate overall in the public equilibrium. Together, the expected probability of war across the entire range also falls in the private equilibrium. The next corollary establishes this result.

Corollary 8.1 (Risk of War). The ex ante probability of war is strictly greater in the public equilibrium than in the private equilibrium.

Clearly, a private threat has advantages for both C and D. On the one hand, because staying private allows C to pretend as if nothing had happened, secret diplomacy can generally secure leeway for irresolute types of C to disavow the

¹⁶The *ex ante* risk of war is the probability of war prior to nature's draw of w_C and w_D .

threat if D resists and avoid domestic political costs associated with backing down. This leeway also allows the mid-valuation types of C to avoid getting "locked into" costly fighting due to his relatively high audience costs.

On the other hand, a private threat helps irresolute types of D (i.e., $w_D < min\{\gamma_{pri}^*, \delta_{pri}^*\}$) escape from a costly public concession and therefore helps her avoid being forced to fight an unwanted war in order to protect her honor from public humiliation. For this reason, a private concession is attractive for D, as it effectively lowers the costs of a concession. Such a cost-reduction device may include concealing the identity of the party offering a concession (O'Neill 2003) and concealing the true reason of backing down (Fearon 1992, 127). Thus, secrecy allows D to rationally make a private concession, which is not attainable in public diplomacy.

Historical norms are that state leaders employ secrecy as a means of facesaving tactics in order to facilitate cooperative outcomes and tension-reduction.¹⁷ For example, during the final phase of the Cuban Missile Crisis, President Kennedy wanted to make sure that "Every opportunity was to be given to the Russians to find a peaceful settlement which would not diminish their national security or be a political humiliation" (Kennedy 1969, 81).

Contrary to the popular perception that transparency or "open diplomacy" carries beneficial effects in the age of democracy (Finel and Lord 1999; Nicolson 1963), *efficient secrecy* posits that the private equilibrium is a more valuable mechanism for almost any type of players, as it can lead to better bargaining outcomes than the public equilibrium can. Moreover, inefficient bargaining failures due to players' incentives to "go public" and signal to an outside audience are ubiquitous not only in international disputes (Kydd 2006b) but also in labor bar-

¹⁷For other historical examples that involve face-saving gestures, see Snyder and Diesing (1977, 257).

gaining (Cai 2000) as well as legislative politics (Groseclose and McCarty 2001). Likewise, as Louis XIV observed about three centuries ago, public diplomacy feeds bargainers with incentives for manipulative political "posturing":

Open negotiations ... incline negotiators to consider their own prestige and to maintain the dignity ... with undue obstinacy and prevent them from giving way to the frequently superior arguments of the occasion (quoted in Nicolson 1954, 61).

For this reason, state leaders cannot rationally ignore a private threat simply because talk is cheap. Secrecy in diplomacy may not only be rational but also efficient.¹⁸

5.6 Discussion

The public equilibrium captures the conventional audience cost logic of the tyinghands mechanism, which helps explain why states sometimes go public and provoke dramatic confrontations that may lead to inefficient outcomes such as costly backing down and costly fighting. The private equilibrium, on the other hand, demonstrates a new result, in which a private threat can improve *Pareto* efficiency by expanding the range of peaceful settlements that are mutually acceptable, even though it only conveys limited credibility. Because this result is new to the literature, it is worth discussing its mechanism and implications in a broader perspective.

¹⁸This may also help to make sense of why "protocole"—the undue ceremonial diplomatic procedure designed to burnish honor and prestige—is another feature of the French system of diplomacy (Nicolson 1963, 43; Berridge 2002, 107).

5.6.1 Effective Compellence without Informational Efficacy

A private threat can be thought of as "cheap talk" because it has no immediate domestic consequence (or payoff) for either side. Yet, in contrast to the Crawford and Sobel (1982) tradition of cheap-talk models, the source of rationality of a private threat does not lie in its informational role affecting D's beliefs. It is also tempting to conjecture that some conditions improve the credibility of a private threat because crisis bargaining is a communication process carried out with threats (Morrow 1989b). However, my model demonstrates that increasing credibility is not necessary for a private threat to successfully compel D to concede; in fact, making a threat privately *reduces* its credibility, even though it still is as compelling as a fully credible public threat.

To understand this, recall that in the private equilibrium the "moderate" and "conciliatory" types of C could have gone public to enhance the credibility of their threats because these types are willing to stand firm in public. Nonetheless, they forgo this credibility-enhancing device and seek a more difficult communication medium instead: a private threat.¹⁹ Because this decision to go private reduces the credibility of C, D revises downward her beliefs that C will follow through on his private threats, so that her posterior belief that a private threat is genuine is indeed lower than the prior: $q_{pri} = \frac{F_C(\kappa_{pri}^*) - F_C(\beta)}{F_C(\kappa_{pri}^*)} < p_{pri} = 1 - F_C(\beta)$. Turning to a more general statement of these claims, I first define two properties of a threat.

Definition 4 (Informational Efficacy). A threat has *informational efficacy* if D's posterior belief about credibility of the threat is greater than her prior, upon

¹⁹A historical (or mythological) example where a resolved type makes a private threat can be found in the "Melian Dialogue" during the Peloponnesus War. When the Athenians delivered an ultimatum to the Melians, they did so at a private meeting, despite the fact that the norm of diplomatic conduct in ancient Greece was that diplomatic envoys negotiate at public assemblies (Adcock and Mosley 1975; Jönsson and Hall 2003). The Melians, out of fear of invoking public outcry, "did not invite [the Athenian] representatives to speak before the people." When the Melians refused to submit to the Athenian demand, the Athenians carried out their private ultimatum and killed the entire male population of the Melians (Thucydides 1972, 400).

receiving the threat. Formally, a threat j has informational efficacy if $q_j > p_j$.

Definition 5 (Effectiveness). A threat is more *effective* if, upon receiving a threat, D concedes at a higher rate than otherwise. Formally, a threat j is more effective than a threat i if $r_j > r_i$.

The next corollaries establish that a private threat, despite its lack of informational efficacy, is no less effective than a public threat to compel D in the private equilibrium.

Corollary 8.2 (Informational Efficacy). A private threat never has informational efficacy either in the public or private equilibrium, while a public threat is always efficacious in both equilibria.

Corollary 8.3 (Effectiveness). A private threat is equally effective as a public threat $(r_{pri}^* = r_{pub}^*)$ in the private equilibrium, while it can never be effective $(r_{pri}^* = 1)$ in the public equilibrium.

There are two implications of these results on informational efficacy and effective compellence. First, because a public threat always has informational efficacy but a private one never does, should C's sole purpose in crisis diplomacy be to convey greater credibility of his threat to demonstrate his resolve, he would always have to go public and provoke the domestic audiences.

In this regard, I agree with the existing rationalist view in that "quiet diplomatic exchanges may be insufficient to allow states to learn what concessions an adversary would in truth be willing to make" and "states resolve this dilemma by 'going public'—by taking actions such as troop mobilizations and public threats" (Fearon 1994a, 586). Diplomatic historians also have emphasized the informational benefits of military *fait accompli* in coercive diplomacy. As Lauren (1994, 25) observes, "despite its inherent dangers, this extreme variant of coercive diplomacy [i.e., an ultimatum] conveys resolve and urgency better than, say, an ambiguously worded diplomatic protest." Perhaps precisely for this reason, state leaders may be tempted to rely on costly signals in crisis bargaining, such as troop mobilizations and public threats that generate a real risk of inefficient war; these measures are generally understood to provide a clear and credible means to reveal one's willingness to fight and to compel the opponents to concede.

The Bush administration's alleged rejection of a private-concession offer on the eve of the Iraqi War elucidates this argument. When *New York Times* broke the story that the U.S. government reportedly rejected the Iraqi offer of a concession through a private channel in an attempt to avert war in March 2003, the Bush administration admitted that it was not willing to back-channel a deal with Iraq on the ground that it used the credibility as its decision criterion and it believed the only public contact was credible. The Press Secretary of the White House stated that "[the administration] didn't view [a private contact] as a credible opportunity or credible communication ... because ... The front door was wide open."²⁰

Second, contrary to the conventional rationalist view, Corollaries 8.2 and 8.3 also collectively indicate that the lack of informational efficacy does not necessarily mean ineffectiveness of a private threat in crisis diplomacy. This gives rise to the second implication of the result, which suggests an often-neglected mechanism of crisis diplomacy. Because the demonstration of one's resolve can hardly be the sole purpose of a state leader during a crisis, improving credibility through conventional coercive tactics may not at all be necessary for effective compellance.

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²⁰Although the Bush administration does not either deny or confirm the existence of such a contact, it apparently deemed this backdoor channel not credible. http://www.whitehouse.gov/news/releases/2003/11/20031106-5.html. See *New York Times* (November 6, 2003, A1) for the report.

Despite this limited credibility, a private threat succeeds at compellence without raising the risk of inefficient outcomes such as costly fighting and costly public withdrawal. The loss of credibility due to going private is compensated by the fact that more types of D will concede to a private threat, while going public makes it more difficult to publicly concede. In other words, because a public threat generates audience costs not only for C but also for D, its informational benefits (i.e., the greater credibility) is counterbalanced by the greater probability that D will have to resist, conditional on a public threat, so as to avoid audience costs associated with a public concession.

It should be stressed that C's seemingly altruistic decision to forgo its credibilityenhancement opportunity has a rational foundation, and is fully compatible with the self-interests of the respective types. Recall that engaging D's domestic audience with a public threat means that she will be locked in to resisting, which then ensures fighting. Then, it follows that the decision made by the moderate and conciliatory types to avoid D's audience costs is equivalent to avoiding the situation where they are locked-in to costly fighting by their own public threats.

The deliberate decision of the moderate and conciliatory types of C to reduce the credibility of their threats induces D to assign a positive probability to her estimate that C is willing to follow through on his private threat, even if its credibility is limited. This "deviation" from a putative equilibrium path implicitly signals that some private threats are genuine and hence compels D to concede at the same rate as she would if facing a public threat. The idea that an "unexpected" event ought to tell something about the signaler's likely intention closely parallels the communication method known as "forward induction" in models of economics (Fudenberg and Tirole 1991), and the deductive reasoning of Sherlock Holmes in his story of "the dog that did not bark at night." This, I argue, is the mechanism of effective compellence without informational efficacy.

5.6.2 A Second Audience and Customized Signals

The common audience-cost models of crisis bargaining generally focus on how state leaders use tying-hands signals to set up a credible commitment in seeking to compel the opponent or deter aggression (e.g., Fearon 1994a; Schultz 1998; Smith 1998b). A tying-hands signal typically works because it creates "audience costs that the leadership would suffer due to the reaction of domestic political audiences to a perceived failure in the management of foreign policy" (Fearon 1997, 70).²¹ The analysis then examines the effect of the audience costs on various aspects of crisis dynamics such as bluffing behavior, informational roles of opposition signaling, effectiveness of immediate deterrence, and the like.

One implicit assumption held by virtually all existing audience-cost models is that only the sender of the signals is subject to domestic audience costs and the signaling actions are assumed to have no direct consequences on the receiver's payoffs (see also Slantchev 2005). In other words, audience costs are generally postulated as a type of signaling costs. This assumption nicely fits these models' purpose of examining various informational roles of audience costs in crisis bargaining, including how political accountability affects leaders' ability to learn the opponent's preferences (Fearon 1994a), why leaders take costly and risky actions in public during crisis situations (Fearon 1997), how opposition signaling shapes a government's ability to send credible signals (Ramsay 2004; Schultz 1998), and how reelection incentives influence the credibility of diplomatic announcements (Guisinger and Smith 2002; Smith 1998b). But these models also assume away audience costs that the receiver would suffer ex post if she fails to stand up for her national interest. Hence, this class of models cannot really account for why state leaders sometimes relinquish public and coercive measures, and employ in-

²¹see Slantchev 2005 for an alternative mechanism, in which sunk-cost signals generate a tying-hands like effect and lock-in the players without audience costs.

stead less public and nonprovocative diplomacy successfully to settle disputes. While building on a standard audience-cost model, my analysis fills this gap by providing a rational account of when and why private diplomacy works.

The key to the logic of efficient secrecy is D's sensitivity to audience costs that C could raise in the event of a public concession. This is proven by Proposition 7 — the private equilibrium does not exist when D has no audience costs ($a_D = 0$). Notice that setting D's audience costs equal to zero effectively changes the present model to a common model with only a one-sided audience. It follows that the private equilibrium proposed here cannot be found in any models that assume away audience costs of the receiver of signals. This result explains why nearly all existing audience-cost models conclude that a private signal is inconsequential in crisis bargaining (e.g., Fearon 1997; Schultz 1998; Ramsay 2004). This further implies that the common argument—positing quiet diplomacy ineffective—holds only if D suffers no political costs from diplomatic humiliation.

Because the moderate and conciliatory types of C would never incur audience costs in equilibrium (since they would fight if resisted), the only reason for these types to go public and generate potential ex post audience costs would be to convey credibility (consistent with the conventional story). Then the only reason for these types *not* to go public but to stay private instead is to avoid engaging D's domestic audience, so that she will be able to concede without incurring audience costs that she would suffer otherwise. Hence, if there is no audience cost for D, the moderate and conciliatory types would have no reason to go private.

One interpretation of this logic of C's choice to forgo the credibility-enhancing device by going private is that C customizes his signal conditional on D's audience costs, so that D can save face. This implies that this sort of customized signal may be unavailable in the absence of multiple audiences in general. Within the context of the present model, in particular, the presence of a viable domestic audience for D disciplines C's communication in a way that C customizes his signals to save face. Substantively, this result suggests that C does not have leverage in private diplomacy unless D is politically accountable to her domestic audience (at least to some degree), while C himself need not be politically accountable to acquire that leverage. Perhaps, this is why President Theodore Roosevelt won a concession from Canada through private letters. In response to Canadian Prime Minister Laurier's plea to save face with his domestic audience during the Alaskan Boundary dispute in 1903, Roosevelt agreed to appoint an international tribunal to camouflage the apparent surrender to American threats, while he sent troops quietly and sent private letters containing an ultimatum. This made it easier for Laurier to concede the territory to the United States, as he was sensitive to domestic costs of a public concession (Nevins 1930, 192-193; Penlington 1972, 62-63).

These results altogether highlight the importance of a second audience in the success and failure of public and private threats. That is, although the rationality of a private threat boils down to D's sensitivity to her audience costs, the rationality of a *public* threat lies in C's sensitivity to his audience costs generated by his own tying-hands signals. Therefore, the existing models postulate C's audience costs as a devise to reveal his level of resolve in a credible manner, a public threat needs informational efficacy for successfully compellence. On the other hand, because audience costs for D enable C to customize his signals to save face through a private concession, and thereby makes compellence possible even without informational efficacy.

It should be emphasized that the rationality of public threats, as we understand them in the common audience cost model such as Fearon (1997); Schultz (1998), comes from the fact that the very action of signaling increases the risk of inefficient outcomes such as war. This is due to a dual role that a public threat plays: it enhances the states' ability to communicate their resolve with the adversary in a crisis, but it also makes it harder for the defender to concede. The driving force behind this logic is the fact that going public with military threats provokes domestic audience costs for both states in a crisis.

These results altogether suggest that the actual picture of the audience-cost story of crisis bargaining may be much larger than the original models suggest.

5.6.3 Rational Diplomacy

At least in recent years, the contemporary literature of international relations has downplayed the role of diplomacy in shaping international outcomes. As Sartori (2005) points out, the literature on audience costs and crisis bargaining suggests a pessimistic conclusion that diplomatic signals must be costly or sent in public to convey information. In particular, the standard rationalist explanations imply that "normal forms of diplomatic communication may be worthless" in international relations, because they are costless and nonbinding (Fearon 1994a, 578). However, this conclusion contradicts the fact that for centuries states have invested time and energy into diplomacy.

Historically, as I have argued in Chapter 2, modern diplomatic institutions were created as a stable communication system between states in response to the security dilemma caused by uncertainty (Mattingly 1955, 51-76).²² Even before modern diplomacy was institutionalized, secret communication had been the norm of diplomacy since ancient times.²³ In particular, secrecy has been a

²²Modern diplomatic institutions were formulated as the "Italian system" during the Renaissance and established as the "French system" during the reign of Louis XIV (Nicolson 1954, 53-61; Berridge 2002, 107). The rudiments of what we know today as diplomacy can be traced back to Ancient Greece (Adcock and Mosley 1975) as well as the Ancient Near East (Cohen and Westbrook 2000).

²³The only exception is Ancient Greece, where diplomatic envoys had to report to public assemblies and argue in public (Adcock and Mosley 1975; Jönsson and Hall 2003).

persistent feature of the so-called "French system" of diplomacy (Nicolson 1954, 75; Berridge 2002, 107), and it has survived the advent of mass democracy in the 19th century and Woodrow Wilson's demand for "open" diplomacy in the post World War I (e.g., Jönsson and Hall 2003; Nicolson 1954).

The logic of *efficient secrecy* may explain why secrecy still remains as one of the central features of diplomatic institutions. Despite its historical origin of diplomatic institutions as a communication system (e.g., Jönsson and Hall 2003, 195-96), my model suggests that the rationality of diplomacy stems not so much from its informational benefits as from its less provocative nature.

To recap, private diplomacy can be rational because audience costs are not raised for the adversary as long as the demands and threats remain private, and such secrecy does not lock the adversary into a situation where she has no choice but to stand firm. This nonprovocative nature helps to overcome private diplomacy's limited ability to convey information. Hence, I argue that the conventional conclusion about diplomacy overlooks the very nature of diplomatic institutions: by definition, the primary objective of diplomacy is "the promotion of the national interest by peaceful means" (Morgenthau 1973, 519).

5.7 Conclusion

This study is a natural extension of the audience costs story (Fearon 1994a, 1997; Ramsay 2004; Schultz 1998, 2001a; Smith 1998b). As noted at the outset, much of the literature on international crises and disputes has developed to explain why states take costly actions in public during a crisis. With a few exceptions (Baum 2004; Leventoğlu and Tarar 2005; O'Neill 2003), research in this area has not addressed questions as to when and why state leaders sometimes go private in the course of international bargaining. Consequently, the historical records
of quiet diplomacy and private maneuvers are left unexplained. My solution to this shortcoming is to extend the audience costs logic beyond its original concern to explain the well-established facts of public confrontations during crisis diplomacy and the unaccounted history of private diplomacy simultaneously. In particular, although building on a typical audience-cost model, my model fills this gap by providing a rational account of when and why private diplomacy works. Relaxing the commonly heled assumptions about the receiver's audience costs allows us to identify the previously unknown "private" equilibrium, in addition to the conventional "public" equilibrium.

The analysis reveals that private threats can convey only limited credibility in crisis bargaining in the private equilibrium. Hence, I agree with the rationalists (e.g., Fearon 1995) and diplomatic historians (e.g., Lauren 1994) that quiet diplomatic communication is less informative than provocative public confrontation. However, I argue that informational inefficacy of private threats does not directly translate into the ineffectiveness of private diplomacy. I establish this claim by identifying the private equilibrium where informational efficacy is not necessary for effective compellence, and by demonstrating efficient secrecy in crisis diplomacy. That is, I demonstrated that private threats can be equally effective as public threats in compelling the opponent to concede, even if going private reduces the credibility of threats. Moreover, because private diplomacy does not invoke a tying-hands mechanism, it can achieve effective compellence without risking one reputations or increasing the risk of costly fighting. For this reason, private diplomacy provides a *more efficient* mechanism of conflict resolution in a sense of Pareto efficiency. Hence, quiet diplomacy can be effective and, when it is, states are always better off with it than with public confrontations in crisis diplomacy. Thus, state leaders cannot rationally ignore a private threat simply because "talk is cheap."

The key to this "efficient secrecy" result is the defender's audience costs. The previous models do not find these results not only because those models assume away the audience costs for the receiver of threats, but also because they underestimated the provocative consequences of publicly issued threats and how those threats can engage the receiver's domestic audience, which may eventually locks-in the receiver to resisting.

These results imply that the rationality of efficient secrecy stems not from an informational advantage (i.e., greater credibility) but from diplomatic benefits (i.e., face-saving). And such rationality hinges on the receiver's audience costs, whereas the rationality of the tying-hands mechanism (i.e., the conventional audience-cost story) hinges on the sender's audience costs. Moreover, such rationality is embedded in an enduring feature of diplomatic institutions.

What eventually emerges from this insight is a theoretical rationale for secret diplomacy. The equilibrium logic developed in this chapter—that private threats can be rational and efficient under reasonable conditions—may account for the apparent predominance of secrecy in diplomacy for (at least) three centuries despite the fact that the advent of mass democracy has generated the popular perception that secrecy is socially inefficient.

Hence, this study on secret diplomacy is part of a growing set of formal models that investigate the role of diplomacy in conflict resolution seeking to fill the gap between the empirical facts and theoretical implications of diplomacy (Guisinger and Smith 2002; Sartori 2005). Although current diplomatic institutions were formulated as a stable communication system among city-states in Renaissance Italy, the rationality of private diplomacy resides not so much in its informational benefits as in its secrecy and its face-saving function.

Perhaps more interesting is that I derive the rationale for private diplomacy from a standard rationalist framework that previously downplayed the role of quiet diplomatic communication. By showing that the standard audience costs story can generate the logic of efficient secrecy, I have demonstrated that the rationalist literature can be extended to explain a much wider range of state behavior than originally envisioned. although the conventional logic of audience costs was developed to explain publicly demonstrated military coercion, it can also be extended to explain privately conducted diplomatic maneuvers.

5.8 Appendix A: Proofs of the Propositions and Corollaries

This appendix presents proofs of the propositions and corollaries. The solution concept is perfect Bayesian equilibrium (PBE), which requires that the strategies of C and D must maximize their utility, given the other's strategy and their beliefs. The beliefs must be consistent with equilibrium strategies of C and D, and determined by Bayes's rule if possible.

Proof of Proposition 4. After a public threat, D's posterior belief that C is a genuine type $(w_C \ge \alpha)$ is given by $q_{pub} = 1$ if $\kappa > \alpha$ because in this case the cutpoint configuration is $\alpha < \kappa < \beta$, and if $\kappa < \alpha$,

$$q_{pub} = \frac{1 - F_C(\alpha)}{1 - F_C(\kappa)} \tag{5.8.1}$$

because $\kappa < \alpha < \beta$. After a private threat, *D*'s belief is $q_{pri} = 0$, because $\kappa < \beta$, regardless of α . With these beliefs, *D* always prefers resisting a private threat to conceding, so $\delta^* = \underline{w}_D$. After a public threat, *D* resists if and only if the expected payoff from doing so is at least equal to conceding: $EU_D(RS_{pub}) \ge EU_D(CD_{pub})$. When $\kappa > \alpha$, since *C* always stands firm if resisted, this decision rule implies $w_D \ge -a_D \equiv \gamma^*$. When $\kappa < \alpha$, this decision rule implies $q_{pub}(w_D) + (1 - q_{pub}) \ge -a_D \Rightarrow w_D \ge \frac{q_{pub}-1-a_D}{q_{pub}} \equiv \gamma^*$. Substituting (5.8.1), we have

$$\gamma^* = \frac{F_D^{-1}(\frac{a_C}{1+a_C})[1 - F_C(\alpha)] + F_C(\alpha) + a_D}{1 + a_D}.$$
(5.8.2)

Of C's strategy, α and β immediately follow from the cutpoint definitions by the argument in the text, and κ^* must solve $EU_C(Pub) = EU_C(Pri)$ for the critical type $w_C = \kappa^*$ by sequential rationality. The solution takes the following forms.

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If
$$\kappa > \alpha$$
, $EU_C(Pub) = EU_C(Pri) \Rightarrow (1 - F_D(\gamma))\kappa^* + F_D(\gamma) = 0$, or

$$\kappa^* = \frac{-F_D(-a_D)}{1 - F_D(-a_D)}.$$
(5.8.3)

Similarly, if $\kappa < \alpha$, $EU_C(Pub) = EU_C(Pri) \Rightarrow (1 - F_D(\gamma))\alpha + F_D(-a_D) = 0$, or $1 + F_D(\gamma^*)(1 + a_C) = 0$. Inserting (5.8.2) and rearranging for κ^* give us

$$\kappa^* = F_C^{-1} \left[\frac{F_D^{-1}(\frac{a_C}{1+a_C})[1 - F_C(\alpha)] + F_C(\alpha) + a_D}{1 + a_D} \right].$$
 (5.8.4)

Finally, to prove uniqueness, it suffices to show that the solution for each of the two cutpoint configurations within this equilibrium is mutually exclusive. Note that for expression (5.8.4) to be a part of PBE, it must be that $\kappa^* < \alpha \equiv -a_C$, which implies

$$a_D < -F_D^{-1}\left(\frac{a_C}{1+a_C}\right) \Leftrightarrow a_C < \frac{F_D(-a_D)}{1-F_D(-a_D)}.$$
(5.8.5)

For the case where $\kappa^* > \alpha \equiv -a_C$, expression (5.8.3) must be greater than $-a_C$: $\frac{-F_D(-a_D)}{1-F_D(-a_D)} > -a_C$. Rearranging this yields $a_D > -F_D^{-1}\left(\frac{a_C}{1+a_C}\right) \Leftrightarrow a_C > \frac{F_D(-a_D)}{1-F_D(-a_D)}$. Clearly, the lower bounds on a_C and a_D do not overlap with (5.8.5). Hence, the public equilibrium is unique.

Proof of Proposition 5. Condition (i) is shown by the proof of Proposition 4. On (ii) and (iii), C, for which $w_C \in [k^*, \beta]$, has an incentive to deviate if any of these conditions is not met. Suppose the contrary, that $\underline{w}_C > 0$. This implies $F_C(0) = 0$. Hence all the threats are credible. In this case, because D resists in public with higher probability (i.e., $Pr(w_D \ge -a_D)$ in public and $Pr(w_D \ge 0)$ in private), types in $[k^*, \beta]$ prefer going private. Suppose to the contrary $\underline{w}_D > 0$. This implies $F_D(\gamma^*) = 0$. Hence D always resists regardless of her beliefs or C's signals. In this case, because C can profitably go public iff $w_C \ge 0$ and go private iff $w_C < 0$, types in $[k^*, \beta]$ prefer going private.

Proof of Corollary 5.1. The partition of the two cases is shown by the proof of Proposition 4.

Proof of Corollary 5.2. To prove the first part of the result, it suffices to show that D's posterior belief is increasing in a_D . By Proposition 4, if $a_D < -F_D^{-1}(\frac{a_C}{1+a_C})$, D's posterior is $q_{pub} = \frac{1-F_C(\alpha)}{1-F_C(\kappa^*)}$, where $F_C(\kappa^*) = \frac{F_D^{-1}(\frac{a_C}{1+a_C})[1-F_C(\alpha)]+F_C(\alpha)+a_D}{1+a_D}$. Then, because $\frac{\partial(1-F_C(\kappa^*)}{\partial a_D} < 0$, differentiating q_{pub}^* w.r.t. a_D yields $\frac{\partial q_{pub}^*}{\partial a_D} > 0$. The second part of the claim is proven by Corollary 5.1.

Proof of Proposition 6. When receiving a private threat, D's posterior belief on the path is given by $q_{pri} \equiv Pr(w_C \geq \beta | w_C < \kappa) = \frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa)}$. When receiving a public threat, D's posterior is $q_{pub} = 1$ because $\alpha \leq \beta < \kappa$ implies that all the types that make a public threat will stand firm in public. With these beliefs, sequential rationality requires that, conditional on a private threat, $EU_D(RS_{pri}) \geq$ $EU_D(CD_{pri}) \Rightarrow q_{pri}w_D + (1 - q_{pri}) \geq 0$, or $w_D \geq \frac{q_{pri}-1}{q_{pri}} \equiv \delta^*$. Similarly, conditional on a public threat, it must be that $EU_D(RS_{pub}) \geq EU_D(CD_{pub}) \Rightarrow$ $w_D \geq -a_D \equiv \gamma^*$. Let r_{pub} and r_{pri} be the probabilities that D resists, upon receiving a public and private threat, respectively. Then, D's equilibrium strategy is characterized as follows.

$$r_{pub} = 1 - F_D(\gamma^*) = 1 - F_D(-a_D), \qquad (5.8.6)$$

$$r_{pri} = 1 - F_D(\delta^*) = 1 - F_D\left(\frac{F_C(\beta)}{F_C(\kappa^*) - F_C(\beta)}\right).$$
 (5.8.7)

In equilibrium D optimizes her strategy to induce the critical type of C with $w_C = \kappa^*$ to be indifferent between a public and private threat. Because this type $w_C = \kappa^*$ stands firm both in public and in private because $\alpha < \kappa$, this indifference condition holds for $w_C = \kappa$ if $EU_C(Pri) = EU_C(Pub) \Rightarrow r_{pri}(w_C) + (1 - r_{pri}) =$ $r_{pub}(w_C) + (1 - r_{pub})$, or

$$r_{pri}^* = r_{pub}^*.$$
 (5.8.8)

To characterize the cutpoint κ^* , I rewrite (5.8.8) using (5.8.6) and (5.8.7): $1 - F_D(\frac{-F_C(\beta)}{F_C(\kappa) - F_C(\beta)}) = 1 - F_D(-a_D)$. Solving this resulting equation for $F_C(\kappa)$ and taking the inverse yields:

$$\kappa^* = F_C^{-1} \left(F_C(\beta) + \frac{F_C(\beta)}{a_D} \right)$$
(5.8.9)

To complete the proof, it remains to be shown that the proposed cutpoint strategy for C is sequentially rational. First, consider the moderate types with $w_C \in [\beta, \kappa^*]$. Making a public threat is nonprofitable for any types in this range if $EU_C(Pri) \ge EU_C(Pub) \Rightarrow r_{pri}^*(w_C) + (1 - r_{pri}^*) \ge r_{pub}^*(w_C) + (1 - r_{pub}^*)$. Substitution and simplification yield: $\frac{q_{pri}-1}{q_{pri}} \ge -a_D$. Substituting q_{pri} in this inequality yields $F_C(\kappa^*) \ge F_C(\beta) + \frac{F_C(\beta)}{a_D}$. Recall that $F_C(\beta) > 0$ and $a_D \ge 0$. Then, this incentive compatibility argument implies that $\kappa^* \ge \beta$ in equilibrium, so a private threat is sequential rational for types with $w_C \in [\beta, \kappa^*]$.

Finally, for the conciliatory and low types with $w_C < \beta$, it is incentive compatible to make a private threat if and only if $EU_C(Pri) \ge EU_C(Pub) \Rightarrow$ $r_{pri} + (1 - r_{pri}) \ge r_{pub}(-a_C) + (1 - r_{pub})$. Plugging (5.8.6) and (5.8.7) into this inequality yields

$$F_D\left(-\frac{F_C(\beta)}{F_C(\kappa) - F_C(\beta)} - 1\right) \ge (F_D(-a_D) - 1)(-a_C + 1).$$
(5.8.10)

Plugging (5.8.9) into (5.8.10) yields $a_C \ge 0$, which is consistent with our assumption. Hence, it is rational for all types with $w_C < \beta$ to make a private threat.

Proof of Proposition 7. I first show condition (ii) $a_D \geq \frac{F_C(\beta)}{1-F_C(\beta)}$. Observe that it

must be that $F_C(\kappa^*) < 1$ for the private equilibrium to exist. Hence, substituting (5.8.9), this condition implies $F_C(\beta) + \frac{F_C(\beta)}{a_D} < 1$. Hence the result follows. Next, because $-a_C \leq 0$ by assumption, it suffices to show that $\kappa^* > 0$ to prove condition (i) $\kappa^* > -a_C$. Suppose to the contrary that $\kappa^* \leq 0$. Then, it follows from (5.8.9) that $F_C^{-1}(F_C(\beta) + \frac{F_C(\beta)}{a_D}) \leq 0 \Rightarrow \frac{F_C(\beta)}{a_D} \leq 0$. However, this last inequality never holds because $F_C(\beta) > 0$ and $a_D > 0$. This contradiction establishes the claim.

Proof of Proposition 8. I begin with the *ex ante* efficiency. Because Corollary 5.1 implies that C's expected payoff of the public equilibrium is higher if $a_C < \frac{F_D(-a_D)}{1-F_D(-a_D)}$, it is sufficient to show that the expected payoff in the private equilibrium for the public equilibrium for both players regardless of types. C's *ex ante* values of the public and private equilibria are $U_C^{pub} = (1 - F_C(\kappa_{pub}^*))[(1 - F_D(\gamma_{pub}^*))w_C + F_D(\gamma_{pub}^*)]$ and $U_C^{pri} = (1 - F_C(\beta))(1 - F_D(\gamma_{pri}^*))w_C + F_D(\gamma_{pri}^*)$, respectively. Because $\kappa_{pub}^* < \beta < \kappa_{pri}^*$ and $\gamma_{pub}^* = \gamma_{pri}^* = -a_D$, it follows that $U_C^{pub} < U_C^{pri}$. An analogous inspection of D's *ex ante* values of the two equilibria shows that $U_D^{pub} < U_D^{pri}$.

Next, to prove the *interim* efficiency, I must show that for all types with $w_C > \beta$, the expected payoff in the private equilibrium is at least as great as that in the non-bluffing case of the public equilibrium, and that the payoff in the private equilibrium is strictly greater for types with $w_C \leq \beta$. First, because $\gamma_{pub}^* = \gamma_{pri}^* = -a_D$, we have $U_C^{pub} = U_C^{pri} = (1 - F_D(-a_D))w_C + F_D(-a_D)$ for types with $w_C > \beta$. Similarly, the expected values of the public and private equilibria for types with $w_C \leq \beta$ are $U_C^{pub} = (F_C(\beta) - F_C(\kappa_{pub}^*))(F_D(\gamma_{pub})^* + (1 - F_D(\gamma_{pub}^*))w_C)$ and $U_C^{pri} = (1 - F_C(\beta))(F_D(\gamma_{pri}^*) + (1 - F_D(\gamma_{pri}^*))w_C)$, respectively, where $w_C < 1$ and $\gamma_{pub}^* = \gamma_{pri}^* = -a_D$. Simple algebra establishes that $U_C^{pub} < U_C^{pri}$. An analogous inspection shows that D's expected payoff is strictly greater in the private equilibrium for any types.

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Proof of Corollary 8.1. Let π^* denote the expected probability of war. The *ex ante* probability of war in the private equilibrium is given by $\pi^*_{pri} = (1 - F_C(\beta))(1 - F_D(\gamma^*_{pri}))$. The *ex ante* probabilities of war in the public equilibrium are given by

$$\pi_{pub}^* = \begin{cases} (1 - F_C(\kappa_{pub}^*))(1 - F_D(\gamma_{pub}^*)) & \text{if } \alpha < \kappa_{pub}^* \\ (1 - F_C(\alpha))\left(1 - F_D\left(\frac{q_{pub} - 1 - a_D}{q_{pub}}\right)\right) & \text{if } \alpha > \kappa_{pub}^* \end{cases}$$

Because $\kappa_{pub}^* < \beta$ and $\gamma_{pub}^* = \gamma_{pri}^* = -a_D$ if $\alpha < \kappa_{pub}^*$ (Propositions 4 & 6), we have $\pi_{pri}^* < \pi_{pub}^*$. If $\alpha > \kappa_{pub}^*$, to prove $\pi_{pri}^* < \pi_{pub}^*$, it is sufficient to show that $1 - F_D(\gamma_{pri}^*) < 1 - F_D(\frac{q_{pub} - 1 - a_D}{q_{pub}})$, where $q_{pub} = \frac{F_C(\kappa_{pub}^*)(1 + a_D) - F_C(\alpha) - a_D}{1 - F_C(\alpha)}$, because by assumption $\alpha < 0 \equiv \beta$, which implies $F_C(\alpha) < F_C(\beta) \Rightarrow 1 - F_C(\alpha) > 1 - F_C(\beta)$. Rearranging this inequality yields $F_C(\alpha) > F_C(\kappa_{pub}^*)$, which always holds because $\alpha > \kappa_{pub}^*$ by assumption. Thus, π_{pub}^* is strictly greater than π_{pri}^* .

Proof of Corollary 8.2. The priors that a public and private threat are credible are given by $p_{pri} = 1 - F_C(\beta)$ and $p_{pub} = 1 - F_C(\alpha)$, respectively, in the public equilibrium. The posteriors in the public equilibrium, given a private and public threat are given, respectively, by $q_{pri} = 0$ and $q_{pub} = 1$ if $\alpha > \kappa^*$ or $q_{pub} = \frac{1 - F_C(\alpha)}{1 - F_C(\kappa^*)}$ if $\alpha > \kappa^*$. Because $p_{pub} < q_{pub}$ but $p_{pri} > q_{pri}$, a public threat has efficacy, whereas a private threat does not in the public equilibrium.

Similarly, in the private equilibrium, the posteriors are $q_{pri} = \frac{F_C(\kappa_{pri}^*) - F_C(\beta)}{\kappa_{pri}^*}$ and $q_{pub} = 1$ given a private and public threat, respectively. Suppose, to the contrary, a private threat has *efficacy* in the private equilibrium. Then, it must follow that $\frac{F_C(\kappa_{pri}^*) - F_C(\beta)}{F_C(\kappa_{pri}^*)} > 1 - F_C(\beta)$. Substitution and rearrangement with (5.8.9) give us $F_C(\kappa_{pri}^*) > 1$. But this inequality contradicts the definition $F_C(\bullet) \in$ [0, 1]. This contradiction establishes the efficacy result.

Proof of Corollary 8.3. By Propositions 4 and 6.

5.9 Appendix B: Cut-point κ^* and beliefs that rationalize private concessions

The private equilibrium itself poses an interesting interpretational issue regarding the role of the cut-point κ^* . In this appendix, I briefly discuss this matter.

Recall that for the private equilibrium to work the defender must resist a public and private threat with equal probability, and that this equal probability is the key to one of the most important results in the chapter. If this equal probability is unbalanced in one way or another, some of the challenger types will have incentives to deviate from the equilibrium strategy. This equal probability ensures that, in equilibrium, all types above β are actually indifferent between public and private threats.

However, one may argue that the interpretation of this result may be troublesome. That is, even though all types with $w_C \geq \beta$ are indifferent between public and private threats, the cut-point κ_{pri} partitions these indifferent types into two regions: types in $[\beta, \kappa_{pri}]$ go private; and types above κ_{pri} go public. What does this result imply for our interpretation of the private equilibrium? If all resolved types above β are indifferent between public and private threats, why does κ partition these types into two regions? Although this does not necessarily mean the solution is incorrect, one may still claim that the partition of resolved types in this manner is artificial.

To understand this puzzle, first notice that κ^* is chosen to include some resolved challengers so that resistance is still risky for the defender. Hence, in the private equilibrium, the defender does not always resist a private challenge as she would in the public equilibrium. However, I should point out that κ_{pri} does not split up the resolved types of challengers for no reason. It does so because the defender's equal probability requirement necessitates that hardliners and moderates split up in equilibrium. Otherwise, pooling among resolved challengers occurs with both hardliners and moderates going public, and this leads to a violation of the requirement that $\gamma^* = \delta^*$. To see why this is the case, suppose both hardliners and moderates went public (with all moderates switching to public threats). Then everyone in the private-threat pool backs down in private and no one will stand firm. This forces the defender to *always* resist in private, resulting in the probability of private resistance being higher than the probability of public resistance, $r_{private}^* r_{public}^*$. Similarly, if the probability of public resistance is lower than the probability of private resistance, then all types above κ (hardliner types) will all go private, joining moderate types.

Now why is this substantially important? Note that one distinctive difference between the public and private equilibria is that a private concession can be supported only in the private equilibrium (and this is what "private threats work" means). This means that if D resists private challenges all the time, the private equilibrium cannot rationalize a private concession.

I should also note that if either type of pooling occurs among the genuine types, then D will not get the "proper" messages. That is, some of resolved types should give up their public option and migrate into the private-threat pool in order to ensure that private resistance carries some risks of war, and that the defender understands this. But this message gets out only if the split among resolved types occurs. Thus, by choosing κ^* so that private resistance can carry some risk of war, C can use a private threat to induce D to form a "proper" belief that rationalizes private concessions. In short, it is this split between moderates and hardliners that makes a private concession a rational choice.²⁴

²⁴The equalization requirement of D's resistance rate, which underpins this split, also ensures that the conciliatory in $[-a_C, \beta]$ and low types below $-a_C$ will not go public, because doing so will reduce their expected payoffs.

5.10 Appendix C: Extensions to the Crisis Diplomacy Game

Recall that because backing down in private has no consequences for C different from just living with the status quo, making these threats will always weakly dominate staying out. This fact raises a modeling issue: the current game does not allow the defender to make a decision whether to go public or private. Although a good model must be as simple as possible to establish its argument, it is equally important that we ensure the robustness of results obtained by such a simple model. In light of this imperative, I have discussed several extensions in the section 5.4.3 "Threats to Go Public and the Status Quo."

In this appendix I elaborate my discussion about the robustness of my results in the text by demonstrating the formal presentation of several extensions to the *crisis diplomacy game*. The primary question in the analysis of the extension is whether alternative specifications of the model changes any of the original results. The short answer to this question, as we shall see below, is "no": in fact, none of the extensions changes the substantive result *at all*.

Since the purpose of this exercise is to demonstrate the robustness of the private equilibrium of the crisis diplomacy game, the solution is not demonstrated for the cut-point configurations corresponding to the public equilibrium. Also note that in presenting formal solutions to modified game, the equilibrium analysis is a straightforward adaption of the original, and hence the proof would essentially be finding solutions to equations.

The Solution When D Has the Option to Bring a Private Challenge to Public

Intuitively, what makes private diplomacy distinctive from public diplomacy is that both parties to a crisis would need to agree on keeping a crisis private. At the first glance, our assumption—that the defender has no opportunity to decide whether to go public or stay private—is inconsistent with our intuition. Yet, my argument in the text is that even if we allow the defender to go public in resisting private challenges, she will never do so in equilibrium. That is, even if we make the choice to keep threats private fully endogenous, the private equilibrium remains intact. Not only the equilibrium behavior of the players remains the same, but also the defender's optimal rate of resistance both in public and private as well as the challenger's optimal rate of going public or private remain identical.

To see how this is the case, suppose a modified version of the crisis game analyzed in the original manuscript, where D has an additional choice of going public or private when resisting the challenger's private threat. When the defender publicly resists the challenger's private threat, the challenger must respond in public by either standing firm or backing down. The sequence of moves and the payoffs associated with each outcome are illustrated in Figure 5.5.

This modification requires two more cut-points to define the players' equilibrium strategies, in addition to the set of cut-points we used in the original manuscript. First, let ϕ denote the additional cut-point that defines D's strategy along with δ and γ . Define ϕ such that all types above ϕ publicly resist, upon receiving the challenger's private threat in private, and types below ϕ stay private in equilibrium. Second, let θ denote the challenger's additional cut-point such that all types above θ stand firm in public when the defender reverts his private threat to public, and all types below θ back down in public. By backward



Figure 5.5: Modified *crisis game*, in which D has an option to go public if challenged privately.

induction, the challenger will stand firm if and only if

$$w_C \ge -a_C \equiv \theta^* \tag{5.10.1}$$

Since the purpose of this analysis is to demonstrate the robustness of the private equilibrium (whose corresponding configuration is $-a_C < 0 < \kappa^*$), condition (5.10.1) implies that we need to look for the solution for only one cut-point configuration of the challenger's cut-point strategy: $-a_C = \theta^* < 0 < \kappa^*$. This yields the following the cut-point strategy (see Figure 5.6).

First, types above κ^* will make a public threat and stand firm if resisted. Its off-the-equilibrium-path behavior is to stand firm in private. Second, types in $[0, \kappa^*]$ will make a private threat and stand firm in private if resisted. Its off-the-path behavior is to stand firm in public if resisted. Third, types in $[\theta^*, 0]$ will make a private threat and back down in private if resisted. Its off-the-path behavior is to stand firm in public if resisted (in public). Finally, types below $-a_C = \theta^*$ will make a private threat and back down if resisted both on and off



Figure 5.6: Feasible cut-point configuration for the challenger: $-a_c = \theta^* < 0 < \kappa^*$.



Figure 5.7: Defender's cut-point strategy when she has the option to go public.

the equilibrium path.

Turning to the defender's cut-points, it is easy to show that any feasible cutpoint configuration in the "private" subgame must satisfy that $\gamma < \phi$. That is, upon receiving a private threat, the defender's cut-point strategy should take the following form, which is graphically illustrated in Figure 5.7. First, types above ϕ will go public in resisting the challenger's private threat. Second, types in $[\gamma, \phi]$ will stay private upon receiving a private threat. Finally, types below γ will concede following the challenger's private threat.

Now consider the defender's posterior beliefs. When seeing a public threat, the defender believes that the challenger will stand firm if resisted with probability 1 because the only genuine challengers will make a public threat in equilibrium in this case. Similarly, the defender believes that the challenger will stand firm with

probability $\frac{F_C(\kappa) - F_C(\theta)}{F_C(\kappa)} \Rightarrow \frac{F_C(\kappa) - F_C(\alpha)}{F_C(\kappa)}$ if the defender goes public (i.e., $w_D \ge \phi^*$), and with probability $\frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa)}$ if the defender stays private in resisting the threat (i.e., $w_D < \phi^*$).

To find D's optimal choice, note that the solutions for γ^* and ϕ^* should solve the indifference conditions for the type $w_D = \gamma$ and $w_D = \phi$ respectively. If D goes public in response to C's private challenge, her expected payoff is $\frac{F_C(\kappa) - F_C(\theta)}{F_C(\kappa)}(w_D) + (1 - \frac{F_C(\kappa) - F_C(\theta)}{F_C(\kappa)})$. If D concedes, her expected payoff is 0. If D stays private in resisting C's private challenge, her expected payoff is $\frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa)}(w_D) + (1 - \frac{F_C(\kappa) - F_C(\theta)}{F_C(\kappa)})$. The optimal γ^* should solve $\frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa)}(w_D) + (1 - \frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa)}) = 0$, which yields

$$w_D = -\frac{F_C(\beta)}{F_C(\kappa) - F_C(\beta)} \equiv \gamma^* < 0.$$
 (5.10.2)

Similarly, the optimal ϕ^* should solve $\frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa)}(w_D) + (1 - \frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa)}) = \frac{F_C(\kappa) - F_C(\theta)}{F_C(\kappa)}(w_D) + (1 - \frac{F_C(\kappa) - F_C(\theta)}{F_C(\kappa)})$, which yields

$$w_D = 1 \equiv \phi^*. \tag{5.10.3}$$

This implies that in equilibrium D will not revert to public once C makes a private challenge. This is because the upper bound on w_D is 1 (that is, $\overline{w}_D = 1 - p - \underline{c}_D = 1$ if p = 0 and $\underline{c}_D = 0$), there exists no type that resists in public in response to a private challenge (that is, the set $[\phi^*, 1] = \emptyset$).

Now, to find the challenger's optimal decision to go public or private, note that κ^* must solve the indifference condition for the type $w_C = \kappa$. C's expected payoff from making a public threat is $[1 - F_D(\delta^*)](w_C) + F_D(\delta^*)(1)$. C's expected payoff from making a private threat is

$$[1 - F_D(\phi^*)](w_C) + [F_D(\phi^*) - F_D(\gamma^*)](w_C) + F_D(\gamma^*)(1)$$

= $[1 - F_D(\gamma^*)](w_C) + F_D(\gamma^*).$

Notice that this expected payoff from staying private is exactly the same as in the original model. Hence, it is not surprising that the solution for κ^* in this specification is exactly the same as in the private equilibrium of the original model. That is, κ^* must solve $[1 - F_D(\delta^*)](w_C) + F_D(\delta^*) = [1 - F_D(\gamma^*)](w_C) + F_D(\gamma^*)$, which yields

$$\kappa^* = F_C^{-1} \left[F_C(\beta) + \frac{F_C(\beta)}{a_D} \right] > 0.$$
(5.10.4)

Naturally, this equilibrium also requires that the defender resists a public and private threat with the same probability (i.e., $\gamma^* = \delta^*$), as is the case in the private equilibrium of the original model.

The Solutions When C Has the Option to Stay Out of a Crisis

Now consider a further complication of this alternative model. One might argue that the defender's threat to go public can meaningfully influence the challenger's decision only if the challenger is allowed to choose to stay out of a crisis to begin with. Another way to put this conjecture is that the lack of the challenger's initial choice to stay out of a crisis may become meaningful only if we add the defender's option to go public. Why? This is because if the defender chose to make a private challenge public, a private threat would be no longer costless for some *conciliatory* types in $[\alpha, \beta]$.

A conjectured logic is as follows: If D goes public with C's private challenges,

she will essentially tie the hand of some private bluffers—types with $w_C \in [-a_C, 0]$ that would have backed down in private but will no longer do so in public. Given this tying-hands consequence of private challenge, C should expect that going private will result in some probability of public resistance, and some of private. This expectation of C is reflected in his initial belief such that D will stay private with probability $F_D(\phi) - F_D(\gamma) > 0$; D will go public with probability $1 - F_D(\phi) >$ 0. With this initial belief, some of the lower types of C then should no longer wish to risk even a private threat because doing so may saddle them with a very public slap in the face, forcing them to back down and suffer audience costs.

To analyze how this conjecture plays out in equilibrium, we add the challenger's option of retaining the status quo (SQ) to the game we just analyzed. Both the payoffs and information structure remain the same. The exact sequence of moves and the payoffs associated with each outcome are illustrated in Figure 5.8.

This modification requires one more cut-point for the challenger. Let λ denote C's additional cut-point such that all types above λ makes a challenge in equilibrium, and all types below λ retain the status quo (SQ).

Once again, because we are interested in how robust the private equilibrium is against this modification to the model, there is only one feasible cut-pointconfiguration for which we should look for an equilibrium: $-a_C = \theta^* < \lambda < 0 < \kappa$. This configuration essentially splits conciliatory types ($w_c \in [-a_C, 0]$) into two regions: types in $[-a_C, \lambda]$ keep the status quo and types in $[\lambda, 0]$ make private challenges.²⁵

Now, given the feasible cut-point configuration, the challenger's strategy should take the following form, which is illustrated in Figure 5.9.

²⁵I should probably note here that there is no equilibrium when $0 < \lambda < \kappa$ or $0 = \lambda < \kappa$. I provide the formal argument shortly.



Figure 5.8: Another modified *crisis game*, in which D has options to stay out of a crisis and to go public if challenged privately.

If $w_C \ge \kappa^*$, the challenger will make a public threat and stand firm if resisted. Its off-the-equilibrium-path behavior is to stand firm in private regardless of whether D resists his private threat in public or private.

If $w_c \in [0, \kappa^*]$, the challenger will make a private threat and stand firm regardless of whether D resists his private threat either in public or private. Its off-the-path behavior is to stand firm in public if his public threat is resisted.

If $w_c \in [\lambda^*, 0]$, the challenger will make a private threat. He will back down if D stays private in resisting his private threat and stand firm if D goes public in resisting his private threat. Its off-the-path behavior is to stand firm in public if his public threat is resisted.

If $w_c \in [-a_C, \lambda^*]$, the challenger will stay out of a crisis and keep the status quo. C would have backed down if D private resists C's private threat, but he



Figure 5.9: Challenger's cut-point strategy in another modified *crisis diplomacy* game

would have stood firm if D goes public in resisting his private threat. He would also have stood firm if he made a public threat.

If $w_c < -a_c$, the challenger will stay out of a crisis period. C would have backed down no matter what happens had he ever made a challenge.

Given this, the defender updates her beliefs as follows. D's posterior belief that private threat is credible is 1. Similarly, upon receiving a private threat, D believes that C will stand firm with probability 1 if D goes public $(w_D \ge \phi^*)$, and with probability $\frac{F_C(\kappa) - F_C(0)}{F_C(\kappa) - F_C(\lambda)}$ if D stays private in resisting the private threat $(w_D < \phi^*)$.

Given these posterior beliefs, the defender's expected payoff from conceding in private when she receives a private threat is $EU_D(CD_{private}|Pri) = 0$. Her expected payoff from bringing C's private threat to public is $EU_D(RS_{public}|Pri) =$ w_D . Her expected payoff from staying private in resisting C's private threat is $EU_D(RS_{private}|Pri) = \frac{F_C(\kappa) - F_C(0)}{F_C(\kappa) - F_C(\lambda)}(w_D) + (1 - \frac{F_C(\kappa) - F_C(0)}{F_C(\kappa) - F_C(\lambda)}).$

Solving the indifference conditions for the types $w_D = \gamma$, $w_D = \phi$, and $w_D = \delta$ yields the defender's optimal strategy characterized by γ^* , ϕ^* , and δ^* . First, the defender will resist, upon receiving a public threat if

$$w_C \ge -a_C \equiv \delta^*. \tag{5.10.5}$$

Second, the optimal γ^* must solve $\frac{F_C(\kappa) - F_C(0)}{F_C(\kappa) - F_C(\lambda)}(w_D) + (1 - \frac{F_C(\kappa) - F_C(0)}{F_C(\kappa) - F_C(\lambda)}) = 0$, which yields,

$$w_D = -\frac{F_C(\lambda) - F_C(\beta)}{F_C(\kappa) - F_C(\beta)} \equiv \gamma^* < 0.$$
 (5.10.6)

(note: $\lambda < \beta = 0$ by assumption). Similarly, the optimal ϕ^* must solve $\frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa) - F_C(\lambda)}(w_D) + (1 - \frac{F_C(\kappa) - F_C(\beta)}{F_C(\kappa) - F_C(\lambda)}) = w_D$, which yields

$$w_D = 1 \equiv \phi^*.$$
 (5.10.7)

This result indicates that the defender's public resistance of a private threat cannot be supported in equilibrium, as is the case with the alternative game without C's option to retain the status quo.

To characterize the challenger's initial decision, note that κ^* and λ^* must solve the indifference conditions for the type $w_C = \kappa$ and for the type $w_C = \lambda$, respectively. The challenger's expected payoff from making a public threat is $[1 - F_D(\delta^*)](w_C) + F_D(\delta^*)$. His expected payoff from making a private threat is $[1 - F_D(\gamma^*)](w_C) + F_D(\gamma^*)$. First, κ^{**} must solve $[1 - F_D(\delta^*)](w_C) + F_D(\delta^*) =$ $[1 - F_D(\gamma^*)](w_C) + F_D(\gamma^*)$, which yields

$$\delta^* = \gamma^* \tag{5.10.8}$$

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Using (5.10.5) and (5.10.6), we get

$$\kappa^* = F_C^{-1} \left(F_C(\beta) - \frac{F_C(\lambda) - F_C(\beta)}{a_D} \right) > 0.$$
 (5.10.9)

I should also emphasize that (5.10.8) implies that the equalization requirement in the original private equilibrium is at work in this equilibrium also. That is, in equilibrium the defender's probability of resisting a public threat $1 - F_D(\delta^*)$ must be the same with her probability of privately resisting a private threat $1 - F_D(\gamma^*)$ in this alternative model as well as in the original model.

Similarly, λ^* must solve $[1 - F_D(\gamma^*)](w_C) + F_D(\gamma^*) = 0$, which yields

$$F_C(\lambda) - F_C(\beta) = F_D^{-1}(0)[F_C(\kappa) - F_C(\beta)]$$
(5.10.10)

$$\lambda^* = F_C^{-1} \{ F_D^{-1}(0) \left[F_C(\kappa) - F_C(\beta) \right] + F_C(\beta) \}.$$
 (5.10.11)

To show that λ^* is consistent with the assumed restriction $\lambda < 0$, we rewrite the expression for λ^* in (5.10.11) using $\beta = 0$:

$$F_D^{-1}(0) \left[F_C(\kappa) - F_C(0) \right] + F_C(0) < F_C(0)$$

$$\Rightarrow F_D^{-1}(0) \left[F_C(\kappa) - F_C(0) \right] < 0$$

While the thing in the square bracket is always positive because $\kappa > 0$, the first term $F_D^{-1}(0)$ is negative because the LHS of (5.10.10) is always negative because $\lambda < \beta$.

* * *

This analysis indicates that, contrary to the conjecture above, D will never go public in any equilibrium of either of the two extensions of the *crisis diplomacy* game. Similarly, although the lower half of *conciliatory* types, for which $-a_C <$ $w_C < \lambda^*$, will no longer make a private threat as predicted by the conjecture, the logic behind this equilibrium behavior is not consistent with our conjecture: that is, types with $w_C \in [-a_c, \lambda^*]$ no longer make a private challenge *not* because doing so saddles them with a public slap, as these types are actually resolved enough to stand firm (so as to avoid audience costs) in the event that D publicly resists C's private challenge (off the equilibrium path). Rather, this equilibrium behavior is because the new cut-point λ splits *conciliatory* types into two populations: Types in $[-a_C, \lambda]$ keep the status quo, and types in $[\lambda, 0]$ make private threats in equilibrium.

But again, these types are actually indifferent between making private challenges and retaining the status quo because backing down in private is inconsequential for C. Why then does λ^* split *conciliatory* types into two populations when they are indifferent between the two? Incidentally, this is the same question Reviewer 1 raises regarding the role of κ^* in the private equilibrium because the reason why λ^* separates types is not the costliness of private threats. Indeed, all types below λ^* that keep the status quo in equilibrium are *indifferent* between making private threats and keeping the status quo.

This split of *conciliatory* types is the only change that results from adding (1) D's option to go public and (2) C's option to stay out of the crisis. While this change gives us a finer degree of variations in the players' types, it does not give us any significant insight that is fundamentally different from our logic obtained from the minimalist model. Other than this, everything remains the same as in the original model. Below, I list the key results that are intact in the modified models (the formal solution is presented below).

• D will not go public when resisting C's private challenges in equilibrium in both versions of the modified game.

- The key types in the original model, *moderate* and *conciliatory* types, survive this alternation to the model. These types' decision to forego their public threats is the driving force of the private equilibrium.
- The solution for κ^* is identical (without C's initial choice of SQ), or has the same structure (with C's initial choice for SQ). And it behaves in the same fashion as in the original model.
- The equalization requirement is still intact in both versions of the modified model. That is, *D* must resist a public and private threat with equal probability.
- A private concession is supported in equilibrium in both versions of the modified game, and this outcome is the distinctive difference between public and private equilibrium. So it is still rational to make a private concession in the private equilibrium, while this outcome is not attainable in the public equilibrium. Hence, my conclusions still hold about how, when, and why a private threat works.

There Exists No Equilibrium if $0 \le \lambda < \kappa$

Finally, I briefly show that there is no equilibrium when $0 < \lambda < \kappa$ or $0 = \lambda < \kappa$. These causes are potentially interesting because the most plausible scenario of the conjecture about "costly private challenge" should come from the case where $0 \leq \lambda < \kappa$. Under this condition, private bluffers (i.e., types that would have backed down privately but will no longer do so in public: $-a_C < w_C < 0$) are no longer able to make a private threat in equilibrium, and only "resolved" types can make a private challenge. This scenario, however, is not supported in equilibrium, and hence the modification to the model does not change the original result.

When $0 \leq \lambda < \kappa$, D's updated beliefs are such that whenever D receives a

challenge whether in public or private, she believes that C will *always* stand firm. Hence, D's expected payoffs are such that

$$EU_D(CD_{private}|Pri) = 0,$$

$$EU_D(RS_{public}|Pri) = w_D,$$

$$EU_D(RS_{private}|Pri) = w_D.$$

Given D's expected payoffs, the indifference conditions generate her optimal strategy as follows. D's optimal decision to resist if threatened publicly is given by $\delta^* = -a_D$, her optimal decision to stay private if threatened privately is given by $\gamma^* = 0$, and her optimal decision to go public if threatened privately is $\phi^* = w_D$.

Given this, the challenger's type $w_C = \lambda$ must be indifferent between making a private threat and staying out of a crisis in equilibrium. Hence, the optimal λ^* must solve the indifference condition $[1 - F_D(\gamma^*)](w_C) + F_D(\gamma^*) = 0$, which yields

$$w_C = -\frac{F_D(0)}{1 - F_D(0)} \equiv \lambda^* < 0 \tag{5.10.12}$$

(5.10.12) shows that the solution is inconsistent with the assumption $0 \leq \lambda$. Also, a similar calculation shows that the optimal κ^* cannot be determined uniquely. All in all, there is no equilibrium to this modified game when $0 \leq \lambda < \kappa$.

The Solutions When C Can Threaten to Go Public if D Refuses in Private

Not only the defender but also the challenger should be able to a threat to go public in order to compel the defender to concede privately. We can analyze the effect of the challenger's threat to go public of this kind by a simple modification of the basic model. Specifically, consider yet another crisis game where the





challenger, before going to war, can make a public threat following the defender's private resistance. The sequence of this extension is depicted in Figure 5.10. This model can be interpreted as follows. The challenger can first test the water by going private. If the private maneuver does not work, then the challenger can try one more around of coercive diplomacy by causing a public crisis before deciding to go to war.

The discussion in the text suggests that the key to understand why the original private equilibrium subsumes its counterpart in this extension is that the subgame following the challenger's decision to go public following the defender's private resistance is structurally identical to the subgame following the challenger's public



Figure 5.11: Challenger's cut-point strategy in another modified *crisis diplomacy* game

threat at the onset of the crisis game. In other words, behavioral strategies in the subgame following the defender's private resistance has a recursive structure of the original public equilibrium. Hence, the cut-point that characterizes the challenger's behavioral strategy at the information set following the defender's private resistance can be denoted by α , which is illustrated in Figure 5.11. It is straightforward to show that this cut-point strategy holds in equilibrium.

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CHAPTER 6

A Tale of Two Secret Crises: Historical Evidence

6.1 Introduction

In this chapter, I present two short case studies that illustrate how the logic of efficient secrecy operates in the recorded history of international politics as preliminary evidence for the theoretical model proposed in the previous chapter. It is "preliminary" in a sense that the comparative case study does not provide quantitative measurements, or determinants, of the deterrent effectiveness or informational efficacy of private diplomacy. It does not present; nor it offer the statistical hypothesis-testing of the major theoretical implications from the previous chapter. Instead, the comparative case study in this chapter offers anecdotal evidence that illustrates how political leaders anticipate domestic consequences of their behavior in crisis diplomacy and how this sort of constraints generate the incentives and beliefs that rationalize private diplomacy while public diplomacy carries informational advantage.

Each case corresponds to one of the two equilibria—the private and public equilibria, and hence one case involves the successful use of secrecy, while another involves unsuccessful secrecy. The historical evidence of the private equilibrium is drawn from an episode of the Alaska Boundary Dispute in 1903 between the United States and Canada/Britain, where President Theodore Roosevelt's use of secrecy successfully yielded a complete concession from Canada. In this episode, Roosevelt's well-known foreign policy maneuver, "Speak Softly and Carry a Big Stick" was most evident and how secrecy serves as an effective instrument of diplomatic manipulation in achieving an agreement while avoiding costly confrontations. The historical illustration of the public equilibrium is drawn from an episode of President Richard Nixon's unsuccessful use of a series of secret nuclear alerts against the Soviet Union in 1969 as an attempt to bring North Vietnam to peace negotiations in Paris to end the Vietnam War. This is the case where Nixon's so-called "Madman's Theory"—a nuclear posture appealing to strategic irrationality— was most evident, as existing formal models of nuclear deterrence and brinkmanship strategies suggest, Nixon's 1969 secret threat did not work and apparently was called a bluff.

The comparison of the public equilibrium case of Nixon's Secret Nuclear Alert to the the private equilibrium story of the Alaskan Border Dispute is intended to highlight the logic of efficient secrecy. Note that the equilibrium conditions for the equilibria (Propositions 5 & 7) suggest that the audience costs for the adversary (or the receiver of signals in the context of my model) should be a primary predictor of whether secrecy can work in crisis diplomacy. If the opponent leader suffers no domestic political repercussion (or low audience costs), the private equilibrium does not exist and hence we cannot expect that a secret threat yields a concession from audience-cost free leaders. Because Nixon's secret threat was issued against the Soviet Union, his secret diplomacy did not yield a concession from Moscow. Likewise, Roosevelt's secret threat worked because the democratically-elected Canadian leaders had every reason to be afraid of the electoral repercussion.

As the following narratives of the two episodes illustrate, events unfold in Nixon's Secret Nuclear Alert in the manner predicted by the public equilibrium, and Theodore Roosevelt spoke and acted during the course of the Alaskan Border Dispute in the manner predicted by the private equilibrium. For example, the equilibrium logic of efficient secrecy suggests that secret threat can work when its primary motive is to allow the opponent to avoid the domestic repercussion. If, on the other hand, a leader keeps her threat secret to avoid exposing her commitment to her own domestic audience so that she can disavow her commitment, then such a secret threat is expected to fail and the opponent is expected not to concede. Hence, we should expect to find some statements made by decision makers as to their motivations for the use of secrecy in making a threat. As we shall see, this prediction is confirmed by the episode of Nixon's nuclear alert: Nixon's use of secrecy did not work because his reason for the use of secrecy was to avoid engaging his own American domestic audience (and its allies).

Moreover, when a secret threat successfully produces the intended policy objective, it should be the case that the threatening party is willing to follow through with the threat. As narratives of the following cases suggest, President Roosevelt was willing to carry through on his threat, while President Nixon was not resolved to launch conventional military offensive, let alone a nuclear warfare.

One last thing I should note about the following narratives of two anecdotes is that they offer a completely different picture about how events unfolded in each of the two episodes from what the Correlate of War Project's Militarized Interstate Dispute (MID) data set indicates. The MID data set records the United States issued threats against the United Kingdom. As we will see below, this is not correct. Similarly, the MID data set simply does not recognize Nixon's nuclear threat in 1969. According to this data set, an incident where the highest level of hostility action is a nuclear threat does not exist. As we will see, this is simply incorrect.

6.1.1 Case Evidence of Successful Private Threats: Alaskan Border Dispute, 1903

In 1902 the United States claimed the Canadian territory adjacent to Alaska along the Pacific coast. The origin of the dispute dated back to the Anglo-Russian Treaty of 1825 drawing the boundary between Britain and Russian territory. This boundary rendered the Russian territory, which the United States later purchased, valueless because it was encompassed by mountains and irregular coastlines. The border became strategically important when gold was claimed to be discovered there. This dispute was eventually resolved in October 1903 in the favor of the U.S.—and the U.S. gained a town now known as Juneau—with an appearance of reasonable compromises. In fact, Canada had conceded in the face of Roosevelt's private threats of waging war.

In March 1902, when Secretary of State John Hay warned Roosevelt of the risk of a miner's uprising if gold were discovered in Alaska, Roosevelt decided to send troops in to southern Alaska "as quietly and unostentatiously as possible ... to prevent any possible disturbance along the disputed boundary line" (Collin 1985, 174-78). In the meantime, Roosevelt sent a message to Ottawa about the possibility of violence, implicitly challenging Canada with a territorial demand. Knowing that Roosevelt would not pull back the troops from the disputed area, Prime Minister Laurier wanted to make a private concession so as to avoid an apparent surrender of territory to Roosevelt's threats to draw the boundary. So Laurier's government proposed an arbitrational settlement so that his government could at least save face with Canadians. Laurier reportedly "pleaded to Henry White, the head of the American Embassy, that he would like to 'save his face' with Canadians by an arbitration" (Nevins 1930, 192-93).

Roosevelt from the beginning, however, refused to arbitrate this dispute or to consider any settlement whatsoever short of a complete victory. Still, he was willing to gesture a compromise as long as the U.S. obtained the claimed territory (Beale 1956, 115-16). Having been briefed on White's meeting with Laurier, Roosevelt wrote to Hay,

The fact is that they [the Canadians] have set up such an outrageous and indefensible claim and in consequence are likely to be in hot water with their constituents when they back down, does not seem to me to give us any excuse for paying them in money or territory. (Penlington 1972, 64)

So instead of accepting Laurier's request for arbitration, the U.S. appointed a tribunal to review the disputed case in the courts (Francis, Jones and Smith 1992, 116). The tribunal was just meant to be a face-saving device, so that an "imposed" settlement appeared to be a compromise and so the Canadian government could conceal the fact that it was submitting (Collin 1985, 174-76; Penlington 1972, 62-63). In fact, the composition of the tribunal was designed so that the U.S. could never lose the case. The six tribunal members consisted of three Americans, two Canadians, and one Briton.¹

Britain did not have a strong interest in the territory, and by 1903 it was having difficult foreign relations with France, Germany, Japan, and Russia. So Britain did not want her relations with the U.S. to suffer from the contestation over the Alaskan border. Britain's decision therefore was primarily based not on Alaska but on the essential need to maintain friendship and détente with the U.S. (Collin 1985, 183; Francis, Jones, and Smith 1992, 115-16; Penlington 1972, 92). As for the Canadian leaders, they really had only two choices, given Roosevelt's high resolve: either to conclude the tribunal favorably for the American case and

¹Britain also played a role of suzerain power in this territorial dispute because until the 1920s Canada did not have sovereignty over its own foreign affairs.

save face with fellow Canadians, or to surrender territory to the U.S. forces in public and be humiliated.

Roosevelt chose to threaten Britain rather than Canada because of the six tribunal members the British representative, Lord Alverstone—Chief Justice of England and President of the Alaska Boundary Tribunal, was a pivotal voter on the tribunal. The U.S. kept sending messages to the British leaders to convince them that Britain's "self-interest would be better served by aligning with America rather than Canada" (Collin 1985, 182), and threatened that should they fail to win the American case, the U.S. would draw the boundary using military force (Francis, Jones and Smith 1992, 116; Penlington 1972, 89-90).

Roosevelt gave Senator Henry Lodge not an "official and authoritative" instruction but a private letter to be shown to British leaders including the Prime Minister Arthur Balfour, the Foreign Minister Joseph Chamberlain, and the Liberal Party leader William V. Harcourt, as well as to Justice Alverstone whose vote was decisive in settling the case with a complete American victory. This letter was the first of a series of Rooseveltian threats to intimidate British authorities.²

What Roosevelt later identified as "one of the decisive elements in the eventual American victory," was another personal letter he had delivered through Supreme Court Justice Oliver W. Holmes to Chamberlain at a private meeting (Collin 1985, 179-80). Its message was: settle or fight. Roosevelt instructed Justice Holmes in this letter dated July 25, 1903 that:

... if you happen to meet Chamberlain ... you are entirely at liberty to tell him what I say, although of course it must be privately and unofficially. [I]f there is a disagreement I wish it distinctly understood, not only that there will be no arbitration of the matter, but that ... I

²Senator Lodge was influential with the President and he is the one who recommended the quiet dispatch of troops into southern Alaska.

shall take a position ... which will render it necessary for Congress to give me the authority to run ... the boundary on my own hook ... as we claim it. (Munro 1970, 56-57)

In order to demonstrate to Britain and Canada that Roosevelt's threat to fight over the Alaska border was not merely a bluff, he issued a seemingly unrelated public statement in November justifying the forceful seizure of Panama should the Panama revolution not take place (Beale 1956, 130). This statement complemented Roosevelt's private threats and helped to compel Britain and Canada by signaling that his *forgone* public threat could have been credible. Historical records suggest that the U.S. was indeed willing to use force at this point to draw a border as it wished. For example, at the White House meeting in June 1903, Ambassador Choate, Secretary of State Hay, and Secretary of War Root agreed with Roosevelt's contingency plan to dispatch troops if the tribunal failed to reach a settlement in favor of the U.S. (Penlington 1972, 88). This contingency plan is a clear example of "off the equilibrium path behavior" of the moderate and conciliatory types of C in my model. Moreover, this statement was a signal designed to demonstrate willingness in general to use force, and possibly engage audience costs on the American side. But by directing it towards Panama and Colombia, it was designed not to raise audience costs on the British/Canadian side.

In the end, the British representative Alverstone sided with the Americans and accepted their position of the boundary and territorial control as the U.S. claimed. Although Alverstone had committed himself to a compromised division of the disputed territory, including Canada's ownership of four islands, he reneged on this commitment only five days later and made an arrangement with the three Americans. Alverstone was reportedly instructed either by Prime Minister Balfour or by Foreign Minister Chamberlain to side with the American demands (Penlington 1972, 90-99).

On the surface, the dispute appeared to be resolved through a tribunal settlement. But it was actually Britain's ceding the Canadian territory under the private threats Roosevelt repeatedly issued. During the course of this boundary dispute, Roosevelt spoke softly by publicly holding a tribunal, but he carried a big stick by quietly dispatching troops and privately blackmailing Britain and Canada. That way, Roosevelt made it easier for Laurier to surrender the territory.

6.1.2 Case Evidence of Failed Private Threats: Secret Nuclear Alert, 1969

In October 1969, president Nixon and Henry Kissinger ordered a series of nuclear alert measures designed to demonstrate an increased readiness by strategic forces of the United States as "a direct military signal to the Soviet Union and its allies" to end the Vietnam War and sign on the peace treaty (Hersh 1983, 124; Sagan and Suri 2003, 156).³

On October 10, the Joint Chiefs of Staff (JCS) informed the U.S. military commanders around the world that the JCS had been directed by higher authority to increase military readiness to "respond to possible confrontation by the Soviet Union." On October 13, the Strategic Air Command (SAC) suspended all air combat training missions, placed B-52 bombers, armed with nuclear weapons, on DEFCON 1, the highest state of nuclear alert (which continued for a month), and secretly placed nuclear-armed air-to-air missiles placed on F-106 interceptor aircraft on civilian airports throughout the country. On October 27 SAC conducted a "show of force" airborne alert operation involving eighteen nuclear armed B-52s flying over Alaska toward Siberia, looping back to California and

³The description of the incident here largely owes to Sagan and Suri (2003). This nuclear alert is known to be the case where President Nixon applied his so-called "madman's theory."

Washington State (Sagan and Suri 2003, 150-56; Hersh 1983, 124).

These readiness measures were implemented secretly. Except for JCS, the military commanders implementing these operations were kept in the dark about the purpose of the increased readiness to launch nuclear attacks against the Soviet Union. The State Department was also excluded from the planning of these nuclear alert measures (Sagan and Suri 2003, 163-67). The nuclear alert was made secretively so that the American public as well as the United States' allied countries would not know it. The veil of secrecy surrounding this incident was so thick that until recent publications of archival research based on declassified documents (Sagan and Suri 2003; Burr and Kimball 2003), this incident had been largely unknown to the public.⁴ Cold War historians had been able only to speculate the meaning and motivations of Nixon's decision to order the 1969 nuclear alert for many years.⁵

Although the 1969 nuclear alert was designed to compel the Soviet Union and hence North Vietnam to sign on the peace treaty and end the Vietnam War in favor of the United States, it failed to produce the intended effect on the Soviet Union (Sagan and Suri 2003, 154-155). Moscow's reaction to the nuclear threat suggests that Nixon's threat was not perceived as credible. On one hand, there is "little evidence indicating what the Soviet leaders knew about the U.S. nuclear alert and how they interpreted it" (Sagan and Suri 2003, 176). Rather, Soviet intelligence did not understand the U.S. military was increasing its readiness for nuclear war. Yet, on the other hand, the fact that the Soviet Union warned

⁴As collateral evidence of how secretive this incidence is, the Militarized Interstate Disputes (MIDs) data and International Crisis Behavior (ICB) data—two of most widely used datasets on international disputes and crises—have no information on the 1969 nuclear alert by Nixon.

⁵For historiography of this incident, see Sagan and Suri (2003). The Strategic Air Command released "Increased Readiness Posture of October 1969" in October 1992, which reveals the fact of the 1969 nuclear alert. Yet this document does not contain any information relevant to the motives behind the show of nuclear force "for the simple reason," according to Sagan and Suri (2003, 157), "that the SAC commander was not told why he was being ordered to increase readiness for nuclear war."
Nixon about dangerous consequences of the use of force in settling the conflict in Vietnam suggests that Moscow was testing Nixon's *resolve* in this contest of nerves. With this, "Moscow's gambit worked" (Sagan and Suri 2003, 173), and on October 28 the JCS ordered the termination of nuclear alert measures effective on October 30. In this sense, Nixon's nuclear threat turned out to be a bluff.

Why did Nixon fail to clearly communicate his intention to the Soviet Union with nuclear threat? Evidence suggests that the imperatives for secrecy caused the half-heartedness of Nixon's nuclear threat. Nixon's efforts to keep the matter secret effectively constrained the U.S. military's ability to exercise its alert measures. The fact of the matter is that any military measures that are designed to appear serious to the Soviet Union cannot be implemented without increasing the awareness of the American public about the nuclear alert itself. For example, recalling military personnel on leave or off duty may expose the military operation to the public.

What is puzzling here is that the U.S. military planners were aware of the eventual consequence of the need for secrecy about the military operations. In planning this nuclear alert, the Defense Department's response emphasized that many of the proposed U.S. alert activities were likely to be regarded as a bluff (Sagan and Suri 2003, 164).

Why is it, then, that Nixon nevertheless kept the nuclear threat secret from the American public? Evidence suggests that while Nixon wanted to put pressure on the Soviets and North Vietnamese to end the Vietnam War, he was also concerned about the domestic opposition to using massive military offensive to achieve this goal.

The first six months of the Nixon administration saw no progress in the fourparty negotiations in Paris to reach a peaceful settlement of the Vietnam War. On July 15, 1969, President Nixon made a private threat to the Hanoi government through a secret courier (Jean Sainteny, a French figure with longstanding Vietnamese connections): "unless some serious breakthrough had been achieved by the November 1 deadline, I would regretfully find myself obliged to have recourse to measures of great consequence and force" (Sagan and Suri 2003, 158-159; see also Nixon 1978, 393-94).⁶ Nixon made this threat along with a letter to North Vietnamese leader Ho Chi Minh through Sainteny promising to be "forthcoming and open-minded" in working together for "a just peace."

Following up on Nixon's private threat, Kissinger also threatened North Vietnamese representatives, at a private meeting in Paris on August 4, that "if by November 1, no major progress had been made toward a solution, we will be compelled-with great reluctance-to take measures of the greatest consequences" (quoted in Sagan and Suri 2003, 159; see also Kissinger 1979, 280).⁷ Despite these privately conveyed threats, On August 25, North Vietnamese leader Ho Chi Minh rejected the "offer" and "refused to budge from his earlier negotiating position calling for immediate U.S. withdrawal" (Nixon 1978, 397).⁸

It is this rejection of Ho that led Nixon and Kissinger to opt out of diplomatic negotiation and to resort to military pressure to coerce North Vietnamese to end the war. They first were inclined to launch massive conventional offensive against North Vietnam, and formulated a strike plan called *Duck Hook*. This plan was to destroy an unprecedented number of targets in North Vietnam in order to apply a "strong psychological shock to the enemy." *Duck Hook* was therefore designed to convince Hanoi that it needed to come to terms with the peace negotiations that the new Nixon administration had proposed (Sagan and Suri 2003, 159-160).

⁶See also Public Papers of the Presidents of the United States, Richard Nixon: 1969 (Washington, D.C.: Government Printing Office, 1971), p. 910.

⁷Memorandum of Conversation between Henry Kissinger, Vernon Walters, Tony Lake, Xuan Thuy, Mai Van Bo et al., 4 August 1969, Folder: Camp David-HAK Background Material and Memcons thru April 1970 [3 of 4], Box 121, Kissinger Office Files, NSC files, Richard Nixon Presidential Materials Project, National Archives, College Park, Maryland.

⁸See also Public Papers of the Presidents of the United States, Richard Nixon: 1969, p. 910

At the same time, however, Nixon also worried about the public opposition to this military offensive plan and wanted to avoid a serious domestic trouble that the massive attack would cause.

In the end, Nixon and Kissinger gave up on the overt military actions as an instrument to achieve their goals, and it was necessary to devise a new military maneuver to put coercive pressure on the Soviet and North Vietnamese leaders while minimizing the adverse domestic effects (Nixon 1978, 414). It is in this context that Nixon told Secretary of Defense Melvin Laird about his intention to "initiate a series of increased alert measures designed to convey to the Soviets an increasing readiness by U.S. strategic forces" (quoted in Sagan and Suri 2003, 162-163).⁹ The specific criteria for the proposed secret threat included (1) being unusual and significant enough to be discernible to the Soviets, (2) but not being threatening to the Soviets, (3) not requiring agreement with the allies, and (4) with minimum chance of public exposure (Sagan and Suri 2003, 163).¹⁰

Notice that in contrast to President Theodore Roosevelt's motivations for the use of secrecy, the reason why Nixon resorted to secrecy was not to keep it secret from the adversary's domestic public, but to avoid the public opposition to the use of military maneuver to achieve peace. The logic of efficient secrecy suggests that the secrecy can be rational and hence a secret threat can compel the adversary when secrecy is motivated vis-à-vis the adversary's domestic consequences.

⁹Haig to Kissinger 14 October 1969, Folder: Haig Chron, October 1-15, 1969 [1 of 2], Box 958, NSC files, Nixon papers.

¹⁰Other criteria include (5) not require substantial additional funding or resources; [6] not require agreement with the allies; and [7] not degrade essential missions. See Haig to Kissinger 14 October 1969, Folder: Haig Chron, October 1-15, 1969 [1 of 2], Box 958, NSC files, Nixon papers.

CHAPTER 7

Conclusion

7.1 Conclusions

This dissertation is an attempt to bring "diplomacy" back into the international relations literature by proposing a theory of the role that diplomacy plays in international disputes. In chapter 1, I have established that there are two primary reasons why it is imperative to restore science of diplomacy and its role in international disputes. First, although a public debate over foreign policies in the event of a significant international event almost always involve the public outcry for diplomacy, there seems to exist the substantial deficiency of the solid knowledge base on how diplomacy works both in policy circle and in general public. Second, while the most fundamental question in the study of international relations concerns the origins of war and peace, the logic of success and failure of diplomacy in international disputes is fundamental to our understandings of why wars occur. History shows that in many cases a war results from a state's attempt to influence the adversary's beliefs and decisions through military coercion. Why do political leaders frequently rely on military coercion in seeking a peaceful settlement of a dispute? This question is important because military coercion often entails a risk of war. It is puzzling that peace cannot be sought peacefully rather than forcefully. But the fact is that the use of military coercion, which always entails a real risk of war, is typically preceded by a period of diplomacy. Hence, the key question to ask is why diplomacy sometimes fails to reach a peaceful settlement that (presumably) all the parties would prefer to the gamble of military coercion?

Despite the importance of the problems of diplomacy, few if any theories in international relations provide explanations for whether and how diplomacy can resolve disputes short of war. Rather, the dominant view is that diplomacy is secondary to military might or ineffective on its own. Specifically, standard rationalist theories on war and conflict resolution downplay the role of the more typical functions of diplomacy such as diplomatic communications and negotiations. It typically claims that state leaders should demonstrate the credibility of their commitments or threats by engaging either the tying-hand or sunk-cost mechanism. To achieve this, state leaders should take a risky and provocative action that increases the risk of inefficient outcomes such as war and diplomatic humiliation to achieve a "peaceful" settlement of a dispute. Following this logic, one of the most cited articles in this field argues that "normal forms of diplomatic communication may be worthless" and therefore "the only way to surmount international crises] is to take actions that produce a real risk of inefficient war" (Fearon 1994a, 578).¹ It is ironic that we should increase the risk of war to avoid war. This logic has more than theoretical bite-the Bush administration appealed to the "credibility" issues in justifying its rejection of a private offer of concessions by Iraq on the eve of the American invasion. John F. Kennedy went on TV with his "coercive" diplomacy and brought the whole nation to the brink of a nuclear catastrophe in 1962 in order to demonstrate his "credibility."

Yet, the record of international history does not provide strong support for this claim. Political leaders go against this logic, and solve many of their international disputes through diplomacy without resorting to tying-hand or sunk-cost mechanisms. For example, secret diplomatic negotiations led to the Oslo Accord in 1993; Nixon and Kissinger avoided a dramatic confrontation on the order of

¹This argument is frequent in the literature. Its intellectual origin can be traced back to the nuclear deterrence. For a canonical work, see Schelling (1960).

1962, pursuing instead quiet diplomacy to settle the Cienfuegos Crisis in 1970; Theodore Roosevelt solved the Alaskan Border Dispute in 1903 and won the Canadian cession including Juneau without shooting a single bullet. The list of these cases is just endless.

The question to ask, therefore, is this: If diplomacy plays only marginal roles in crisis bargaining and conflict resolution as suggested by the "conventional wisdom," why is it that the international system has maintained the current form of diplomatic institutions from the beginning of history of international politics (see chapter 2)? In fact, diplomacy is one of the oldest political institutions designed to preserve security and peace among states. We are left with a gap between our theoretical understandings and the empirical facts about diplomacy. The dissertation project was the first step toward filling this gap by solving the puzzle as to whether diplomacy helps to solve international disputes short of war and, if so, when and why it works.

In doing so, I have offered a theoretical framework to analyze what are considered to be the more normal (as opposed to coercive) functions of diplomacy, and their role in solving international disputes short of war. In particular, in Chapter 2, divide the key machinery of diplomacy into three distinctive processes *diplomatic communication, diplomatic negotiation,* and *diplomatic manipulation,* building on the reconstruction of a natural history of diplomacy. From Chapter 3 to Chapter 5, I have developed the strategic logic that explains how and why diplomacy works in conflict resolution for each of these key functions. I have argued that the role of diplomacy in conflict resolution is understood by a natural extension of bargaining theories of war. My approach, thus, views normal diplomacy as a conflict-resolution institution of the same kind as war and coercive diplomacy. Hence, I have explained how diplomacy works in the same way as the existing literature explains the logic of war and military coercion.

7.1.1 Revisiting Why Diplomacy? Policy Implications

How is diplomacy relevant to the contemporary international security agenda? Many scholars see the end of the Cold War as changing some of the fundamental questions and answers about international politics. Accordingly, the end of the Cold War has created new policy problems and new research puzzles in both realms of *national* security and *international* security. One of such changes in dynamics of the post-Cold War era is concerned with the declining importance of the role that military power play in international politics(Baldwin 1995, 117).² Byman and Waxman (2002) also report that the frequent use of the United States military power in coercive foreign policy since the end of the Cold War has not consistently let to successful outcomes.

Similarly, since the end of the Cold War, a series of costly civil wars (many of them ethnic conflict) have dominated the international security agenda, replacing "traditional" inter-state military confrontations between great powers. The international community, often acting through the United Nations or regional security organizations such as NATO, has come to conceive it imperative to intervene in many of these conflicts. The post 9/11 world also witnessed a similar change in the security outlook, and the terrorism has emerged as a non-traditional security threat and the prevention of terrorists' attack is now added to the list of major security agendas.

Facing the emergence of the new kinds of security threats, the relevancy of diplomatic instruments (whose peaceful and non-provocative nature distinguishes itself from other instruments of statecraft) to our security concerns in today's

 $^{^{2}}$ A notable exception is John Mearsheimer who typically argues that states will concern as much about military security as they did during the Cold War. See also Byman and Waxman (2002) for the argument that military coercion will remain a vital American foreign policy instrument. The end of the Cold War and the 1991 Persian Gulf War, however, changed the focus of scholarship on coercive diplomacy from nuclear threats to other coercive instruments such as air power and economic sanctions (Byman and Waxman 2002, 14-18).

world has increasingly been recognized by scholars, as the traditional logic of coercive diplomacy in general, military and economic coercion in particular, have appeared ineffective in coping with today's national and international security issues. It is in this context that I argue the art of diplomacy has a lot to offer to contemporary issues both on national and international security.

In the realm of intervention in civil wars, Regan and Aydin (2006) point to diplomacy, used conjointly with military and economic instruments, as the key to successful interventions. The overwhelming evidence from empirical work (on the effect of third-party intervention in the civil wars) suggests that military and economic interventions to civil wars tend to prolong fighting and are not very effective at bringing about the termination to a civil war, in contrast to the assumption widely held in the policy community.³ However, Regan and Aydin (2006) show that when an intervener combines diplomatic initiatives with coercive instruments such as military assistance and economic sanctions, the intervention is more likely to be successful at bring the conflict to the end. This is because although coercive instruments of intervention—such as military assistance and economic sanctions-alter incentives and preferences of warring parties in a way to create the structure of the relationship conducible for reaching an agreement, in the absence of diplomatic initiative, the information necessary to identify a peaceful solution is at best asymmetrically distributed among the warring parties, and neither side has an incentive to unilaterally reveal its military capabilities or willingness to fight because of the fear of exploitation by its adver-

³Empirical evidence suggesting that third-party military and economic interventions increase the duration and hostility levels a civil war and make its termination less likely is reported by Balch-Lindsay and Enterline (2000) and Regan (2000, 2002). Moving beyond the real of civil wars, Dixon (1996) and Rauchhaus (1992, 2006) report the same findings on the effectiveness of conflict management techniques are also reported with respect to international disputes in general. They find that third-party mediation that facilitate communication among the disputants are effective, while coercive intervention can produce adverse effects. Collier, Hoeffler and Soderbom (2004) present empirical evidence suggesting that military assistance for insurgency can shorten the duration of a civil war.

sary. Therefore, information transmission by diplomatic intermediaries plays a crucial role in helping warring parties reduce the asymmetry of information and hence helping them find a peaceful settlement of a civil conflict that can benefit both parties. In this respect, diplomacy should play an important role in the successful intervention.

If intervention in civil wars is a dominant international security concern, terrorism is arguably the issues that dominate the national security agenda. Similarly in the realm of terrorism, the art of diplomacy that the modern international system has accumulated has a lot to offer as to responding extremist terrorism, the arguably most urgent agenda in contemporary national security.

Since September 11, 2000, extremist terrorism has dominated national security agenda in the international community. David Lake (2002) suggests that coercive response to terrorism can arguably be counter-productive. On the issues of counterproductive effort of coercion in dealing with extremist terrorism, Byman and Waxman (2002) also show how the U.S. style coercion can inadvertently promote opportunities and incentives for counter-coercion by adversaries who cleverly exploit U.S. vulnerabilities. I argue that the art of diplomacy in conflict resolution should be very useful in responding to extremist terrorism. As Hedley Bull (1977) argues, diplomacy is a foreign policy tool designed to minimize the friction between disputing parties. What we have learned in this dissertation is that diplomacy is the art of minimizing the political costs of political leaders in bringing peace. Since foreign affairs, violent conflict, and international disputes are all the continuation of politics, political leaders (whether state leaders or non-state actors) often face mixed incentives when they decide whether to fight or settle. Diplomacy is a collection of techniques and institutional arrangements that allows political leaders to insulate themselves from political retribution for making concessions. Hence, in dealing with terrorists, diplomacy should play an important role in settling a dispute, especially when military or economic coercion has proven successful.

Moreover, diplomacy remains a central elements or what Martin Wight once called the "master institution" of international politics, even though the visibility of military coercion and military-based instruments of foreign policy may carry an image of their primacy in international politics. The failure to appreciate the importance of diplomacy and its institutions would invariably lead to privilege research questions on military instruments at the expense of other instruments (i.e., diplomatic instruments in this dissertation's context) worthy of scholarly attention.

7.2 Extensions

This dissertation offers a just first step towards full-fledged science of diplomacy. The immediate next step that I have to take to improve our understanding of diplomacy is two-fold. First, the scope of theoretical analysis should be extended to other forms of diplomacy. Second, theoretical claims that I proposed in this dissertation must be subject to more systematic empirical analysis.

7.2.1 Other Forms of Diplomacy

I have confined my attention to three key basic functions of bilateral diplomacy, and some other aspects of diplomacy have been left out. Yet, political leaders utilize many other prominent forms of diplomacy in the context of international disputes as well. For example, multilateral diplomacy has emerged as a new form of conducting diplomacy in the past century. Until the end of the First World War, state leaders had conducted diplomacy primarily in bilateral relations. The Paris conference after the First World War witnessed the rise of multilateral diplomacy, and observers at that time referred to this new method new diplomacy (e.g., Nicolson 1963). It is possible to argue that multilateral diplomacy is essentially an extension of bilateral diplomacy, and hence a whole new analysis will not be necessary. On the other hand, it is known that the dynamics of information transmission will dramatically change as we increase the number of "speakers" in cheap talk games (Austen-Smith 1993, Battaglini 2002, Gilligan and Krehbiel 1987, and (Gilligan and Krehbiel 1989)). The dynamics of diplomatic negotiation among multiple parties are also conjectured to be more complicated and have not fully analyzed yet (see Powell 2002). Multilateral diplomacy is typically conducted in the form of conference diplomacy. For example, in seeking legitimacy of its military action, the U.S. occasionally seeks to build a consensus at the UN Security Council. However, Condorcet July Theorem implies that decision-making through deliberation often encounters complicated issues, and the construction of a consensus cannot be guaranteed. The focus of this dissertation has been on the role of diplomacy in resolving international disputes short of war. Yet, state leaders ceases to use diplomacy once war erupts. Pre-crisis diplomatic communication, diplomatic negotiation, and diplomatic maneuvers in a military crisis can fail and war may not be prevented. Once war occurs, then state leaders engage in the war-time diplomacy, or peace talks. Slantchev (2003b) has analyzed this type of diplomacy.

Once states start fighting, then neighboring states or major powers often attempt to intervene and mediate the dispute. Although the study on mediation and interventions are voluminous, there is the lack of rigorous theoretical analysis that guides systematic empirical analysis Rauchhaus (1992). Although Regan and Aydin's (2006) attempt to distinguish informational interventions from structural interventions is promising, they still consider diplomacy simply as an informational device. Mediation is a phenomenon in which the distinctions among communication, negotiation, and manipulation can be helpful.

7.2.2 Toward Full Fledge Empirical Analysis

It is imperative that theoretical propositions advanced in this dissertation are tested against more systematic empirical data. I have considered primarily two institutional arrangements of diplomacy that render pre-crisis diplomatic communication effective. It would be interesting to compare these them to see which mechanism can make diplomacy more effective. The challenge will be collecting data on diplomatic statements made by state leaders prior to crisis bargaining. Data availability is also a problem in testing some implications of the negotiation game analyzed in Chapter 4. If we limit our focus to territorial disputes that occurred in the twentieth century, then we could reanalyze the data collected by Huth and Allee (2002b). Finally, although it would be difficult to test the logic of efficient secrecy that I proposed in Chapter Efficient-Secrecy, it is possible to test some of implications in an indirect manner. For example, the propositions about deterrent effectiveness and informational efficiency of two types of threat can be tested by estimating the amount of belief updating using the structural approach (Whang 2007).

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