

**DOMESTIC INSTITUTIONS, STRATEGIC INTERESTS, AND
INTERNATIONAL CONFLICT**

A Dissertation

by

JOSEPH DANIEL CLARE

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

December 2006

Major Subject: Political Science

**DOMESTIC INSTITUTIONS, STRATEGIC INTERESTS, AND
INTERNATIONAL CONFLICT**

A Dissertation

by

JOSEPH DANIEL CLARE

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Approved by:

Co-Chairs of Committee,	Vesna Danilovic Guy Whitten
Committee Members,	Ahmer Tarar Charles Hermann
Head of Department,	Patricia Hurley

December 2006

Major Subject: Political Science

ABSTRACT

Domestic Institutions, Strategic Interests, and

International Conflict. (December 2006)

Joseph Daniel Clare, B.S., Central Michigan University

Co-Chairs of Advisory Committee: Dr. Vesna Danilovic
Dr. Guy D. Whitten

This dissertation explores the interactive effects of domestic audience costs and strategic interests on state behavior in international crises. I argue that the magnitude of a leader's audience costs is influenced by the level of strategic interests, which leads to several predictions of crisis behavior in terms of (1) decisions to issue threats, including bluffs, (2) the credibility of these threats and the willingness of opponents to resist, and (3) crisis outcomes, including war. In the theoretical chapters, a formal model of crisis bargaining is stylized under conditions of complete and incomplete information. Based on this model, several novel predictions are derived regarding crisis behavior. These predictions are quantitatively tested through a series of monadic and dyadic probit and multinomial logit models using a dataset of deterrence crises for the period 1895-1985. The results lend strong validity to the approach advanced here that does not consider endogenous and exogenous factors in isolation, but rather models their interplay to predict the dynamics of crisis behavior.

With respect to dispute initiation, the results show that strategic interests have a much stronger influence on authoritarian leaders' willingness to initiate disputes than

they do for democracies. Moreover, the formal stylization and empirical analyses show that democracies can and do bluff, which is in contrast to the conventional expectations from audience cost research. Relatedly, this study specifies if and when democratic threats are credible and how the interplay between variable domestic costs and strategic interests can lead to deterrence success, failure, or war. While there is little difference between the credibility of democratic and authoritarian threats at the lower level of interests, democratic threats become more credible and less likely to be resisted as the interests at stake increase. As for crisis outcomes, among others, war is more likely between opponents with vital interests involved; yet even here, the predictions are not straightforward but rather the probability of war is increasing at a differential rate for democratic and authoritarian initiators. Whereas the formal models in this study provide the logical rationale for these and other expectations, the quantitative findings demonstrate their empirical validity as well.

ACKNOWLEDGMENTS

Throughout this process, I have relied on the support of several people for their advice. I would like to thank my dissertation advisor, Vesna Danilovic, who was with me on this project from the very beginning. From the early stages of selecting a research question to coming up with a coherent theoretical argument, she was always willing to listen to my ideas and generously and tirelessly provide comments and suggestions. For this I am very grateful. I would also like to thank Ahmer Tarar, Guy Whitten, and Charles Hermann for their insights and helpful feedback on different aspects of this dissertation. Of course, all remaining errors are my own.

TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
ACKNOWLEDGMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF FIGURES.....	viii
LIST OF TABLES.....	x
 CHAPTER	
I INTRODUCTION.....	1
Outline of the Dissertation.....	5
II LITERATURE REVIEW AND THEORY.....	7
Domestic Institutions and International Conflict Behavior.....	8
Strategic Interests and International Conflict.....	24
Theoretical Argument.....	28
III COMPLETE INFORMATION MODEL.....	38
The Crisis Game.....	38
Solution to the Complete Information Game.....	47
Discussion.....	59
Proofs for the Complete Information Game.....	61
IV INCOMPLETE INFORMATION MODEL.....	63
Uncertainty About the Challenger's Resolve.....	64
Solution to the Imperfect Information Game.....	67
Comparative Statics and Discussion.....	78
Conclusion.....	88
Proofs for the Incomplete Information Game.....	91

CHAPTER		Page
V	HYPOTHESES AND RESEARCH DESIGN.....	102
	Hypotheses.....	103
	Research Design.....	115
	Conclusion.....	133
VI	QUANTITATIVE ANALYSIS.....	134
	Dispute Initiation.....	134
	Dispute Reciprocation.....	160
	Crisis Outcomes.....	175
	Control Variables.....	190
	Conclusion.....	193
VII	CONCLUSION.....	195
	Theoretical Contributions.....	197
	REFERENCES.....	202
	VITA.....	210

LIST OF FIGURES

FIGURE		Page
3.1	Crisis Bargaining Model with Complete Information.....	40
3.2	The Magnitude of Audience Costs as a Function of the Interests at Stake.....	46
3.3	The Interactive Effects of Audiences and Interests on Resolve.....	56
4.1	Crisis Bargaining Model with Incomplete Information.....	65
4.2	The Impact of the Value of the Disputed Good on the Credibility of Democratic and Authoritarian Threats.....	81
5.1	Strategic Interaction and Crisis Outcomes.....	119
6.1	The Difference in the Predicted Probability of Dispute Initiation for Democratic and Authoritarian Challengers as a Function of the Interests at Stake.....	151
6.2	Difference in the Predicted Probability of Dispute Initiation for Democratic and Authoritarian Challengers as a Function of their Interests at Stake: Defender's Weak Interests.....	155
6.3	Difference in the Predicted Probability of Dispute Initiation for Democratic and Authoritarian Challengers as a Function of their Interests at Stake: Defender's Strong Interests.....	157
6.4	Difference in the Predicted Probability of Dispute Initiation for Democratic Challengers as a Function of their Strategic Interests: Defender's Weak Versus Strong Interests.....	158
6.5	Predicted Probability of Dispute Reciprocation for Democratic and Authoritarian Challengers as a Function of the Interests at Stake.....	165
6.6	Difference in the Predicted Probability of Dispute Reciprocation for Democratic and Authoritarian Challengers as a Function of the Interests at Stake.....	167

FIGURE	Page
6.7	Difference in the Predicted Probability of Dispute Reciprocation for Democratic and Authoritarian Challengers as a Function of the Interests at Stake: Defender's Weak Interests..... 171
6.8	Difference in the Predicted Probability of Dispute Reciprocation for Democratic and Authoritarian Challengers as a Function of the Interests at Stake: Defender's Strong Interests..... 172
6.9	Difference in the Predicted Probability of the Defender's Acquiescence as a Function of the Democratic and Authoritarian Challenger's Interests at Stake..... 184
6.10	Difference in the Predicted Probability of Acquiescence for Democratic and Authoritarian Challengers as a Function of their Interests at Stake..... 187
6.11	Difference in the Predicted Probability of War for Democratic and Authoritarian Challengers as a Function of the Interests at Stake..... 188

LIST OF TABLES

TABLE	Page
3.1	Complete Information Equilibria and Threshold Requirements..... 53
6.1	Frequency Distribution of Dispute Initiation for Democratic and Nondemocratic Major Power (Potential) Challengers..... 135
6.2	Democratic and Authoritarian Challenger's Interests (Mean Levels) in the Dispute Region..... 137
6.3	Interpretation of the Coefficients in the Interactive Probit Models..... 143
6.4	Monadic Model of Dispute Initiation, Probit Estimates..... 145
6.5	Dyadic Models of Dispute Initiation, Probit Estimates..... 148
6.6	Dyadic Models of Dispute Reciprocation, Probit Estimates..... 162
6.7	Frequency Distribution of Crisis Outcomes for Democratic and Nondemocratic Major Power Challengers..... 176
6.8	Frequency Distribution of Crisis Outcomes for Democratic and Nondemocratic Challengers and the Defender's Weak or Strong Interests..... 178
6.9	Crisis Outcomes, Multinomial Logit Model..... 181

CHAPTER I

INTRODUCTION

The purpose of this dissertation is to explore the relationship between domestic audience costs and the strategic interests at stake as they influence crisis behavior. Specifically, it explores the interactive effect of these two factors on decisions to issue and carry out threats, the credibility of these threats and the willingness of an opponent to resist them, and crisis outcomes. As I am interested to explain the onset and effectiveness of coercive diplomacy as a function of these two factors, I build upon and fills in some research gaps in the extant literature. My research contributes to the classic literature on strategic bargaining (e.g., Schelling 1960, 1966; Ellsberg 1959; Maxwell 1968; George and Smoke 1974; Snyder and Diesing 1977) as well as more recent works in the relevant areas for my project (Huth and Russett 1984, 1988; Fearon 1994a, 1995; Zagare and Kilgour 2000; Schultz 2001; Danilovic 2002).

Two recent theoretical angles are most relevant for the approach I take here. Though both attempt to explain the same phenomena—strategic bargaining—they do so from different theoretical angles: one focuses on the effect of a leader’s anticipation of domestic punishment for foreign policy failure and the other focusing on the impact of strategic interests. Not surprisingly, therefore, they have often been seen as alternative approaches (see e.g., Fearon 1994b) but, as I show in this dissertation, this separation need not be the case. Indeed, a fundamental goal of this study is to show that, by

This dissertation follows the style of the *American Journal of Political Science*.

developing a theoretical model based on the interactive impact of domestic audience costs and strategic interests, we can generate novel predictions and explain a range of phenomena that escape explanations by either theory alone.

For example, recent models of strategic bargaining hold that signals of resolve are more credible when leaders face domestic punishment for failing to carry out their threats. Most notably advanced in the audience costs approach (Fearon 1994; Smith 1998; Schultz 2001), this premise leads to an expectation for democratic states to more credibly signal resolve in crises since their leaders fear domestic costs for backing down. While scholars disagree about the mechanism linking foreign policy failure to the leader's anticipation of domestic punishment—i.e., the audience's concern for the nation's reputation (Fearon 1994), because reneging on a threat shows a leader's incompetence (Smith 1998), or because the domestic opposition can capitalize on such a failure (Schultz 2001)—the implications are similar. Democratic threats are more credible because their leaders are less likely to bluff and initiate only the disputes they intend to carry out.

Regardless of the causal mechanism at work (i.e., reputational, competency, or partisan competition bases for domestic punishment), the audience cost approach is based on a premise of an invariant willingness of the public to penalize an incumbent for reneging on a threat. What it does not consider is that the audience can have variable preferences for their leader's actions in a crisis. Depending on its evaluation of the involved interests, it does not always have an incentive to punish the leader for backing down. Thus, whereas the public is unlikely to accept the losses from yielding in a crisis

of vital interests (and penalize the leader for such a failure), it would be too restrictive to expect the same during crises they deem of minor importance.

I theoretically modify the audience costs approach by relaxing the assumption about the monotonic willingness of the domestic public to penalize their leaders for foreign policy failures. Like previous scholars, I assume that democratic leaders face higher domestic audience costs than authoritarian ones. Yet I also allow for the magnitude of these audience costs to vary depending on the interests at stake in the crisis.¹ In the formal stylization, I show how introducing variation in the magnitude of audience costs (based on the strategic interests at stake) can influence not only whether democratic threats are considered more credible than authoritarian ones, but also when this is likely to be the case. Importantly, I also show that democratic states can and do bluff during crises. Yet this also poses a problem for previous audience cost expectations, since democratic threats cannot always be believed as credible. I therefore outline the conditions under which democratic leaders are and are not believed resolved, and the empirical results strongly support my predictions. Thus, although this project assumes audience costs are an important factor, it also leads to predictions, confirmed in the empirical analysis, that the previous audience cost studies have not foreseen.

Moving to the second important body of research for my project, that is, those studies focusing on the strategic interests at stake in a crisis, I also address some research gaps in these studies, most notably resulting from their lack of attention to the role of

¹ In the next chapter, I discuss some of the plausible causal mechanisms linking the magnitude of a leader's audience costs to the interests at stake in the dispute.

domestic politics. They generally anticipate that, regardless of regime type, when a challenger issues a threat in an area of its strong interests, the threat is less likely to be resisted by another state and that war is most likely when two states have mutually strong and competing interests at stake in a dispute. Yet if we presume, as mentioned above, that the interests at stake influence domestic politics by influencing the magnitude of audience costs a leader faces for acquiescing, and that democratic leaders are more vulnerable to domestic punishment than authoritarian ones, it is possible to anticipate that the interests at stake can have a different effect on the credibility of democratic and authoritarian threats. In this respect, interests still matter, but primarily as filtered through the domestic audience's lenses. In other words, I demonstrate that the link between strategic interests and crisis behavior is not automatic, just as there is also not a straightforward link between backing down in a crisis and the magnitude of domestic audience costs that a leader faces.

Therefore, instead of juxtaposing these two factors, in this dissertation I take an approach that refines the way that we can model their interplay. Specifically, I relax the restrictive assumption in the audience cost approach that the domestic public will always remove an incumbent from office if s/he backs down from a public commitment. Instead, I contend that the magnitude of audience costs a leader pays for renegeing on a threat is variable, depending on the strategic interests at stake in the crisis. As a result, backing down can have different implications for a leader's tenure, depending on the associated stakes. Altogether, this modification of the main audience cost premise generates several novel expectations for crisis behavior, particularly regarding (1) the willingness of

democratic leaders to issue threats, including those intended merely as limited probes or bluffs, (2) the credibility of their threats and the willingness of an opponent to resist, and (3) crisis outcomes in terms of either the challenger's or defender's acquiescence and the probability of war.

Outline of the Dissertation

With the above goals in mind, this dissertation proceeds in the following manner. In the next chapter (Chapter II), I review the extant literature in both research traditions (audience costs and strategic interests) that are relevant for this study. I point to the relevant theoretical issues that drive these studies as well as some theoretical gaps and empirical puzzles that escape explanation if we are to focus on either endogenous (domestic institutions and audience costs) or exogenous (strategic interests) factors independently of one another. At the end of this chapter, I also provide a discussion of my main theoretical premises and show some of the intuitive implications they generate, which are then more closely examined as specific predictions in the following chapters. These are briefly illustrated with the historical cases of the 1898 Fashoda Crisis between France and Great Britain and the 1911 Second Moroccan (Agadir) Crisis between France and Germany.

In chapters III and IV, I provide a formal stylization of my theoretical argument under conditions of complete and incomplete information, respectively. The main importance of this game theoretic approach is two-fold. First, the modeling process helps to ensure that my theoretical argument is internally consistent, and that all predictions follow logically from my premises. Second, game theoretic approaches rely on a strategic

form of interaction in that each player must consider how the other will respond when determining their own course of action. That is, outcomes are a function of interactive choices, which is critical to incorporate if we are to explain strategic bargaining and crisis outcomes.

The analysis of the game in chapters III and IV leads to several predictions that altogether depart from those of the audience costs or strategic interests literature. At the end of Chapter IV, I summarize the findings from the formal analysis. These are then stated more formally as explicit hypotheses in Chapter V. Chapter V also lays out the research design for a quantitative test of the validity of the hypotheses. It provides detailed information about the units of analysis, dependent and independent variables, data, and statistical models. The hypotheses are then subject to a quantitative empirical test in Chapter VI. In this chapter, I discuss the results in the context of my premises, theoretical expectations, and hypotheses. As will be shown, the results of a series of statistical tests strongly support not only the validity of the hypotheses, but also that of my theoretical argument that links domestic audience costs and the strategic interests at stake in order to explain crisis behavior.

In the final chapter (Chapter VII), I conclude with a summary of my theoretical and empirical analysis. I further discuss these in the context of previous studies that have focused on either domestic politics or the strategic interests at stake independently of one another. The major finding of my study is that both domestic politics and strategic interests matter, but not in the manner as previous identified. Rather, their interactive effect reveals some previously obscured patterns of crisis behavior.

CHAPTER II

LITERATURE REVIEW AND THEORY

If I have seen farther, it is by standing on the shoulders of giants—Isaac Newton

There is always something new out of Africa—Pliny, the Elder

As pointed out in the introduction, the purpose of this dissertation is to contribute to the previous literature linking domestic audience costs to international conflict behavior by modifying and refining some old premises with an argument that explains how the interests at stake interact with domestic audience costs to influence crisis behavior. In this chapter, I take the first steps toward developing my theoretical model. I first review the previous research relevant for domestic audience cost arguments in the context of international conflict. I also place it in the broader research agenda linking domestic institutions to foreign conflict. In doing so, I point to the core assumptions that have been advanced in the audience cost literature, but also show that none of these previous scholars have considered the modifying influence of strategic interests on domestic audience costs and thus, a democratic leader's crisis behavior. I then discuss the strategic studies that do consider the interests at stake as an important factor in crisis bargaining and deterrence, but largely ignore the mitigating or accentuating effect of domestic factors on the importance of strategic interests. In the last section, I develop my main assumptions that form the basis for my argument, and provide an intuitive discussion of some of their main predictions. I also illustrate these intuitive predictions with the cases of the 1898 Fashoda crisis between France and England and the 1911

Agadir crisis between France and Germany. These expectations are then more fully specified and the predictions they generate are explored in Chapters III and IV.

Throughout this section, I point to the similarities and differences between my theoretical argument as well as those advanced by previous scholars.

Domestic Institutions and International Conflict Behavior

The impact of domestic institutions on foreign behavior has been at the forefront of a substantial number of studies. The vast majority of this research attempts to explain the democratic peace puzzle—i.e., that democratic states, while not less war-prone than nondemocracies, rarely, if ever, fight one another.² While the goal of this dissertation is not to provide yet another explanation for the democratic peace puzzle, the democratic peace research is an ideal place to begin an exploration of the literature linking domestic audience costs to international conflict behavior.

In order to work through this broad area of literature, I use a conceptual notion that differentiates between different theoretical arguments based on whether domestic political institutions are considered to influence international conflict behavior in either an *ex ante* or *ex post* sense. While scholars within each (i.e., *ex ante* and *ex post*) tradition differ on several fronts, they share certain premises that bind them together theoretically.³ Specifically, those that fall into the former (*ex ante*) category share the

² This is known as the dyadic version of the democratic peace. Monadic accounts of the democratic peace hold that democratic states are more peaceful than nondemocracies in general and hence, that they are not as war-prone as nondemocracies. For a general review of the democratic peace research, see Chan (1997) and Ray (1998).

³ That this distinction between *ex ante* constraints and *ex post* costs is a parsimonious, and thus useful, analytical tool for sorting through such a diverse body of literature is attested by

assumption that institutions are important in that they place domestic institutional barriers on a leader that must be passed *before* (hence, *ex ante*) s/he can initiate conflict. These barriers can, in turn, be thought of as decisional constraints, since they essentially serve to constrain an incumbent's ability to make decisions independently of certain institutional actors.

Alternatively, researchers that fall into the latter (*ex post*) category posit a different role for domestic institutional actors. Instead of presuming that institutions limit a leader's decisional autonomy through *ex ante* formal barriers, they rather maintain that the presence of certain institutional characteristics of democracy—such as accountability to the general public or the necessity of maintaining majority support in parliament—can influence foreign policy by increasing a leader's anticipation of domestic punishment for foreign policy failure. Hence, institutions and institutional actors operate *ex post*, by creating domestic costs that a leader must pay for his/her failed foreign policy. Although I review here several strands of research, this study clearly attempts to add and contribute to the audience cost and informational approaches. Thus, these theories will be reviewed more extensively than other related theories.

Ex Ante Decisional Constraints

The early institutionalist research primarily considered institutions to influence

its most recent use by Rousseau (2005) as well. He similarly states that “[c]onstraint in the decision-making process is referred to as *ex ante* constraint whereas the ability of legislatures and publics to punish decision makers after the policy has been selected is referred to as *ex post* constraint” (2005, 16, fn. 10). Unlike Rousseau, however, it would be more consistent with the thrust of most literature on *ex post* domestic effects to refer to them as *costs* as these may influence decision-makers either as constraints or incentives regarding the use of force.

foreign conflictual behavior in an *ex ante* sense. In this respect, it focused on the way in which domestic considerations place decisional constraints on a leader before s/he can commit the state to a particular foreign policy action. The main difference between democratic and authoritarian leaders according to this approach is that democratic leaders must mobilize, or obtain approval from, a larger number of domestic actors before initiating the use of force (Morgan and Campbell 1991; Maoz and Russett 1993; Russett 1996; see also Russett and Oneal 2001).⁴ This, in turn, is assumed to produce a restraining effect on the dispute initiatory behavior of democratic incumbents, and result in a lower rate of dispute or war initiation by democratic states as compared to authoritarian ones.

Morgan and Campbell (1991), for example, focus on the way in which electoral accountability to the general public and shared decision making authority between the executive and the legislature produce *ex ante* constraints on a leader's decision for war. Of these two sources, they clearly argue that shared decision making authority between the executive and legislature is the most important constraint. "Because democratic leaders know that the electoral consequences of their decisions can often be delayed for months or years, the fear of failure at the polls should be the least important constraint. The most important should be the ability of another institution to block directly a decision for war" (192). Morgan and Campbell therefore implicitly recognize the

⁴ In this respect, these arguments are consistent with Tsebelis' (2002) notion of institutional "veto players"—the individuals or collective actors whose support is necessary to change the legislative status quo.

possible role of political accountability (as an *ex post* factor) as influencing foreign conflict behavior, but due to the fact that domestic punishment may not be immediate, they reject it in favor of the *ex ante* constraining effect of shared executive-legislative decision making authority.

Maoz and Russett (1993) also focus on the *ex ante* decisional constraints, but instead of limiting these constraints to shared agenda-setting between the executive and legislature, they consider them more broadly in terms of the constraining impact caused by the necessity of mobilizing various institutional actors and the public. Ultimately, democratic leaders are considered highly constrained due to the fact that they must follow certain institutional rules or procedures before initiating conflicts, as well as the extent to which they rely on other institutional actors to pay for their foreign policies (Maoz and Russett 1993, 629; see also Russett 1996; Russett and Oneal 2001).

Nondemocratic leaders, on the other hand, only need the support of certain “legitimizing groups” which may already benefit from the use of force during crises, and these groups are thus unlikely to oppose a leader’s decision for war (626).

While the main emphasis within the *ex ante* decisional constraints literature is to delineate the differences between democracies and autocracies, previous scholars have examined the effect of different institutional structures within democratic states on crisis behavior (see e.g., Auerswald 1999; Elman 2000; Reiter and Tillman 2002).⁵ Morgan

⁵ Some seminal works in the comparative politics literature provide generic criteria for differentiating among democracies according to their institutional variations (e.g., Lijphart 1984; Tsebelis 2002; Powell and Whitten 1993), but since they are not linking them to foreign conflict propensity, I focus here only on the international relations literature which attempts to

and Campbell (1991) and Elman (2000), for example, argue that the presence of shared agenda-setting control between the executive and legislature makes leaders in presidential systems more constrained than those in parliamentary systems. Auerswald (1999) further differentiates between presidential systems based on the degree of agenda-setting power, arguing that strong presidents (i.e., those with full agenda setting power) are less constrained than weak presidents (those with only partial-agenda setting control). Ultimately, however, quantitative tests typically failed to provide solid support for the predictions of the decisional constraints approach. Morgan and Campbell (1991), for example, find little empirical support for the argument that shared decision making authority reduces the likelihood of conflict involvement. Moreover, other scholars (see Auerswald 1999; Ireland and Gartner 2001; Reiter and Tillman 2002) actually find presidential systems to be more conflict prone than leaders in parliamentary systems.

In the end, however, the international relations literature that conceptualizes domestic institutions to operate in an *ex ante* sense is problematic for two main reasons. First, by assuming that democratic leaders are always more constrained than authoritarian ones, it can only logically predict a lower rate of dispute initiation for democratic challengers than for authoritarian ones. Yet this is ultimately inconsistent with the strong empirical finding that democratic states are just as conflict prone as nondemocracies.⁶

do so.

⁶ Some scholars attempt to correct for this shortcoming by adding the additional assumption that democratic leaders fear exploitation from nondemocratic ones, and therefore are more likely to find shortcuts to the mobilization process when facing nondemocracies (Maoz

A second, and more vexing problem for the purposes of this study, is that by emphasizing the role of institutional actors that have the ability to block a leader's foreign policy actions, this literature ultimately fails to consider the incentives that these actors have to actually exercise this power. That is, by ignoring the strategic context in which a dispute arises, these scholars consider democratic leaders to always be highly constrained, regardless of the importance of the strategic interests at stake. In other words, they are all based on the implicit premise that democratic leaders would face the same level of constraints when contemplating a response to a vital national interest as they would when attempting to act in an area of weak interests. Yet contrary to this, it would be quite reasonable to anticipate that, in the former case (i.e., when strong interests are at stake) a leader would be expected to act in defense of the national interest, and that relevant domestic actors would actually push for action rather than constrain it. By not considering the strategic context of a dispute, therefore, these approaches cannot account for the variable impact of the same institutional structures under different strategic contingencies.

Ex Post Domestic Political Costs

In contrast to the early explanations that consider the role of domestic institutions in an ex ante sense, more recent theoretical approaches primarily assume that institutional actors are important in their ability to increase an incumbent's anticipation

and Russett 1993, 626). This would indeed allow for democratic states to be conflict prone when facing nondemocracies. However, if shortcuts to the mobilization process are available, then it is not clear why democratic leaders should not be willing to use them in all circumstances when vital interests are involved, and not only when facing nondemocracies.

of *ex post* domestic political punishment for foreign policy failure. Thus, an additional assumption that is often introduced in this more recent literature is that leaders want, above all, to remain in office (Bueno de Mesquita and Lalman 1992; Fearon 1994a; Bueno de Mesquita and Siverson 1995; Bueno de Mesquita et. al. 1999; see also Chiozza and Goemans 2004). This premise is important for two main reasons. First, it provides another explanation for the role of domestic political institutions—namely, the ability to punish an incumbent for their foreign policy failures. The fact that the use of force is a risky endeavor, which can ultimately cost a leader politically,⁷ should make democratic leaders especially cautious when deciding to become involved in international conflicts (Gelpi and Griesdorf 2001, 513; Huth and Allee 2002, 12).

Second, this assumption provides the basis for two influential angles that link domestic politics to international conflict: the winning coalitions theory (Bueno de Mesquita et. al. 1999, 2003), and the audience cost (or informational) approach (Fearon 1994a; Smith 1998; Schultz 1999, 2001). The winning coalitions approach arose largely out of the research on the democratic peace, and thus, is primarily interested in explaining why democracies do not fight one another, while at the same time being just as war-prone as nondemocracies.⁸ The audience costs approach, on the other hand, arose primarily out of the signaling and deterrence/coercive bargaining literature. As such, it is

⁷ Or perhaps even physically. See, for example, Goemans (2000) who showed that failed foreign policies can often result in imprisonment or even death.

⁸ Bueno de Mesquita et. al. (1999) refer to their explanation as an “institutional explanation for the democratic peace”. Since all of the above explanations are considered institutionalist, I refer to their argument as the “winning coalitions” approach.

concerned not only with the outbreak of war, but also with the effectiveness of different signaling strategies and coercive bargaining techniques in order to help avoid escalation to violent conflict (see also Schelling 1960, 1966). Despite having different theoretical bases—one in the democratic peace, the other in the strategic literature—the two approaches commonly consider a leader’s goal of office retention to be the central factor influencing conflict behavior.

Winning Coalitions Approach

The winning coalitions approach (Bueno de Mesquita et. al. 1999) can be seen as a logical extension to Bueno de Mesquita and Lalman’s (1992) early argument about domestic political costs. It is based upon two main assumptions, namely that leaders (1) want above all to remain in power, and (2) must provide some combination of public and/or private benefits to their selectorate and winning coalitions (Bueno de Mesquita et. al. 1999, 793-94). The selectorate is comprised of all members of society who have the ability to participate in selecting the government. The winning coalition is the subset of the selectorate whose support is necessary in order for leaders to remain in office (793). Members of the selectorate typically benefit from the provision of public goods, whereas the members of the winning coalition largely derive benefit from private goods provided by the incumbent leader. Given a limited amount of resources then, leaders must decide which combination best serves their goal to remain in office.

Bueno de Mesquita et. al. (1999) argue that large winning coalitions in democratic systems make it unlikely for their leaders to remain in office merely by providing private goods to the members of these coalitions, as each member’s share of

such benefits is already small. Instead, democratic leaders are more likely to rely on the provision of public goods in order to remain in office. Foreign policy success, as it is a public good, is thus a necessity for democratic leaders (794). On the other hand, they see nondemocratic systems to be typically characterized by smaller selectorates and winning coalitions, and thus, their leaders are assumed to be able to remain in office by providing larger private benefits to the members of the winning coalition than democratic leaders can. Consequently, autocratic leaders can politically afford foreign policy failure as long as it does not waste resources used for the provision of these private benefits (794).

This reliance on the provision of public versus private benefits for political survival has several implications for foreign policy behavior according to the winning coalitions approach. On the one hand, the necessity of foreign policy success in democratic systems makes it more likely that their leaders will (1) try harder in the conflicts they do become involved in, and (2) select themselves into conflicts they can win (Bueno de Mesquita et. al. 1999, 799; see also Lake 1992, 2003; Gelpi and Griesdorf 2001). Nondemocratic leaders, on the other hand, do not need to put forth as much effort during wars, as the outcome is not critical to their political survival (802).

Unlike the research focusing on ex ante decisional constraints, which yielded mixed empirical support, quantitative tests of the winning coalitions approach report strong supporting evidence (see e.g., Bueno de Mesquita et. al. 2003, 2004; Bueno de Mesquita, Koch and Siverson 2004). Yet similar to the research on ex ante decisional constraints, the winning coalitions theory is problematic for the purposes of this study for a couple of reasons. First, while it is strong in predicting the initiation of disputes and

their ultimate escalation to war, the winning coalitions approach is silent about the impact of a leader's anticipation of domestic political costs at other stages of a crisis in terms of threats, counter-threats, and the outcome of the crisis other than a simple war or no war dichotomy.

A second, and perhaps more important, issue is that the winning coalitions approach is ultimately based on an invariant willingness of the domestic public to punish a leader for engaging in a costly or unsuccessful war. This ultimately leads to the prediction that, since democratic leaders are more likely to rely on foreign policy success for their office retention, they are more likely to select themselves into only those wars they can win.⁹ Yet it seems unlikely that, even when there is a low probability of success, a democratic state would be unwilling to protect its vital interests. Furthermore, if we consider maintaining a vital foreign policy interest to be a public good, then it would be plausible to argue that the domestic opposition would have an even greater incentive to punish the leader for not fighting to protect such a critical strategic interest, even if the prospects for success are not *ex ante* strong.

Audience Costs and Informational Approaches

As mentioned above, the audience cost or informational approach arose mainly from the studies on signaling and commitment, and as a result, it attempts to explain the

⁹ Other scholars criticize this approach based on this prediction and, in particular, whether war should actually be likely to occur under these situations of such a power disparity. “[W]hy, when countries are mismatched, need a war be fought? The weaker can hardly threaten the stronger, yet democratic countries go to war against them. If this is true, it tells us something frightening about the behavior of democratic countries: namely, that they excel at fighting and winning unnecessary wars” (Waltz 2003, 181).

factors that make some threats more credible than others. The concern about the effective signaling of resolve was initially raised in nuclear deterrence studies because of the precarious nature of nuclear threats: if a state were to carry out its threat, it could have triggered mutual annihilation. While the attempts of several early scholars to solve this credibility dilemma were notable at their times (see for example, Ellsberg 1968), Schelling's (1960, 1966) original work in this respect is influential to date. Schelling prescribed a number of manipulative signaling strategies to convey commitment through the process of "surrendering options." By creating a situation in which a leader had no other option but to carry out the threat—in a sense, making the threatened retaliation automatic—states could increase their credibility. In this respect, Schelling (1960, 28) advocated the use of public statements, "calculated to arouse a public opinion that permits no concessions to be made." This is one of the early statements that suggest an ex post audience effect on a democratic leader's bargaining leverage. This point will be further refined and elaborated in the most recent audience cost literature.

Although borne out of the nuclear dilemma, the question of credible signals is relevant for conventional conflicts as well. Indeed, it is regarded as a central problem for the current rationalist explanations for war. In his oft-cited article, Fearon (1995; see also Fearon 1994a; Schultz 2001) argued that, since war is costly for all sides involved, there is always some range of settlement that all sides in a dispute would prefer to war. The problem, however, is that states have an incentive to misrepresent their true resolve in order to strengthen their bargaining positions. As a result, not all threats of violence can be believed (as was the case with the nuclear threats discussed above), and as a result,

opponents have incentives to resist even credible threats in the erroneous belief that they are bluffs. The implication of this “rationalist explanation for war” is that wars result from informational asymmetries and the inability of states to credibly reveal information about their resolve. Hence, the relevant question is how states can credibly convey their true resolve given their incentives to mislead, and it is in this respect that the audience cost approaches focus on the impact of domestic politics.

Fearon (1994a), for example argues that, during international crises, leaders generate “audience costs” that they pay when they back down after having made a public threat. In this respect, Fearon’s argument is similar to the notion of “surrendering options” discussed by Schelling—leaders can surrender options, and ultimately make the threatened response automatic, by tying their hands domestically. This argument has several implications for the link between democracy and crisis behavior. Since democratic incumbents are more vulnerable to domestic punishment than authoritarian ones, they are unlikely to issue threats merely as bluffs or “limited probes”, since doing so will jeopardize their ability to maintain office. Instead, democratic leaders are only likely to issue those threats they intend to carry out (585-86). As a result, when democratic leaders do initiate disputes, they are believed by their opponents to be highly resolved. This, in turn, leads to a lower rate of reciprocation against democratic threats, and democratic challengers are better positioned to avoid the inefficient wars that can result from informational asymmetries than are authoritarian challengers.

Fearon thus posits a direct, monotonic link between crisis outcomes (i.e., backing down or standing firm) and a leader’s anticipation of domestic punishment. In other

words, he assumes that the domestic audience will always consider a leader's failure to uphold a public commitment as a foreign policy failure, and subsequently penalize it. Yet it is reasonable to question why the domestic audience would always have an incentive to do so. In Fearon's model, the audience is assumed to care about the nation's reputation for resolve, and thus they are willing to punish a leader that puts the "national honor" in jeopardy and diminishes the national reputation by issuing public threats and subsequently backing down (Fearon 1994a, 580-81; see also Guisinger and Smith 2002).¹⁰ Other approaches linking threat credibility to domestic audience costs (Smith 1998; Schultz 2001) differ in terms of precisely why the domestic audience would always have an incentive to punish a leader for bluffing, yet in the end, they all share this similar restrictive assumption.

Smith (1998), for example, departs from Fearon (1994a) by emphasizing the importance of the public's evaluation of a leader's competence (rather than their concern for the nation's reputation) to explain why the failure to uphold threats would be punished as a foreign policy failure.¹¹ Starting from the premise that the public wants to retain competent leaders and remove incompetent ones (633), Smith finds that, in equilibrium, only incompetent leaders would be willing to issue empty threats. "Since it

¹⁰ Guisinger and Smith (2002) also posit a reputational basis for audience costs, and find that when the nation's reputation is tied to the leader's crisis behavior, then audience costs allow democratic states to more credibly signal resolve.

¹¹ It should be noted, however, that Fearon (1994a, 580) makes a cursory suggestion for, but does not elaborate on, a competency-based rationale for domestic punishment when he mentions that crises are "carried out in front of political audiences evaluating the skill and performance of the leadership."

is the least competent type of leaders who renege, broken commitments are a sign of incompetence which the voters punish” (624). The model predicts that incompetent leaders have no incentive to initiate disputes and that only competent democratic leaders will do so. In the end, however, while Smith introduces a valuable new angle (the public’s evaluation of a leader’s competence) his expectations are consistent with those of the audience costs approach. Since only competent democratic leaders initiate threats, and given that they are also more resolved to carry them out, their opponents are likely to view them as credible and back down at lower levels of hostility.

Schultz (2001) departs from both Fearon and Smith by introducing an office-seeking domestic opposition party as an important strategic actor during crisis bargaining. That is, while both Fearon and Smith model the interplay between a single principle (the audience) and an agent (the incumbent), Schultz models the interplay between two agents (the government and opposition) as competing for the support of the domestic audience.¹² Given the opposition party’s office seeking goals, one of its most important decisions is whether to support or oppose the government’s policy. On the one hand, not supporting a successful policy is a sign of weakness that diminishes their future electoral prospects. At the same time, the opposition gets its highest payoff when it dissents from a failed foreign policy (i.e., backing down or losing a costly war).¹³ One

¹² As will be evident, my theoretical argument is more in line with the principle-agent model of Smith and Fearon, and the predictions are made regardless of the domestic opposition.

¹³ Interestingly enough, Fearon (1994a, 581) also suggested (but again, did not elaborate on) a similar rationale for the costliness of backing down in international crises, as “backing down after making a show of force is often most immediately costly for a leader because it gives

important implication from argument this is that the opposition party will never support a bluff and instead “only supports genuine challenges” (Schultz 2001, 94-95).¹⁴

By introducing the domestic competition between the government and opposition party, Schultz (2001) generates a number of novel results, yet the main issue of concern here—whether democratic threats are expected to be more credible—remains unaltered. Since the opposition party is unwilling to support bluffs, this is a signal to the adversary about the leader’s lack of resolve making the bluff unlikely to succeed. For this reason, democratic leaders are unlikely to issue empty threats in the first place. Hence, “when conditions are such that opposition parties would have incentives to oppose the use of force, governments often have incentives to refrain from making threats” (Schultz 2001, 69). As a result of this self-selection process, the observable implications are the same as those derived from the audience costs approach. Democratic leaders are unlikely to bluff, and instead initiate only those threats they intend to carry out, which, in turn makes their threats more credible than authoritarian ones.

In contrast to the winning coalitions approach, the audience cost approach has the added advantage of allowing for predictions of state behavior at different stages of an international crisis. Apart from attempting to explain the initiation of disputes and their subsequent escalation to war, the audience cost approach explores the dynamics of intra-

domestic political opponents the opportunity to deplore the *international* loss of credibility, face, or honor” (emphasis in original).

¹⁴ More precisely, Schultz (2001) states that “*while the government may have incentives to bluff, the opposition has no incentive to collude in a bluff*” (95; emphasis in original) and consequently, “the government’s willingness to bluff decreases” (96).

crisis bargaining in terms of the likelihood of threat reciprocation and the effective use of counter-threats. Moreover, rather than predicting the simple war/no war dichotomy for dispute outcomes, it makes precise predictions about which state in a crisis, if any, should be likely to back down.

At the same time, note that while Fearon (1994a), Smith (1998) and Schultz (2001) differ in terms of the specific bases for a leader's punishment for failing to carry out their threats, they all similarly posit that democratic leaders will always be punished for backing down after issuing a threat in a crisis. Thus, similar to the winning coalitions approach, the audience cost theory is premised on an assumption of an invariant willingness of the domestic audience to always punish a leader for foreign policy failure, regardless of the strategic context in which a dispute occurs. For example, democratic leaders are always expected to be punished for backing down during international crises, and as such, are less likely to bluff and likely to only initiate threats they intend to carry out. But the question remains as to why a leader should anticipate domestic political costs for bluffing, and ultimately backing down, if the issues at stake in a particular crisis are relatively low in terms of a state's national interests. Moreover, this assumption would lead us to the expectation that a democratic leader can always commit himself to stand firm in a crisis, and therefore convey his resolve, through the use of public threats. Yet, in this respect, the audience cost theory is ultimately vulnerable to the same criticism that Maxwell (1968, 19) leveled regarding Schelling's theory of commitment

that “an identity of interest, though it may be publicized by a process of declaratory commitment. . . *can hardly be created by it*” (emphasis added).¹⁵

In the end, therefore, all approaches linking domestic politics to international crisis behavior do so while ignoring the strategic context in which a dispute occurs. Even those studies focusing on ex post domestic political costs, which have led to some novel insights and have largely been supported in the literature, fail to consider the precise nature of the disputed good. It would seem, however, that this question is of dubious importance for these theories, as it can be expected to have implications for the domestic public’s evaluation crisis outcomes as foreign policy successes or failures. I thus turn now to the deterrence studies focusing on the issues at stake in order to gain a better understanding of how previous scholars have posited a role for this factor.

Strategic Interests and International Conflict

As just pointed out, the audience cost literature bypasses the role of strategic interests by focusing on public threats as signaling devices to enhance threat credibility through their ex post “tying hands” effects. In the end, therefore, they consider the value of the prize to be less relevant for signaling resolve than the tactic used to achieve it; that is, the tactic of “tying hands” by creating audience costs. This premise that domestic considerations have the greatest impact on a leader’s resolve is in sharp contrast to those approaches that consider threat credibility as primarily dependent on exogenous factors such as relative power and/or the balance of interests (George and Smoke 1974; Huth and

¹⁵ It should be noted that Schelling himself seemed to be aware of this issue, and thus he also outlined several behavioral strategies that can be used, in addition to public threats, in order to convey resolve.

Russett 1984; Danilovic 2002). In this latter literature, such factors are assumed to shape the inherent resolve of a threat, which places a value on the disputed good, and ultimately cannot be manipulated by different manipulative bargaining strategies, such as public threats that generate audience costs (George and Smoke 1974; Danilovic 2002; Zagare and Kilgour 2000).

As evident from the strategic studies of the issues at stake in coercive bargaining, the intensity of national interests involved in a crisis shapes the “inherent” resolve of a deterrent threat which, in turn, has a significant impact on a state’s threat credibility. Huth and Russett (1984, 1988; see also Huth 1988; Huth, Gelpi and Bennett 1993), for example, focus on the salience of direct ties between a defender and protege in extended deterrence—in terms of their alliance status, arms transfers, and trade—and find most of these ties to significantly increase the likelihood of extended-immediate deterrence “success”.¹⁶ If, however, deterrence fails (that is, the challenger continued to stand firm in light of the defender’s threats), then these ties make it more likely that the defender will go to war to defend the protege. These results thus confirm the expectation that the

¹⁶ Though the notion of extended-immediate deterrence is widely used, it may be necessary to define the deterrence terminology. *Extended* deterrence refers to cases in which a state uses threats to deter an attack against a third-part (or protege), and can be contrasted to *direct* deterrence, wherein a state is attempting to deter a direct attack on its own territory. The difference, therefore, refers to who the deterrence attempt is aimed to protect. The difference between *general* and *immediate* deterrence, on the other hand, is intended to indicate the immediacy of the deterrence crisis. As can be guessed, immediate deterrence refers to the use of threats and counter threats once an initiator (challenger) has already issued a threat, whereas general deterrence refers to attempts to prevent initial threats to be issued in the first place. For a more thorough discussion, see Morgan (1977), Huth (1988, 1999), and Danilovic (2002).

ties between the defender and protege have an influence on the defender's threat credibility, as well as the defender's resolve to fight if necessary.

Danilovic (2002) focuses on major-power deterrence cases and conceptualizes a state's interests (or stakes) in terms of a challenger's or defender's interests in the geopolitical region of a protege, which should ultimately influence the inherent credibility of their threats.¹⁷ Unlike the above scholars that only test extended-immediate deterrence failure and the escalation to war, Danilovic also tests whether the interests at stake influence the onset of extended-immediate deterrence as well—that is, a major power's willingness to step in as a defender in the first place. Her results indicate that when the stakes are high for a defender, its threat is inherently more credible than the challenger's because “the more salient the area is for a major power, the more likely it is that the power will be willing to defend a third party against another major power” (109-110). Consequently, a challenge will rarely occur in such cases. Alternatively, when the relative interests are in favor of the challenger, other major powers are less likely to become involved as defenders. The most dangerous situation, however, occurs when both the challenger and defender have equally strong interests at stake. In this case, war is the most likely outcome as major powers are more likely to fight over areas of strong and conflicting interests for both sides.

¹⁷ In my discussion of the hypotheses and quantitative tests, I return to this consideration of whether interests are conceptualized in terms of the direct ties between the defender and protege in extended deterrence (Huth and Russett 1984, 1988) or the ties with the protege's entire region (Danilovic 2002).

In all of the above studies, measures of strategic interests are typically better predictors of the outcomes of extended-immediate deterrence than are alternative explanations based on, for example, the defender's past behavior (as an indicator of its reputation for resolve) or regime type (as an indicator of the defender's level of audience costs). Both Huth and Russett (1984, 1988; see also Huth 1988; Huth, Gelpi and Bennett 1993) and Danilovic (2002), for example, find a stronger impact for their measures of the defender's interests than for the defender's reputation for resolve (see also the results reported by Signorino and Tarar 2006 which also point to a similar pattern).

Altogether, the implications are clear. These results show that strategic interests matter and have a stronger effect on predicting crisis outcomes than do the other factors such building a strong reputation for resolve (Schelling 1960) or domestically tying hands in order to create a commitment to stand firm (Fearon 1994a; Schultz 2001). Not surprisingly, however, the approaches centering on either domestic costs or strategic interests are often considered to offer competing explanations. Farber and Gowa (1997), for example, argue that the "democratic peace" can be explained by the fact that democracies shared common alliances (and thus, shared interests) during the Cold-War period rather than their regime types.¹⁸ Danilovic (2002) compares domestic audience

¹⁸ An alternative body of research to the deterrence studies emphasized above highlights the issues of whether there are common or conflicting interests between states. Conceptualized either in terms of alliance portfolio similarity (Bueno de Mesquita 1981; Signorino and Ritter 1999) or the similarity of voting patterns in the UN General Assembly (Gartzke 2000), states that have similar foreign policy ties are expected to have more common interests and less willing to initiate disputes against each other. Yet while these measures can perhaps highlight the influence of the overall level of cooperation between two states in a dyad, they are less useful for understanding how the strategic context, in terms of the interests at stake in a

costs and regional stakes as alternative influences on the likelihood of deterrence onset and outcomes. Similarly, alliances and trade ties are often used as control variables in quantitative analyses of institutional explanations for the democratic peace.

While deterrence studies of the issues at stake help us understand the relevant role of exogenous factors on credibility, the audience cost approach points to the importance of domestic sources of resolve. Instead of juxtaposing exogenous to endogenous factors, I take an approach that refines how we can model their interplay. Strategic interests matter, but only by revealing information about the preferences of the democratic audience. If, as I argue, the audience will only punish a leader for backing down when they consider the disputed good to be highly salient, then their preferences have a crucial impact on a leader's foreign policy behavior and consequently, the credibility of his threats. It is precisely this connection between domestic audience costs and strategic interests that can lead to a number of predictions about the conflict behavior of democratic leaders that were obscured in the previous studies due to their isolated treatment of these factors.

Theoretical Argument

The theoretical argument in this dissertation is motivated by the need to link a leader's anticipation of ex post domestic political audience costs to the interests at stake in order to predict crisis behavior. While I provide a more thorough formal treatment of this argument in the next two chapters, in the remainder of this chapter, I lay out and

particular dispute, influence crisis behavior.

discuss my main assumptions, and point to some more intuitive implications, which will be formally stylized in Chapters III and IV.

Assumptions

My argument is premised on four main assumptions. The first three are consistent with the literature focusing on ex post domestic political costs, whereas the fourth critically revises it in terms of the domestic audience's variable willingness to penalize their leaders. First, as is the case with the literature assuming that institutions serve primarily to influence a leader's anticipation of domestic punishment for foreign policy failure (Fearon 1994a; Bueno de Mesquita et. al. 1999; Schultz 2001), I assume that leaders want, above all, to maintain office. In this respect, the most important goal of an incumbent is that of office retention, and they conduct their foreign policies with this goal in mind. Second, I assume that democratic leaders are more vulnerable to domestic punishment than are their authoritarian counterparts. Given the electoral leverage that the domestic public has in democratic societies, as well as other institutional factors such as the necessity of maintaining a majority support in the parliament for prime ministers, it is quite plausible to anticipate that democratic leaders are more likely to be punished for their foreign policy failures than are their autocratic counterparts.¹⁹ The third assumption is that the domestic audience considers foreign policy failure in terms of a leader's failure to follow through on his public commitments. Hence, leaders generate audience

¹⁹ While I recognize the emerging literature pointing to variations among authoritarian regimes in terms of the constraints they place on leaders (see e.g., Peceny, Beer, and Sanchez-Terry 2002; Reiter and Stam 2003; Danilovic and Clare 2004), I nevertheless make this assumption in order to remain consistent with previous scholars.

costs during international crises that they pay if they issue a public threat and subsequently back down.

Yet I also introduce a fourth critical assumption that allows for the audience to have different preferences for a leader's actions in international crises, rather than restrictively assume that backing down always carries *high* domestic political costs. This relaxed assumption rests on the premise that the audience evaluates a leader's policy in terms of the salience of the interests at stake in the crisis. The magnitude of audience costs that a leader generates during a dispute is therefore considered to be a function of interests at stake in the crisis. When the strategic interests are relatively weak, the incumbent has more leeway to renege on a public commitment due to the relatively low level of anticipated audience costs. Alternatively, when the involved strategic interests are strong, failure to carry out a threat would carry high domestic audience costs, thus jeopardizing a leader's tenure.

This assumption about the audience's evaluation does not mean that the domestic audience is completely informed about all foreign policy issues. Rather, it simply means that leaders need to act *as if* the audience can form opinions about the prudence of certain foreign policy actions. In this respect, it is consistent with previous research that shows that the public can and does form opinions about issues related to foreign policy (Page and Shapiro 1992; Jentleson 1992). Moreover, while it is not necessary for the purposes of this dissertation to specify precisely the causal link between the interests at stake and the magnitude of a leader's audience costs, it is possible to posit some intuitive bases for this relationship. For example, consistent with Smith (1998), it is plausible to

assume that the domestic audience evaluates a leader's competence in terms of how s/he acts in the areas of strong national interests. In this way, backing down in a crisis of vital strategic interests could obviously be considered a sign of incompetence, which is then expected to be punished domestically.

A second possible link could be simply based on the public's self-interest. Vital strategic interests, by their very definition, are those in which the "costs to the nation are somewhere between severe and catastrophic if not protected and whose benefits are large when protected" (Art 1998/99, 83). Given that such vital interests are necessary for the national welfare as well as that of its citizens, it is easy to understand why they would be more likely to punish an incumbent for backing down in an area of strong strategic interests as opposed to those of low stakes. Finally, it is also possible that the audience costs are higher in cases of strong interests due to the intense scrutiny that such disputes generate in the media and among elites. According to this line of reasoning, "the general public should have its greatest impact on highly salient issues that draw intense attention from the media. . .and thereby pose the most direct threat of electoral punishment for government officials who are unresponsive" (Jacobs and Page 2005, 3).

Ultimately, then, there is a strong theoretical and empirical basis for understanding why leaders would generate a higher magnitude of audience costs in the areas of more vital interests. At the same time, as we move away from "vital" interests toward those of lesser importance, it is reasonable to anticipate that the implications for the public's perception of a leader's competence, the losses to the national welfare, and/or the media scrutiny would be less severe when a leader backs down, and therefore

that the magnitude of audience costs s/he would pay for failing to carry out a public commitment would decrease as well. However, this does not mean that there would be no audience costs associated with renegeing on a threat in an area of relatively weak interests. Rather, it simply means that these costs would not have as strong influence on an incumbent's office retention as when the crisis involves strong interests.²⁰

Implications for Crisis Behavior

One important implication that follows from these assumptions, especially the fourth one that I introduce, is that backing down in what the audience considers to be a low salience crisis will not necessarily carry large political costs resulting in a leader's removal from office. Rather, since the costs a leader pays for renegeing on a threat are based on how much the audience cares about the issue, the level of domestic punishment may range from severe to quite minor. This, in turn, should be expected to give rise to bluffing behavior by democratic leaders, since their incumbency status is not jeopardized by issuing a threat and even backing down (if the threat is resisted) under conditions of

²⁰ Note that I do not consider reputational effects to be as significant as Guisinger and Smith (2002), for example, do. Like Schelling (1960, 1966) they assume that events are interdependent in that the past behavior influences a state's reputation for strong resolve in current and future crises. My expectation for democracies to pay relatively low levels of audience costs on low salience issues presumes a secondary role of reputational concerns in low stakes crises. In general, it is rather consistent with the claims made by critics of Schelling's theory of "interdependent commitments": "[t]he obvious conclusion to be drawn from the failure of a state to fulfill a commitment is simply that the commitment did not represent an interest worth defending, at the level of violence and risk estimated to be necessary" (Maxwell 1968, 19). Moreover, and as discussed above, previous scholars (e.g., Huth and Russett 1984; Huth 1988; Danilovic 2002) have found little support for the "interdependence of commitments" claim that the failure to stand firm in one crisis influences threat credibility in future crises.

low salience.²¹ Even as we move away from the low end of interests and toward their intermediate range, it is still plausible to anticipate that the audience costs for backing down would not be so large as to prevent bluffing. Therefore, once we consider the magnitude of a leader's domestic audience costs to be variable, depending on the audience's evaluation of the strategic importance of the disputed good, then it is possible to anticipate finding democratic leaders initiating disputes as limited probes, which is opposite to the claims of previous audience cost scholars (Fearon 1994a; Smith 1998; Schultz 2001).

At the same time, if an incumbent issues a threat on a highly salient issue, then it is likely that failing to carry it out would trigger high domestic audience costs. It is precisely under these conditions that a leader would jeopardize his office retention for backing down. As a result, democratic leaders have a strong incentive to carry out threats in disputes of vital interests and, indeed, if their threats are resisted, war is perhaps the most likely outcome. Moreover, this should hold even when the *ex ante* prospect of victory in a possible war is not obviously high, since yielding on the highly salient issue would result in a certain loss of the good. This latter prediction departs from those of previous scholars that argue that democracies are likely to initiate or escalate only those disputes they can win (e.g., Bueno de Mesquita et. al. 1999; see also Lake 1992).

The above discussion suggests that democracies can initiate disputes when they are both highly and weakly resolved. Such bluffing behavior is consistent with the

²¹ Of course, in order for bluffing to occur, it is necessary for there to be incomplete information about the challenger's resolve. I incorporate this into the formal model in Chapter IV.

actions of authoritarian leaders, who are typically considered unconstrained in their ability to initiate disputes as limited probes. The problem, however, is that when both resolved and unresolved types of democratic leaders have an incentive to issue threats, their signals cannot be considered inherently credible. This is quite contrary to the audience cost claim that democratic threats are always considered credible since they only issue those threats they intend to carry out (Fearon 1994a; Smith 1998; Schultz 2001). Rather, I show that under certain conditions (i.e., when the interests at stake are relatively weak), democratic threats are not always credible nor necessarily more credible than those sent by authoritarian leaders. Instead, I predict that when their strategic interests are weak, democratic threats should be, and indeed will be, reciprocated at a relatively high rate. At the same time, as their interests increase, it is more likely that their opponents will acquiesce, and thus it is only under these conditions (i.e., the democratic challenger's relatively strong interests) that the expectations of the audience cost approach hold.

To briefly illustrate these two predictions that depart from the previous audience cost literature, consider the 1898 Fashoda crisis. The French sent a military mission to the upper Nile valley—long considered within the British sphere of influence—that was ultimately considered a threat to British interests. Previous scholars (Schultz 2001) have examined this case to illustrate the validity of the audience costs approach by showing how the British effectively used public threats to force France to back down. This is especially the case with respect to the Grey Declaration in 1895 that “any French expedition to the upper Nile would be ‘an unfriendly act’” (Taylor 1954, 354). Yet, while

the British side has received the attention of previous scholars, French actions have been largely unexplored.

In terms of the French decision to challenge British interests in the first place, historians typically disagree about precisely what the French hoped to gain by sending the Marchand mission to Fashoda. Some scholars, such as Taylor (1954), speculate that the sole basis for the expedition was to seek an Anglo-French alliance, whereas others believe it was an attempt to extract concessions from the Salisbury government, which was known for its generosity in crisis bargaining (Langer 1954; Brown 1970). In any case, it is commonly agreed that France would not be willing to fight in “the Fashoda swamps [that] could not be regarded as a matter of vital interests” (Langer 1951, 563). This is especially the case given that “every French politician of any sense knew that Egypt had been lost for good in 1882” (Taylor 1954, 380). This, in turn, raises the interesting point that, although France had democratic institutions, its actions can only be described as a bluff, which cannot be explained within the context of the audience cost or informational approaches. If, however, we tie the audience preferences over the issue to their incentive to remove a leader for backing down, then the French bluff and subsequent withdrawal is not so difficult to explain. The government was able to bluff precisely because there were little domestic ramifications if they failed to carry out their threats in the Fashoda crisis.²²

²² While there was a change of government in France at the time of the Fashoda crisis, there is a near consensus that it was most likely the domestically divisive Dreyfus affair, not Fashoda, that brought down the French government. After all, the government fell on October 25, well before France yielded by recalling the Marchand mission on November 1 (Brown 1970,

France, however, would not capitulate 12 years later when their interests were challenged by Germany during the Second Moroccan (Agadir) crisis. Unlike the situation in the Fashoda, where “war over Egypt had been ruled out by the French ever since 1840” (Taylor 1954, 380), France had been solidifying its interests in Morocco for almost a decade before the Agadir crisis (Schumann 1931; Roberts 1929). Consequently, the French public would not stand for any concessions to be made in Morocco (Gooch 1938) and, in the end, the French government stood firm, forcing Germany to acquiesce. Thus, in two different crises, the same country (France) would ultimately settle for two different outcomes: defeat in Fashoda and success in Agadir. However, only the outcome of the Second Moroccan (Agadir) Crisis is consistent with the expectations of the audience costs approach, though this is the case largely because their involved strategic interests were so high.

Going back to the case of Fashoda, it is also possible to question just how significant the public declarations by the British government would have been had it not had significant interests at stake. After all, the Egyptian protectorate had long been considered a prize among the British colonial possessions (Langer 1951; Townsend 1941), and one that they would ultimately be willing to fight to defend. Yet it is possible to question whether these public signaling techniques would have been effective in the absence of British vital interests. After all, just two years prior to the Fashoda incident, the same Salisbury cabinet initially took a similar uncompromising position—though

having significantly fewer interests in the disputed region—against the United States in the Anglo-American dispute over Venezuelan debts. Despite public commitments, the British eventually capitulated to US demands and accepted whatever terms “the United States chose to offer” (Taylor 1954, 410).

In the end, therefore, the revised theoretical argument advanced in this dissertation allows for democratic states to bluff in areas of their weak interests without serious domestic political repercussions. At the same time, when their interests at stake are relatively strong, then their leaders are more likely to anticipate serious domestic reprisals, including being removed from office, for failing to carry out their threats. This, in turn, has significant implications for the conflict behavior of democratic states, including bluffing behavior, that departs from previous expectations of the audience costs approach.

CHAPTER III

COMPLETE INFORMATION MODEL

In the last chapter, I posited several intuitive predictions about crisis behavior and outcomes that can be expected once we allow for the magnitude of a leader's domestic audience costs to vary based on the strategic interests at stake in a crisis, as I do here. Altogether, these predictions depart significantly from previous studies that consider the exogenous (interests) and endogenous (audience costs) sources of resolve to operate independently of each other. In this chapter, I subject my argument to a more demanding test in order to determine more accurately if these intuitive predictions indeed follow logically from my basic theoretical premises and whether the different parameters in my theory (domestic audience costs, strategic interests, and their interplay) actually operate as anticipated to produce different crisis outcomes. To this end, I specify and analyze a formal model of crisis bargaining under conditions of complete (this chapter) and imperfect (Chapter IV) information. As we shall see, many of the expectations intuitively derived in the previous chapter hold-up to the rigorous scrutiny of the game-theoretic analysis. At the same time, the structured analysis of the game generates additional predictions that will also be tested quantitatively in Chapter VI.

The Crisis Game

The extensive form version of the crisis game is presented in Figure 3.1, and the familiar reader will note that the structure and sequence of moves in this game are similar to the standard generic formal representation of extended deterrence crises. That

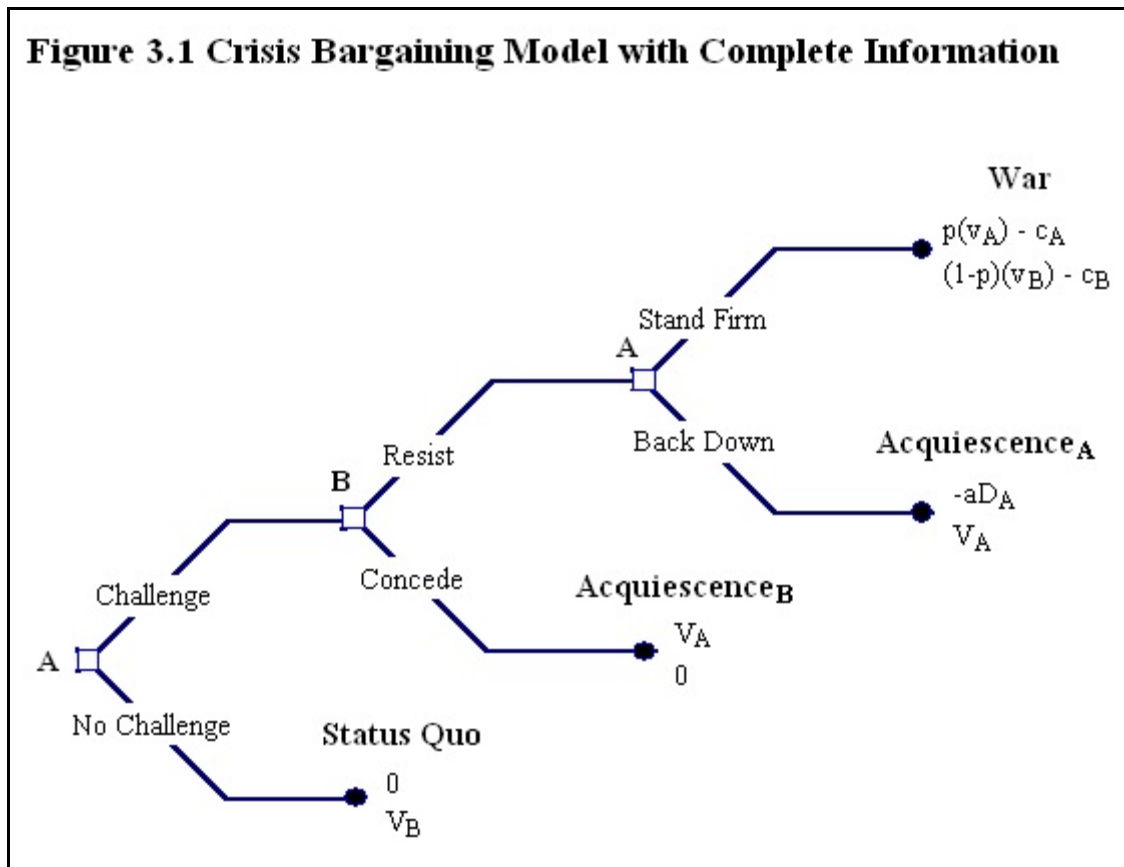
is, the available moves to each player are consistent with previous models of deterrence as analyzed, for example, by Zagare and Kilgour (2000) and Schultz (1999, 2001). I differ, however, from previous scholars in how I determine the payoff structures for each player and, specifically, in how I model the magnitude of a leader's audience costs for backing down in a crisis. I discuss this in more detail below.

Sequence of Moves and Crisis Outcomes

The game tree in Figure 3.1 illustrates the sequence of play and available moves for states A (Challenger) and B (Defender). At each decision node (represented by the open squares) the player whose turn it is to move can choose between one of two actions, represented by the different branches in the game tree and labeled accordingly. Crisis outcomes are represented by the terminal nodes (indicated by the shaded circles in Figure 3.1). The payoffs for each player are presented at each terminal node (and discussed in the next section). Following the standard convention, I list player A's payoff for each outcome first (top), followed by the payoff for player B (bottom).

I assume that there are two states that are involved in a dispute over some good, and that, in the status quo, State B is in possession of the good. At its first move of the game, State A decides whether to challenge the status quo by issuing a threat against State B.²³ If A does not challenge, the Status Quo prevails and B retains possession of the

²³ In this case, a challenge refers to a specific threat directed toward state B. As typically classified in the empirical literature, such actions can be manifested through verbal threats, the mobilization of troops, or an actual use of military force. However, I require that all actions are observable to the other side.



good. If A does challenge, then a crisis occurs and B must decide whether to resist by issuing a counter-threat or concede the disputed good. If B concedes, then the game ends peacefully with A in full possession of the good (Acquiescence_B). If B resists, then A must decide whether to stand firm or back down at the final stage of the game. If A backs down, the game ends with B in complete possession of the good (Acquiescence_A). If A stands firm, the crisis leads to War between A and B.

Payoffs

At the *Status Quo* outcome, A receives a payoff of zero (0) and B retains the disputed good with a value of v_B . Conversely, if A challenges and B concedes, then A

gains possession of the disputed good with a payoff of v_A whereas B loses the good and thus receives a payoff of 0. I assume that the value of the disputed good for both A and B has some non-negative value (i.e., $v_B, v_A \geq 0$). If war occurs (i.e., State A issues a threat, State B resists, and State A stands firm), then each side's payoffs from war are represented by the following expected utilities

$$EU_A(War) = p(v_A) - c_A \quad (3.1)$$

$$EU_B(War) = (1-p)(v_B) - c_B \quad (3.2)$$

A state's expected utility for war is therefore a function of its subjective probabilities of victory (p and $1-p$ respectively), the value of the disputed good for states A and B (v_A and v_B), and the subjective evaluation of the costs of war (c_A and c_B) for the leaders in A and B, respectively. In Chapter II, I discussed the notion of the value of the disputed good as the interests at stake for the states involved in a crisis and, in Chapter V, I further refine it for the purposes of the quantitative tests. The probability of victory can be intuitively understood as a function of the pre-war balance of military capabilities, as is commonly done in the strategic literature (see e.g., Bueno de Mesquita and Lalman 1992; Fearon 1995; Powell 2002).

While the first two parameters are relatively straightforward, the notion of the costs of war is itself a multifaceted concept and, while it is not necessary to specify precisely the factors that influence a leader's evaluation of c , a brief and intuitive

discussion at this point will aid in the interpretation of the results later on.²⁴ One obvious component that weighs on a leader's subjective evaluation of c would be the material costs of war, in terms of the amount of state resources that need to be spent to carry out the war effort. These material costs can be thought of in a direct sense—i.e., what proportion of the GNP will be required to wage the war?—or alternatively, in an indirect sense as opportunity costs—i.e., what other sectors of the public (i.e., welfare, social security, increased taxes, etc.) will be affected as a result of increased military spending? Another obvious aspect deals with the human costs of war in terms of casualties and/or lives lost. Thus, a war that will result in hundreds of thousands of casualties will be considered more costly than a relatively low scale military conflict that would lead to a couple of hundred (or even thousand) casualties.

At the same time, there are other, less obvious components of c , such as the one related to the political costs of war for an incumbent in terms of a higher probability of being removed from office (Schultz 2001, 34; see also Bueno de Mesquita and Lalman 1992; Bueno de Mesquita et. al. 1999).²⁵ This component is particularly important if, as many scholars claim, leaders are interested in their office retention (Bueno de Mesquita and Siverson 1995). It is also not necessarily independent of the previous two factors,

²⁴ For an extensive discussion of the factors that go into a leader's evaluation of the costs of war, see Schultz (2001, 31-36).

²⁵ In this respect, it is not necessary that leaders are held accountable for becoming involved in a war in the first place (as would be the case if the public was especially dove-like—see for example, Bueno de Mesquita and Lalman 1992). Rather, these political costs of war can also be considered in the heightened vulnerability to domestic punishment for *losing* a war (e.g., Bueno de Mesquita et. al. 1999).

since it is well documented that public approval for the war is reduced as the number of casualties increases (Mueller 1973) and/or as leaders must divert spending from other domestic areas or increase taxes to pay for the continuing war effort.²⁶ Finally, political costs are also not constant within the same general political systems. Rather, leaders within each regime can be more or less vulnerable to these political costs depending on, for instance, the existence of a viable alternative candidate for the leadership position, or whether a leader relies on the confidence of a coalition of parties for his office retention (as in coalitional parliamentary system) as opposed to relying on merely the confidence of his own party (as in majoritarian parliamentary systems).²⁷ Even in majoritarian parliamentary systems, a leader can be more or less vulnerable to the domestic political costs of war based on factors such as intra-party cohesion.

The point of listing all of these factors that comprise the cost term ($c_{A,B}$) is two-fold. First, since these costs are an important determinant of a leader's resolve, it is theoretically necessary to determine their nature. Second, the above discussion also highlights the difficulty of assuming conditions of complete information about a leader's costs of war. When I introduce imperfect information into the analysis in the next chapter, I discuss some of the possible sources of uncertainty about the costs of war. In

²⁶ For example, while George H.W. Bush promised "No new taxes" in his 1988 presidential campaign, the necessity of increasing taxes to pay for the Gulf War was an instrumental factor leading to his lost re-election bid in 1992.

²⁷ This latter factor has been the subject of a number of studies attempting to differentiate between democratic states in their conflict behavior (Auerswald 1999; Elman 2000; Ireland and Gartner 2001; Gelpi and Grieco 2001; Reiter and Tillman 2002). See Lijphart (1984) for a further discussion of the distinction between majoritarian and coalitional parliamentary systems.

this chapter, however, we will simply assume that states act *as if* their opponent is completely informed of both their own and their adversary's costs of war.

The remaining possible outcome in the game—*Acquiescence_A*—is further critical for understanding the impact on a leader's resolve (if we assume it to be a function of audience costs as I do here) once he decides to issue a challenge. Note in Figure 3.1 that if A backs down at the final node of the game, the payoffs for A and B are $-aD_A$ and v_B , respectively. That is, if A backs down, his opponent retains possession of the disputed good, while he pays audience costs $-aD_A$. Similar to previous audience cost scholars, I make the assumption that democratic states generate higher audience costs during a dispute than authoritarian ones. As discussed in the previous chapter, previous scholars examining the role of audience costs in crisis bargaining (Fearon 1994a; Schultz 1999, 2001) have not directly specified that factors that determine the audience's willingness to politically punish a leader for backing down. Consistent with my argument that audience costs are dependent on the domestic audience's evaluation of the good, I assume that the magnitude of a leader's audience costs is determined as follows.

$$aD_A = r(v_A^2) \tag{3.3}$$

Where v_A is the observable value of the disputed good for State A, and r is simply some multiplier that differentiates between democracies and autocracies indicating the ability of the audience to penalize a leader. Technically, r can take any positive value from zero to one, and I assume that it is higher in democracies than it is in nondemocracies.²⁸

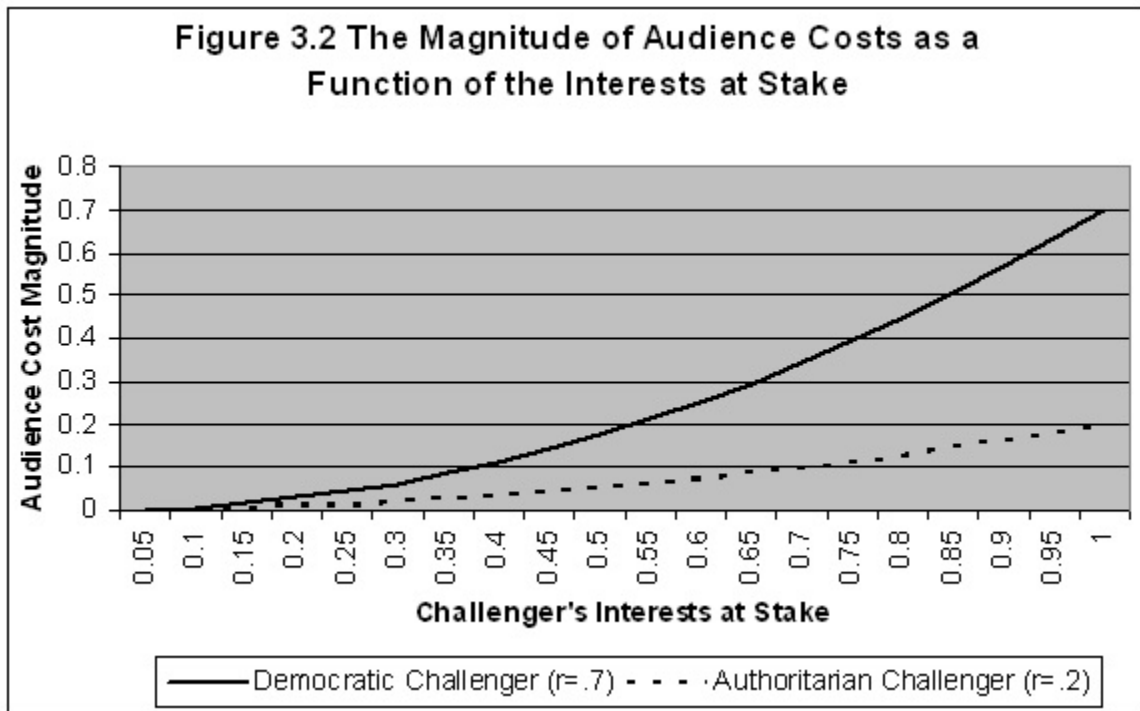
²⁸ While it is beyond the scope of this study, note that r can also be considered as an indicator, for example, of the strength of the domestic opposition. It would thus be interesting to further examine different magnitudes of r in order to evaluate differences both between and

There are a number of different ways to represent the magnitude of audience costs a leader faces based on the audience's evaluation of the disputed good. However, opting for $r(v_A^2)$ as in equation (3.3) has three appealing implications. First, note that aD_A is strictly increasing as the observable value of the disputed good also increases. Thus, consistent with the discussion of the audience's evaluation in the previous chapter, this meets the criterion that the domestic audience places more emphasis on salient issues than it does on those that are in the low range of interests at stake. They would consequently be more likely to punish a leader for failing to carry out their threats as the strategic interests at stake increase. Second, note that the magnitude of aD_A rises at an increasing rate with a rise in the interests at stake. The implication here is that the domestic audience is increasingly more likely to punish a leader for failing to carry out their threats as the value of the disputed good increases. Finally, note that the magnitude of audience costs is an interactive function of r and v_A and, since this relationship is not readily apparent, I illustrate it graphically in Figure 3.2.

As can be seen from Figure 3.2, the magnitude of a leader's audience costs rises (at an increasing rate) with the interests at stake.²⁹ Note also that, as was just discussed above, this holds for both democratic and authoritarian states. In this respect, there is an interesting pattern showing that, at the lower level of the disputed stakes, the magnitude

within democratic and authoritarian regimes in the magnitude of the audience costs they face.

²⁹ In Figure 3.2, I set the lower level boundary of the strength of the domestic opposition, r , (i.e., for nondemocracies) at .2 as opposed to zero. This is because it is quite questionable to assume that nondemocratic leaders face no opposition (see e.g., Peceny, Beer and Sanchez-Terry 2002; Reiter and Stam 2003; Peceny and Beer 2003; Danilovic and Clare 2004; Lai and Slater 2006).



of audience costs is essentially the same for both democracies and autocracies. This implies, quite consistent with the discussion in the previous chapter, that it is not always the case that democratic states are more vulnerable to domestic punishment for backing down in a crisis than are autocracies. Rather, at the extreme low end of the interests at stake, both types of leaders (democratic and authoritarian) can face low levels of audience costs. Note also, however, that the rate of increase in aD_A (per increase in v_A) is higher for democracies than it is for autocracies. Hence, Figure 3.2 shows precisely when democratic leaders face higher audience costs than nondemocracies—that is, when their domestic audience places greater emphasis on the disputed good.

This specification of the magnitude of domestic audience costs thus captures the *theoretical* argument here and as presented in the previous chapter. It simply postulates

that leaders (and particularly democratic leaders) face variable levels of audience costs depending on the audience's evaluation of the interests at stake. At the same time, while relatively simple, this argument leads to some interesting implications that significantly modify previous expectations about how audience costs influence crisis bargaining. These will be further apparent from the equilibrium generated by the game. I now turn to solving to the complete information game.

Solution to the Complete Information Game

As is standard in finding equilibria under complete information, I use subgame-perfection as a solution concept, which requires that each player's strategy in every subgame is optimal given the other player's strategy in that subgame. The game presented in Figure 3.1 has three subgames—the entire game, the subgame beginning with B's move at the second node of the game, and the one at A's final decision node—and each player's optimal strategy need be identified at each of these three subgames. Using backward induction, we see that, at the final node, A must choose between standing firm and backing down. In this case, A will stand firm if and only if he is resolved to fight, which can only be the case when $EU_A(War) \geq EU_A(Acquiesce)$:

$$-aD_A \leq p(v_A) - c_A \quad (3.4)$$

We can determine from this condition (3.4) the value of costs at which A is willing to fight rather than back down. That is, if

$$c_A \leq p(v_A) + aD_A \quad \equiv \quad c_A \leq c_A^* \quad (3.5)$$

A threshold value (c_A^*) is thus critical in that A stands firm (and goes to war) if $c_A \leq c_A^*$, and backs down otherwise ($c_A > c_A^*$). Substantively, this means that a high value of the

disputed good (v_A) or high audience costs (aD_A) that A's leader will pay for backing down, relative to the costs of war, increase the likelihood that A will stand firm (that is, by increasing c_A^*). Alternatively, an increase in the costs of war (c_A) makes it more likely for A to back down. Both of these expectations are fairly intuitive.³⁰

Since this is a game of complete information, B knows whether or not A will stand firm at the final decision node. In other words, B knows whether A is resolved, and she can therefore condition her response accordingly. This leads to two separate possibilities. If $c_A > c_A^*$ (the challenger is not resolved), then B will always choose to resist since her payoff from doing so (v_B) is greater than the payoff of zero from conceding ($v_B \geq 0$). If, on the other hand, A stands firm at the final node, then B will only resist if her expected utility for war is greater than that of conceding the good in dispute. That is, if

$$0 \leq (1-p)(v_B) - c_B \quad (3.6)$$

From (3.6), we can derive B's critical threshold for resisting (given that the challenger will stand firm) as follows:

$$c_B \leq (1-p)(v_B) \quad \equiv \quad c_B \leq c_B^* \quad (3.7)$$

As was the case with A, a threshold value of war costs for B (c_B^*) exists such that if $c_B \leq c_B^*$, then B resists, while if $c_B > c_B^*$, then B concedes the disputed good to A. As

³⁰ Consistent with previous scholars, I consider condition (4) to indicate a leader's resolve (i.e., whether a leader will carry out a threat). Credibility, on the other hand, refers to State B's belief in State A's resolve (i.e., the defender's belief in the relationship between c_A and c_A^*). Under conditions of complete information, there is no difference between the two, since State B knows whether or not $c_A \leq c_A^*$ (i.e., whether a leader is resolved). Under conditions of imperfect information, however, this is not necessarily the case and a defender can consider some threats credible even though the challenger is not resolved to carry them out.

for state A, we also find that an increase in the value of the disputed good (v_B) for B makes it more likely that she will resist, while an increase in the costs of war (c_B) makes it more likely for B to concede.

Finally, in terms of A's initial decision at the first node of the game (i.e., whether or not to challenge the status quo), it is necessary to consider two separate conditions, depending on whether or not B resists. If B resists at the second node of the game, then A's decision to challenge or not challenge the status quo would depend on whether the $EU_A(War)$ is greater than his status quo payoff of zero. Thus, A will challenge if

$$0 \leq p(v_A) - c_A \quad (3.8)$$

which, solving for c_A , yields the critical threshold value

$$c_A \leq p(v_A) \quad \equiv \quad c_A \leq (c^*_A)_2 \quad (3.9)$$

Inequality (3.9) thus represents the threshold $(c^*_A)_2$ wherein if the costs of war are below this threshold [i.e., $c_A \leq (c^*_A)_2$], then A challenges. If condition (3.9) is not met, then A does not challenge and the *status quo* outcome prevails.

To distinguish this threshold from the one in (3.5), in which A compares his payoff from war to backing down, I present the threshold value c^* differently for the two separate choices. When A decides between war and backing down, the threshold value is labeled as c^*_A . When A compares his payoff from war to that from the status quo, the threshold value is again critical, but to distinguish it from the previous situation, I label it $(c^*_A)_2$. Note, however, the main difference between these two threshold requirements. In the former condition (c^*_A), audience costs are important as the leader must choose between war or backing down. In the latter condition ($(c^*_A)_2$), audience costs play no role

since backing down is not part of the choice situation. Note also that if B resists, then A will not challenge if he would also not be willing to stand firm at the final stage of the game. This is because $aD_A \geq 0$ (or conversely, $-aD_A \leq 0$) meaning that backing down at the final node is never preferred to the status quo. Hence, under complete information, bluffing (issuing a threat backing down) does not occur.

So far, the discussion of A's decision to challenge at the start of the game assumed that B will resist. If B will not resist, then A's decision to challenge depends again on whether A would be willing to stand firm at the final node of the game (i.e., whether $c_A \leq c_A^*$).³¹ If $c_A \leq c_A^*$ (A will stand firm at the final stage of the game) and $c_B \geq c_B^*$ (B will concede if a challenge is made), then A will always challenge since his payoff from the outcome when B acquiesces (v_A) is greater than his status quo payoff of 0. Note, however, that this can occur regardless of whether condition (3.9) holds since, if state B will back down at the second node, then A's expected utility for war relative to the status quo is not relevant. As will be discussed below, this implies that even if the status quo is preferred to war, a challenger can still "force" a weakly resolved state B to back down if the leader in A can generate enough domestic audience costs for himself at the final node to make war preferred to backing down. I will revisit this important finding later in this chapter in the discussion of the equilibria.

Before moving to the discussion of the equilibria, note an important relationship between the threshold requirements in conditions (3.5) and (3.9) for the challenger. That

³¹ Recall that if this condition is not met, then B will always resist at the second node of the game. Hence, the requirement $c_A \leq c_A^*$ is a necessary (though not sufficient) condition for B to concede at the second node.

is, the only difference between c_A^* and $(c_A^*)_2$ is the audience cost term in the former threshold requirement and, since by assumption, $aD_A \geq 0$, then $(c_A^*)_2 \leq c_A^*$ is true as well. The implication is that, if a leader prefers war to the status quo, then he also always prefers war to backing down. Yet the opposite is not true: a leader can prefer war to backing down without preferring war to the status quo. This, in turn, has two interesting substantive implications depending on the defender's willingness to resist.

First, when the defender is unlikely to resist, then this condition leads to a coercive form of crisis initiation by the challenger, wherein the challenger's ability to generate audience costs can essentially "force" a defender to concede, regardless of the relative value of the status quo in relation to the expected utility from war. That is, if the defender knows that the challenger can generate high enough domestic audience costs to make him resolved (and if the defender would herself prefer to concede), then a challenger can issue a threat and take the disputed good *even though* war is less optimal than the status quo. Essentially, this occurs because the defender would herself prefer concessions to war (though again, only against a resolved challenger), which makes war a zero-probability event for the challenger. Below, I discuss how this finding reflects on the differences between democracies and autocracies in terms of their coercive abilities.

Alternatively, if the defender will not concede, but rather will resist upon observing a threat, then the challenger can only issue a threat if $c_A \leq (c_A^*)_2$. That is, A will challenge under this condition only if he prefers war to the status quo. In this case, the magnitude of audience costs that a leader faces is essentially inconsequential for the challenger's decision to initiate. This, in turn, suggests that there are selection effects

wherein, under complete information, challengers issue threats against resolved defenders only when the status quo outcome is worse than the expected utility from war.

Subgame Perfect Equilibria

The complete information game in Figure 3.1 leads to four separate equilibria outcomes—three peaceful, and one violent.³² These are: *Status Quo* (which arises under two conditions), *Acquiesce_B*, and *War*. Note here that the challenger's acquiescence is not an equilibrium because bluffing never occurs under conditions of complete information (as mentioned above). These equilibria, and the threshold requirements that are necessary to generate them, are further illustrated in Table 3.1. The first column in Table 3.1 describes the equilibrium outcome (War, B Concedes, Status Quo). Beneath each equilibrium outcome (in parentheses) are the strategy profiles for players A and B that make up the equilibrium, with the first two actions referring to player A's decision at the first and third decision nodes, and the third strategy referring to B's choice at the second decision node. The second and third columns in Table 3.1 provide the threshold conditions for A and B respectively that must be met in order for each outcome to occur in equilibrium.

An analysis of these threshold requirements, and the relative relationships of the different parameters required to generate them, can lead to interesting insights on when the different outcomes of an international crisis are likely to occur. However, not all of

³² In the text here, I discuss only those four strategy profiles that comprise the subgame-perfect equilibria. These are thus optimal and form stable equilibria. In the appendix to this chapter, I show why the remaining four strategy profiles in the complete information game cannot be subgame-perfect equilibria, and hence, cannot be solutions to the game.

TABLE 3.1 Complete Information Equilibria and Threshold Requirements

Equilibrium (Strategy Profiles)	Threshold Requirements	
	State A	State B
War (Ch SF, RS)	$c_A \leq (c_A^*)_2$	$c_B \leq c_B^*$
B Concedes (Ch SF, CD)	$c_A \leq c_A^*$	$c_B > c_B^*$
Status Quo (\sim Ch SF, RS)	$c_A > (c_A^*)_2$ and $c_A \leq c_A^*$	$c_B \leq c_B^*$
Status Quo (\sim Ch BD, RS)	$c_A > c_A^*$	$c_B \leq c_B^*$ or $c_B > c_B^*$

Note: Ch = A Challenges; SF = A Stands Fir; BD = A Backs Down; RS = B Resists; CD = B Concedes.

these parameters are critical for the theory advanced here, and there is a valid theoretical motivation for focusing my attention on two parameters in particular: the value of the prize for A and B (v_A and v_B) and the amount of audience costs that A will pay for issuing a threat and backing down at the final node of the game (aD_A).

War. Perhaps the first thing that need be discussed is that, under the set up of this game, war can occur in equilibrium under conditions of perfect information. As seen in Table 3.1, the threshold requirements required to generate this equilibrium are that $c_B \leq$

c_B^* —meaning that B will stand firm at the second node of the game (regardless of A’s resolve to carry out the threat in the end)—and when $c_A \leq (c_A^*)_2$ —which implies that A would prefer war to the status quo payoff of zero given that B will resist his threat. An analysis of the different parameters for these threshold requirements reveals that war is more likely to occur when both sides have sufficiently high interests at stake in the crisis.³³ This, in turn, confirms the expectations of Danilovic (2002) about how war may be unavoidable when states have competing and mutually strong interests in a particular issue.³⁴ It also validates the relevance of the stakes as a component in my model.

Defender concedes. In equilibrium, war occurs when the value of the disputed good for both the challenger and defender is sufficiently high relative to the costs of war. Alternatively, when the defender’s interests at stake are relatively low (thus making $c_B > c_B^*$), it is more likely to be willing to concede the disputed good. Recall, however, that this will happen if and only if the challenger is resolved to fight at the final stage of the game (i.e., $c_A \leq c_A^*$). As mentioned above, under these conditions, a challenger can coerce a defender into backing down even if he would prefer the status quo to war. This is because the ability of the challenger to generate high enough audience costs for

³³ Actually, the level of stakes required to generate this condition can be high, low, or intermediate, depending on the costs of war. However, if we consider the costs of war to be at least in the intermediate range (which is relatively unproblematic), then it is unlikely to find states fighting a war over low stakes issues. At the end of this chapter, however, I do discuss some of the conditions under which we could plausibly find war when one of the states has relatively low interests at stake.

³⁴ Note that “War” can occur as an equilibrium outcome under complete information because unlike previous scholars (Fearon 1994; Schultz 1999, 2001), I do not assume that there is always some settlement that would make both sides better off in the dispute.

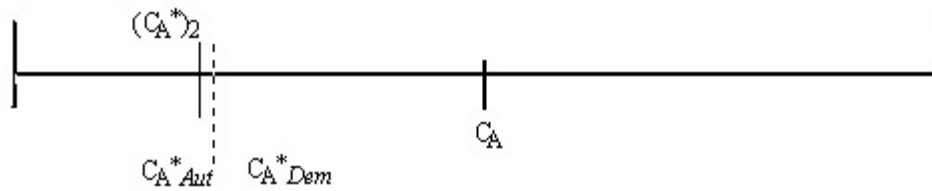
himself from backing down to make his threat credible. This, in turn, essentially makes an unresolved defender's resistance (and thus, war) a zero-probability event.

A simple analysis of v_A and aD_A lead to some intriguing results for when this is possible. Recall from the above assumptions that these two parameters are interrelated such that the magnitude of audience costs for backing down are increasing in the value of the disputed good (that is, $aD_A = r(v_A^2)$). Given this, it is relatively intuitive to understand that, given some costs of war, a leader will be unable to generate high enough audience costs to make standing firm optimal at the final stage of the game when the interests at stake are relatively low, since the audience's evaluation of the disputed good is itself relatively low. Alternatively, given the same costs of war, at the upper level values of the disputed good, audience costs are essentially redundant since the high salience of the disputed good makes it more likely that a leader will be resolved to fight (i.e., $c_A \leq (c_A^*)_2$) even in the absence of audience costs.

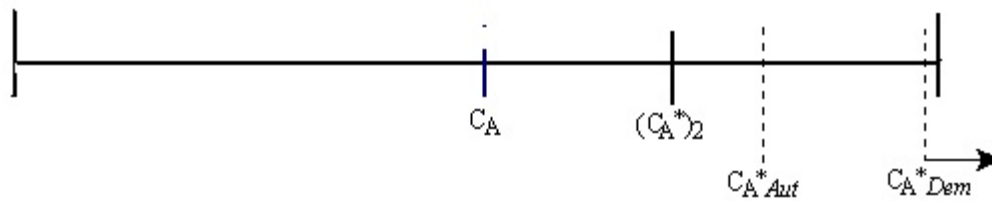
Ultimately, and somewhat counterintuitively, audience costs under complete information have the most significant effect when the value of the good is in the middle range—i.e., when the value of the disputed good is neither so low as to make a threat incredible nor too high as to ensure its “inherent” credibility. Under these conditions, a leader's ability to generate audience costs can raise his threshold for war at the final stage of the game to force a defender to concede rather than resist. In this respect, we can anticipate an important difference between democracies and autocracies in their ability to coerce an opponent into conceding, and I illustrate this effect in Figure 3.3.

Figure 3.3 The Interactive Effects of Audiences and Interests on Resolve

Case 1: Challenger's Weak Interests
($V_A = .2$)



Case 2: Challenger's Strong Interests
($V_A = .7$)



Case 3: Challenger's Intermediate Interests
($V_A = .4$)

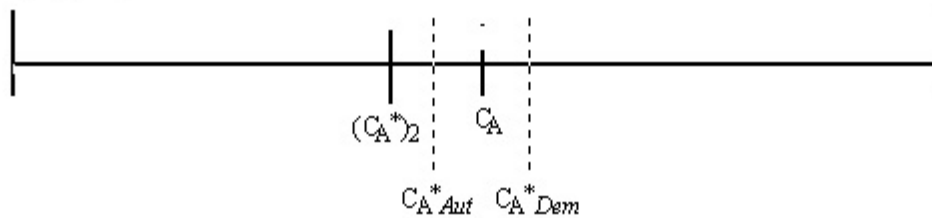


Figure 3.3 illustrates one implication of my theoretical argument about the interrelationship between audience costs and interests at three different levels of interests (low, high, and intermediate respectively), while holding the costs of war constant. For the purposes of this illustration, I consider only two values of r (the strength of the domestic opposition which differentiates democracies from autocracies) and assume that r is high for democracies (.7) and low for autocracies (.2).³⁵ As audience costs only affect the threshold c_A^* , I label the differences between democracies in terms of this threshold value, where $c_{A(Dem)}^*$ represents a democratic challenger's resolve at the final node of the game and $c_{A(Aut)}^*$ represents an authoritarian challenger's resolve.

As can be seen in Figure 3.3, at the extreme low level of v_A (Case 1 in Figure 3.3) neither democratic nor authoritarian challengers are able to generate enough audience costs to coerce their opponent into conceding the good. In this case, then, the low value of the disputed good ensures that a threat by the challenger would be incredible and, given this, the defender will always have an incentive to resist. As a result, a challenge is unlikely to occur, regardless of the challenger's regime type.³⁶ Alternatively, at the extreme high level of v_A (Case 2 in Figure 3.3), the value of the disputed good is so high that the challenger's threat is always credible, regardless of the magnitude of audience costs (see that $(c_A^*)_2$, which does not include the audience cost term, is higher than c_A).

³⁵ I hold the costs of war at .5 (intermediate costs), which is neither so low to make the majority of threats credible nor high to make them incredible. Theoretically, however, the costs of war can take any value along the horizontal axis in Figure 3.3. These regime values are inevitable arbitrary, but are set here only for illustrative purposes.

³⁶ Again, under conditions of the challenger's low interests at stake, a threat can only be credible if c_A is itself low.

Hence, audience costs are redundant, and both democratic and authoritarian challengers are likely to initiate because the defender will concede in this case.

Finally, in Case 3 depicted in Figure 3.3, I illustrate the relationship between c_A and c_A^* at the intermediate range of interests ($v_A=.4$), and it is here that we find the greatest difference between democratic and authoritarian states in their ability to coerce an opponent into conceding the disputed good. In this case, the value of the disputed good is high enough so that, when a democratic leader issues a threat, he is able to generate enough domestic audience costs to ensure that he will carry it out ($c_A < c_{A(Dem)}^*$). This is not the case, however, for an autocratic leader who, even though the value of the disputed good is the same as for the democratic one, cannot generate high audience costs to make himself resolved ($c_A > c_{A(Aut)}^*$). In this case, we would expect to find the defender conceding to the democratic challenger and resisting against the autocratic one. This, in turn, gives an incentive to democratic states to issue threats while ensuring that autocracies would refrain from initiating a dispute.

Status quo. The final equilibrium outcome from the complete information game refers to situations in which the challenger does not attempt to upset the status quo by initiating a dispute against state B. This outcome can arise from two conditions. Consider first the scenario in Table 3.1 in which the defender is resolved to go to war if the challenger issues a threat ($\sim Ch, SF; Rs$). As already discussed, when this is the case, the challenger will only issue a threat if his expected utility from war is greater than his status quo payoff of zero (i.e., $c_A \leq (c_A^*)_2$). If this is not the case, then the challenger will never issue a threat since the expected utility of war leaves A worse off than he was at

the status quo. In this case, the challenger is “selecting” himself out of a crisis due to (1) the defender’s relatively strong interests, and (2) his own relatively low interests at stake.

An even more interesting condition arises when the defender is not resolved to resist the challenger’s threat; that is, when $c_B > c_B^*$ and the defender would prefer to concede than go to war (see the last scenario in Table 3.1 with the strategy profile $\sim Ch, BD; Rs$). In this case, the status quo results from the inability of A to generate high enough audience costs at the final node to make standing firm preferred to backing down. This contrasts the above discussion, where leaders could generate enough audience costs to “force” an unresolved defender to concede the disputed good, and we can see this equilibrium at work in Case 1 in Figure 3.3 (where neither democracies nor autocracies can issue a credible threat) as well as in Case 3 (though this time only for autocracies).

Discussion

Before analyzing the crisis game under imperfect information, we should first consider the pertinent theoretical expectations generated from the complete information game. One is that, when the challenger’s resolve is common knowledge, bluffing does not occur. This is a fundamental aspect of international relations in that, when the cards are laying face-up on the table, no actor can make their opponent believe they are more resolved than they truly are. This is the case for both democracies and autocracies.

Second, I found that increasing the value of the disputed good increases a challenger’s resolve to stand firm by increasing the magnitude of audience costs a leader will pay for backing down. Thus, the influence of audience costs on resolve is not

monotonic, but rather can increase or decrease depending on the value of the disputed good. It also differs between democracies and autocracies in that, as these interests increase, the magnitude of audience costs are higher for democracies than they are for autocracies, and the difference between the magnitude of audience costs for these two states is increasing with the interests at stake. Even for democracies, however, we find that this relationship is not straightforward. Instead, at the low end of strategic interests, democratic states cannot necessarily ensure their own resolve by generating audience costs, and as a result, at the low end of interests at stake, there is only a negligible difference between democracies and autocracies in terms of the credibility of their threats under complete information.

The complete information game therefore yields some interesting implications as to how the value of the interests at stake influence a leader's resolve, and the conditions under which a democratic state's threat is credible, both compared to nondemocracies as well as to other democracies based on the level of strategic interests. We also know that it is possible for a challenger to be resolved or unresolved at almost any value of the disputed good, because resolve is also a function of the costs of war (c_A) *relative to* the value of the interests at stake and audience costs. That is, even when the interests at stake are weak, it is possible that a challenger can be resolved as long as the costs of war itself is low.³⁷ Alternatively, even at the high end of strategic interests, a leader may be unresolved, as long as the costs of war are high enough. Thus, under complete

³⁷ To see that this is true, consider moving c_A in Case 1 of Figure 3.3 far to the left (i.e., thus decreasing the costs of war). If it is moved far enough to the left, then both democratic and authoritarian threats would be known to be resolved, despite their low interests at stake.

information, the defender's knowledge of the challenger's costs of war is just as important factor influencing threat credibility as the interests at stake and the magnitude of domestic audience costs.

Hence, complete information about the costs of war ensures that a defender does not resist against a challenger that is resolved to fight even at the low level of observable interests. It also ensures that the defender does not concede to an unresolved challenger who has relatively strong interests at stake. As discussed above, assuming that the defender is completely informed about the challengers costs of war may be problematic, and I now turn to an analysis of the imperfect information of the crisis game.

Proofs for the Complete Information Game

To analyze the complete information game, I use subgame-perfection, which requires that each player's strategy in each subgame is optimal given the other player's strategy. There are eight possible subgame-perfect equilibria (SPE) in this game. In the text to Chapter III, I discuss the four SPE to this game. Here, I confine myself to showing the nonexistence of a SPE for the remaining four strategy profiles. I do so by showing that at least one of the actions in the strategy profile is not optimal in at least one of the subgames.

Subgame Perfection

Scenario 1: A Challenge, B Resist, A Back Down (Ch BD, RS)

There can be no SPE in which state A challenges and backs down at the final node of the game, since this would require that $c_A > c_A^*$ and $c_A \leq (c_A^*)_2$. In other words, it

requires that $(c_A^*)_2 \geq c_A > c_A^*$, or equivalently, that $(c_A^*)_2 > c_A^*$. This can only be the case if

$$p(v_A) + (1-p)(-a') > p(v_A) + (1-p)(-a') + aD_A \quad (3.10)$$

which reduces to $aD_A < 0$. However, by assumption $aD_A \geq 0$, and therefore it is not possible that $(c_A^*)_2 \geq c_A > c_A^*$. Thus, it would never be optimal for A to back down at the final node of the game if it is willing to challenge at the first node, and therefore this cannot be a SPE.

Scenario 2: A Challenge, B Concede, A Back Down (Ch BD, CD)

There can be no SPE in which state B will concede if state A will back down at the final node. If the challenger will not stand firm at the final node, then B must decide between the payoff of zero if he concedes and the payoff of v_B if he stands firm. Since $v_B > 0$ by assumption, then it cannot be the case that B would concede at the second node. Moreover, as was the case in Scenario 1, state A will never challenge if it will back down at the final node.

Scenario 3: A ~Challenge, B Concede, A Stand Firm (~Ch SF, CD)

There can be no SPE in which A does not challenge if B will concede in the very next move. If B will concede at the second node, then A must decide between the status quo payoff of zero and the payoff of v_A . Since, by assumption, $v_A > 0$, A will always challenge if B will concede. Hence, this cannot be a SPE.

Scenario 4: A ~Challenge, B Concede, A Back Down (~Ch BD, CD)

As with Scenario 2, there can be no an SPE wherein B will concede if A will not stand firm at the final node. Please see the discussion of Scenario 2.

CHAPTER IV

INCOMPLETE INFORMATION MODEL

The analysis of the formal model under conditions of complete information led to some interesting predictions for how the value of the interests at stake and the magnitude of audience costs influence crisis behavior. Ultimately, however, this behavior was a result of each side's knowledge of their opponent's resolve (that is, by the condition of complete information): since each side knew with certainty what the other would do in any given situation, they could condition their responses accordingly. Thus, a defender would always resist when facing an unresolved challenger—even if her expected payoff from war was lower than that from acquiescence—precisely because she knew that the challenger was irresolute and would back down at the final stage. At the same time, because an unresolved challenger knew that he would always have to back down after issuing a threat, he would never challenge in the first place. Thus, under conditions of complete information, bluffing did not occur.

In this chapter, I analyze a one-sided incomplete information version of the crisis game wherein the defender is no longer certain about whether the challenger will stand firm or back down at the final node of the game. Under these circumstances, it is quite appropriate to anticipate bluffing to occur. Two main questions that are addressed in this chapter are therefore (1) when is the defender's belief about the challenger's resolve an important factor influencing her willingness to resist, and (2) when her beliefs about the

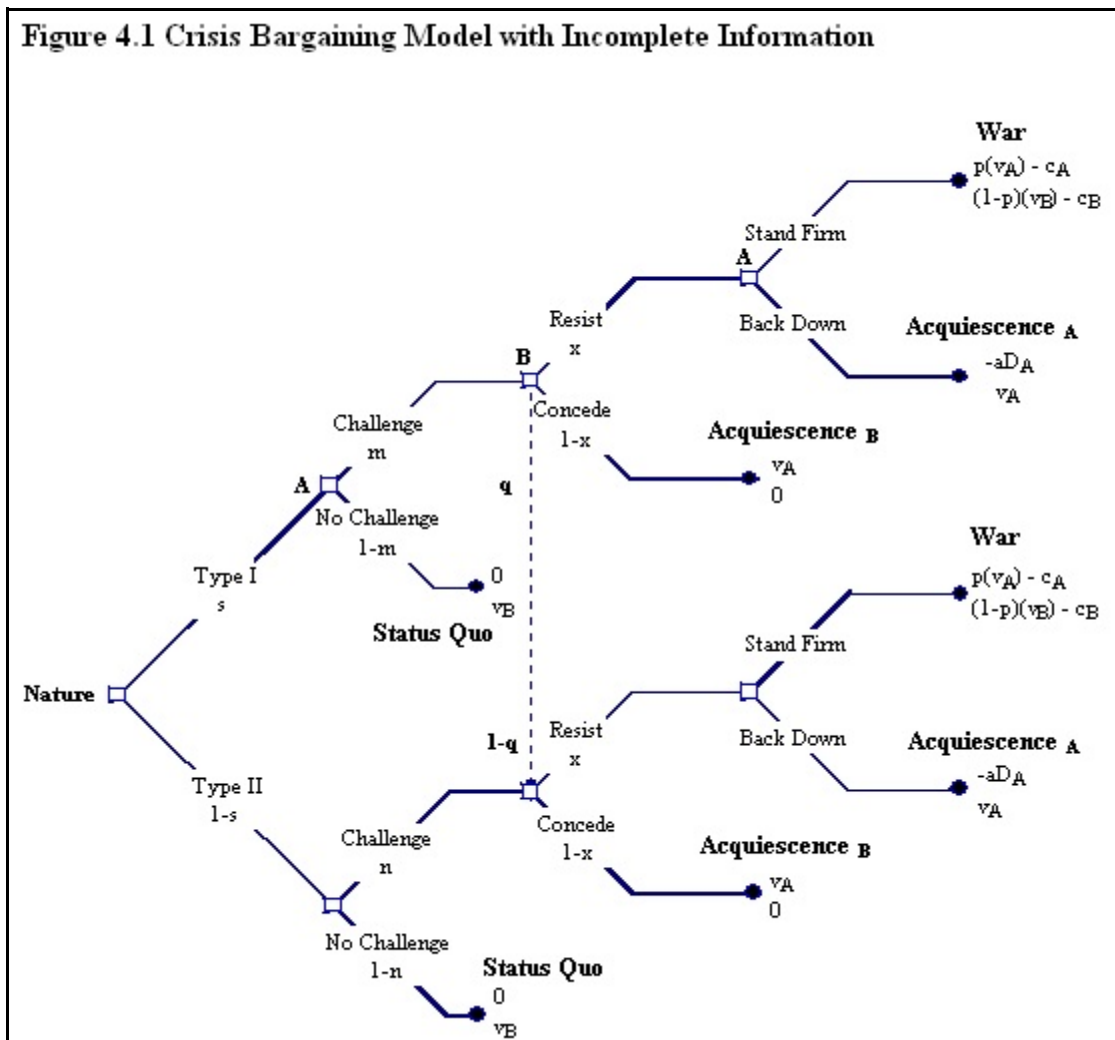
challenger's resolve are important, how do the challenger's interests at stake and audience costs influence her willingness to resist an initial threat.

Uncertainty About the Challenger' Resolve

The imperfect information (Harsanyi transformed) representation of the crisis game is presented in Figure 4.1 and, as can be seen, the sequence of play and payoffs for A and B are the same as they were in the complete information game. The only difference is that, at the second node of the game, State B is uncertain of whether State A would prefer to stand firm (and thus fight a war) or back down at the final node of the game. In Figure 4.1, this uncertainty is represented by the dashed line (information set) connecting B's decision nodes at the second move of the game. The interpretation here is that the defender knows that a threat has been issued, but upon observing the threat, she is uncertain about whether she is facing the resolved or unresolved type of challenger (I discuss the challenger's types below).

Hence, I assume the defender is uncertain of the challenger's resolve. While this uncertainty could result from any of the parameters that make up A's resolve, I assume that it results from B's uncertainty about A's costs of war (c_A).³⁸ As discussed above, the notion of a state's costs of war is itself a multifaceted concept and I discussed a number of factors that go into a leader's subjective evaluation of how costly a war will be. Ultimately, by assuming that State B is uncertain about A's costs for war, I am assuming

³⁸ Recall from the complete information game that a challenger's resolve is a function of the costs of war (c_A) relative to the value of the disputed good (v_A) and audience costs (aD_A). Hence, the defender's uncertainty about any one of these parameters could translate into the defender's uncertainty about the challenger's resolve.



that she is imperfectly informed about at least one of the factors that determines these costs, which is often empirically reasonable. For example, consider this in terms of the political costs of war, wherein factors such as the presence of a viable alternative candidate or intra-party cohesion can make a leader more or less vulnerable. Neither of these factors are always readily apparent to individuals within a particular state let alone an outsider looking in. For example, if political parties often have an incentive to keep

their internal divisions to themselves in order to present an image of unity on a particular issue (which itself seems relatively intuitive), then this could easily be a source of uncertainty about a leader's costs of war.³⁹

To generate this uncertainty, I assume that there are two types of challengers: resolved and unresolved ones. At the first move of the game, a draw from Nature determines the challenger's type: with probability s the challenger is resolved (Type I) and with probability $1-s$ the challenger is unresolved (Type II). Recall that the relevant distinction between resolute and irresolute challengers essentially pertains to whether he will stand firm (and fight a war) or back down at the final node. Therefore, from condition (3.5), we can identify the resolved type of challenger as follows:

$$c_A \leq p(v_A) + aD_A \quad \equiv \quad c_A \leq c_A^* \quad (4.1)$$

Hence, the resolved type of challenger is one whose costs of war are low enough (relative to the value of the disputed good and the magnitude of audience costs that he would pay for backing down) to ensure that he would stand firm (and go to war) at the final node of the game. Alternatively, for the unresolved type of challenger:

$$c_A \geq p(v_A) + aD_A \quad \equiv \quad c_A \geq c_A^* \quad (4.2)$$

Thus, for the unresolved challenger, the costs of war are high enough (again, relative to the value of the disputed good and magnitude of domestic audience costs) to ensure that he would prefer backing down (and even paying audience costs) to fighting.

³⁹ As Schultz (2001, 35n) pointedly notes, this assumption does not imply that State A's leader is himself perfectly informed of the costs of war and that State B is completely unaware of them. Rather, all that is necessary for this condition of complete information to hold is that the leader in State A is *better* informed about his own costs of war than is the leader in State B.

I therefore assume that the defender is uncertain about the challenger's costs of war, and the practical implication of this assumption can be seen by referring back to Figure 3.3. In the previous discussion of Figure 3.3, c_A was considered common knowledge to both A and B, and hence, the relative question for B was whether the value of the interests at stake for the challenger were such to make him resolved to carry out the threat (formally, whether $c_A \leq c_A^*$). In the context of imperfect information, on the other hand, B is uncertain about where precisely c_A is along this continuum and therefore, the relative relationship between c_A and c_A^* . This is important because, depending on where c_A truly is, the challenger could be either resolved or unresolved to fight in any of the three scenarios. Also, when the defender would prefer to resist against an unresolved challenger but concede to a resolved one (as was the case in Figure 3.3), then its decision becomes more complicated under conditions of imperfect information since she never truly knows the challenger's resolve. As we shall see, this uncertainty gives rise to bluffing behavior by unresolved challengers in certain conditions, and the interests at stake for the challenger (v_A) become an important source of information for the defender as to the credibility of a challenger's threats.

Solution to the Imperfect Information Game

Before stating the equilibria to the imperfect information game, it is necessary to consider how the defender's uncertainty about the challenger's resolve influences her decision of whether or not to resist. To see how uncertainty about resolve affects B's decision, we can begin to work backwards from the last decision node of the game. As

was the case under complete information, State A will stand firm at the final node if $c_A \leq c_A^*$ (i.e., he is resolved) and back down if $c_A \geq c_A^*$ (i.e., he is unresolved).

Consider now B's move at the second node of the game. Note here that unlike in the complete information game, B cannot condition her behavior on whether A will stand firm or back down, since doing so would require knowledge about A's type. Hence, her decision to resist or concede is not straightforward, and instead, she must consider the expected utility of resisting given her belief about the challenger's possible type. From the complete information game we know that, if B resists, her payoff is $v_B(1-p) - c_B$ if A is resolved, and v_B if A is unresolved. Now let q denote B's (probabilistic) posterior belief after observing a threat that A is resolved (Type I), and $1-q$ denote the posterior belief that A is unresolved (Type II). Then B's expected utility for resisting versus conceding is given by

$$EU_B(\text{resist}) = q[v_B(1-p) - c_B] + v_B(1-q) \quad (4.3)$$

$$EU_B(\text{concede}) = 0$$

Since B would prefer to resist whenever the $EU_B(\text{resist}) \geq EU_B(\text{concede})$, then B will resist whenever

$$q[v_B(1-p) - c_B] + v_B(1-q) \geq 0 \quad (4.4)$$

Solving condition (4.4) for q results in the following

$$q \leq v_B / (pv_B + c_B) \quad \equiv \quad q \leq q^* \quad (4.5)$$

As in complete information, q^* represents a threshold requirement for B's willingness to reciprocate such that if (1) $q \leq q^*$, then B will always reciprocate, (2) $q > q^*$, then B will

always concede, and if (3) $q = q^*$, then B can be using a mixed strategy (resisting with probability x and conceding with probability $1-x$).

An examination of this threshold requirement provides some interesting cues as to the defender's willingness to resist if challenged. Holding all else constant, as the value of the disputed good for state B increases, then the threshold q^* increases, which means that a defender is more likely to resist even as her posterior belief that the challenger is resolved increases. That is, at higher levels of interests at stake, the defender will be willing to resist even highly resolved challengers (that is, even as q increases). Moreover, while q (by definition) is bound by the relationship $0 \leq q \leq 1$, q^* can conceivably be greater than 1. When this is the case, then B will always reciprocate regardless of her evaluation of A's resolve. Thus, setting $q^* \geq 1$ and solving for c_B , we find that B will always resist whenever

$$v_B / (pv_B + c_B) \geq 1 \quad \Rightarrow \quad c_B \leq v_B(1-p) \quad (4.6)$$

Condition (4.6) shows that there are some values of the disputed good for which the defender would always prefer to resist rather than concede, even if she knows it would lead to war.

Finally, since this is a model of one-sided imperfect information, then this means that the challenger knows of the defender's willingness to resist his threat (i.e., he knows the relative relationship between q and q^* for the defender). Hence, similar to the game of complete information, the challenger can condition his initial decision to issue a threat based on this information. Yet as we shall see (and unlike in the complete information game), this, in turn, can give rise to bluffing behavior by the unresolved type of

challengers. At the same time, it can also lead to a selection effect, wherein only the resolved type of challengers will issue threats.

Perfect Bayesian Equilibria

To find the equilibria in the imperfect information game, I use perfect Bayesian equilibrium as a solution concept which requires that (1) players' strategies are optimal given their beliefs and the other player's strategies, and (2) beliefs are consistent with strategies and are updated according to Bayes' rule where possible. There are three equilibria in the imperfect information game: one separating, pooling, and semi-separating equilibrium each.⁴⁰ Since each of these equilibria depend on the relative relationship between q and q^* for the defender, I examine them under the different conditions of the defender's willingness to resist. That is, I first analyze the equilibrium that gives rise when the defender will always resist ($q \leq q^*$), then when the defender will always concede ($q > q^*$) and finally when the defender is indifferent between resisting and conceding ($q = q^*$). A complete set of proofs for each equilibrium is provided in the appendix to this chapter.

A. The defender will resist with certainty ($q \leq q^*$)

- Proposition 1 ("separating" equilibrium). *The following strategies and beliefs form a perfect Bayesian equilibrium to the imperfect information game when $s \leq q^*$: the resolved type of state A issues a threat (CH) and stands firm (SF); the weakly resolved type of state A does not challenge (\sim CH) and backs down (BD); state B*

⁴⁰ Only one outcome was off the equilibrium path and consequently is not analyzed separately here.

resists with probability = 1. State B's posterior belief is that $q = 1$ (she is facing a resolved challenger).

The intuition behind this equilibrium is relatively simple and is strikingly similar to the type of behavior that was found in the “war” equilibrium under conditions of complete information. Since the challenger knows that the defender would always resist (and ultimately fight a war) than concede the disputed good, only the resolved type of challenger will issue a threat in the first place. The unresolved type of challenger will never issue a threat, since the defender’s high resolve ensures that the unresolved challenger will *always* have to back down and pay audience costs. Hence, the challenger’s types are completely separated under conditions of the defender’s high resolve. Bluffing does not occur in this equilibrium and, therefore, when a challenger issues a threat, the defender can easily infer that it is facing the resolved type.

At the same time, note also that when the defender places strong emphasis on the disputed good, threats are useless as signals of resolve. This is not because no information is conveyed in the threat—in fact, due to the separation of the challenger’s types, the threat is indeed informative—but rather because the information is inconsequential to the defender. To see that this is the case, consider the defender’s updated (posterior) belief after observing a threat. Following Bayes’ rule, the defender’s posterior belief (q) about the challenger’s resolve is as follows:

$$q = s(m) / (s(m) + (1-s)n) \Rightarrow q = s(m) / (s(m) + (1-s)0) \equiv 1 \quad (4.7)$$

where s is B’s prior belief that nature chose a resolved challenger, m is the probability that the resolute type of challenger would issue a threat, and n is the probability that the

irresolute challenger would issue a threat. Substituting zero for n ,⁴¹ then condition (4.7) reduces to $q = 1$; that is, the defender is certain that the challenger is of the resolved type. And since the defender is willing to resist anyway, then knowledge of the challenger's type is essentially inconsequential.⁴²

An interesting implication that emerges from this proposition is that challengers are more likely to issue threats, and defenders are more likely to resist these threats, when the issues at stake for both sides are sufficiently high, and war occurs when both the challenger and defender place sufficiently strong emphasis on the disputed good. Moreover, when the defender's stakes are sufficiently high, the challenger's threat is useless as a signaling device since the defender would always prefer fighting to conceding in the dispute, regardless of her belief about the challenger's resolve. In fact, war occurs despite the defender's certainty that it is the resolved type of challenger that has issued a threat, since this is the only equilibrium in which the defender's high resolve separates resolute from irresolute challengers. In this respect, the formal results presented here confirm the expectations of Danilovic (2002) about the heightened probability of war and uselessness of costly signals under conditions of mutually strong interests at stake.

⁴¹ While the defender does not know the challenger's type, she does know that the unresolved type of challenger will not challenge if he will always have to back down. Hence, when the defender will always resist, she also knows that the unresolved type of challenger will not issue a threat, making $n = 0$.

⁴² It is important to note that, in order for this equilibrium to occur, then $q^* \geq 1$ (i.e., $c_B \leq v_B(1-p)$), which follows from state B's strategies and beliefs. Since B will only resist when $q \leq q^*$, and since (by Bayes' rule) $q = 1$, then it must be the case that $q^* \geq 1$.

B. The defender will concede with certainty ($q \geq q^*$)

- Proposition 2 (“pooling” equilibrium). *The following strategies and beliefs form a perfect Bayesian equilibrium to the game with imperfect information when $s > q^*$: State A challenges (CH) regardless of its type; A stands firm (SF) if $c_A \leq c_A^*$ and backs down (BD) otherwise; B always concedes (CD). Since both the resolved and unresolved types of state A issue a threat, B cannot update its belief. The posterior belief is the same as the prior belief $q = s$.*

Again, the logic here is relatively straightforward. Since the defender will always concede upon being challenged, then both resolved and unresolved challengers will always issue a threat. Therefore, under conditions of the defender’s low stakes, we do find bluffing in equilibrium, and in this respect, there is an interesting difference between the predictions of the complete and incomplete information versions of the crisis game. Recall that, under complete information, the defender’s acquiescence was never certain, even when it had low stakes in the crisis. This was because the defender knew whether the challenger was resolved or not and could condition her behavior accordingly: conceding when the challenger was resolved but resisting against an unresolved challenger. Moreover, the unresolved challenger could not profitably bluff, because he could never convince the defender that he was more resolved than he really was.

Under conditions of imperfect information, however, we find the opposite expectation. Unresolved types of challengers can expect to profitably bluff, and they do it with certainty. Importantly, however, note that the defender is aware of the unresolved challenger’s incentives to bluff, and that she is not conceding the disputed good because

that is her preference. In fact, the defender would still prefer to resist against the unresolved challenger. The problem, however, is that upon observing the threat, she does not know whether the challenger is resolved or not, and thus resisting could lead to a war against the resolved type of challenger that would make her worse off than conceding the low stakes issue. In this case, the mere fact that resistance *could* lead to an unwanted war over a low stakes dispute for B is enough to ensure that B never resists.

C. The defender resists probabilistically ($q = q^*$)

The above two equilibria are premised on relatively extreme values of the defender's interests at stake. When the defender's stakes are so high that it will always resist a challenge, then only resolved types of challengers will issue threats. In this case, war is inevitable when the challenger issues a threat ("separating" equilibrium above). Alternatively, when the defender's stakes are so low that it will never resist, both resolved and unresolved types of challenger issue threats. Here, the unresolved type of challenger always succeeds in his bluff, and war never occurs ("pooling" equilibrium above).

Perhaps the most interesting equilibria arises under the conditions in which the defender is neither resisting nor conceding with certainty, but rather is resisting with a certain probability (x) and conceding the rest of the time with probability ($1-x$). The logic here is that the defender, knowing that the irresolute type of challenger has an incentive to bluff, and not wanting to concede the disputed good to an unresolved challenger, will resist just often enough to attempt to keep the irresolute challenger from bluffing. The unresolved challenger, on the other hand, will continue to bluff, but unlike the situation

we found in the pooling equilibrium above, will only do so probabilistically (with probability n) and will be dissuaded from issuing threats the remainder of the time. Before stating the equilibrium strategies and beliefs in the form of a proposition, it is first necessary to outline the defender's strategy for resisting probabilistically and, based on this, the irresolute challenger's mixing strategy.

Consider first the defender's mixed strategy (x) that she chooses in order to limit the irresolute challenger's willingness to bluff. In this case, the defender is resisting just often enough to make the irresolute type of challenger indifferent between challenging and not challenging the status quo. That is, state B resists with probability x so as to ensure that, for state A, $EU_A(\text{CH} | x) = EU_A(\text{SQ})$. Hence,

$$x(-aD_A) + (1-x)v_A = 0 \quad \Rightarrow \quad x = v_A / (v_A + aD_A) \quad (4.8)$$

Note here that the defender's willingness to resist is a function of two variables: the value of the disputed good for State A and the amount of audience costs that A will pay for backing down. Note also that state B's strategy is optimal given its own indifference between resisting and conceding the disputed good. That is, while the defender could plausibly resist with a higher probability (thus ensuring that $EU_A(\text{CH} | x) < EU_A(\text{SQ})$ for the irresolute type of challenger), it would also increase the likelihood that the defender would have to fight a war against a resolved type of state A. Alternatively, the defender could resist with a lower probability than that identified in condition (4.8), though doing so would not be optimal since it would mean conceding the disputed good to an irresolute challenger more often than generally preferred. Hence,

B's mixed strategy for resisting (x) is optimal given the challenger's incentive to bluff as well as B's own indifference between resisting and conceding.

Moving backward to the challenger's first move of the game, consider now the irresolute challenger's willingness to issue a threat, which it does with probability n (the resolved challenger, in this case, always issues a threat).⁴³ In this case, the irresolute challenger chooses n so that the defender is indifferent between resisting and conceding, given her updated (posterior) belief after observing a challenge and the threshold value q^* for resisting. State A knows that the defender is indifferent between resisting and conceding when

$$q = q^* \Rightarrow s / (s + (1-s)n) = v_B / (pv_B + c_B) \quad (4.9)$$

Solving for n , we find the unresolved challenger's mixing strategy that will make the defender indifferent between resisting and conceding.

$$n = s[c_B - v_B(1-p)] / v_B(1-s) \quad (4.10)$$

For the unresolved type of challenger, the probability of issuing a threat is decreasing as v_B (the defender's value for the prize) increases.⁴⁴ Alternatively, as v_B decreases, the unresolved challenger is more likely to initiate and bluff. This makes intuitive sense, given the fact that as v_B increases, the defender is more likely to resist (as in the separating equilibrium) and as v_B decreases, she is more likely to concede (as in the

⁴³ In the appendix to this chapter, I show that this is the case. Simply put for the purposes of the present discussion, the logic is that if the irresolute challenger finds it optimal to be challenging probabilistically, then it must be the case that the resolved challenger will challenge with certainty.

⁴⁴ Of course, since n is a probability, it must be the case that $0 \leq n \leq 1$ (it must be a valid probability). I show that this is the case in the proof of this proposition at the end of this chapter.

pooling equilibrium). Hence, this semi-separating equilibrium can be seen as a middle area between the pooling equilibrium (where the defender never resists), on the one hand, and the separating equilibrium (where the defender always resists) on the other. Yet unlike in the separating equilibrium, bluffing occurs with positive probability in the semi-separating equilibrium and, unlike in the pooling equilibrium, war is not a zero-probability event here.

- Proposition 3 (“semi-separating” equilibrium). *Let $x = v_A / (v_A + aD_A)$ and $n = s[c_B - v_B(1-p)] / v_B(1-s)$. Then the following strategies and beliefs form a perfect Bayesian equilibrium in the imperfect information game: The resolved type of State A challenges (CH) with certainty and stands firm (SF); the unresolved type of State A challenges with probability n and backs down; the defender resists with probability x . The defender’s posterior belief is that C is resolved with probability q^* when it receives a threat.*

Under the equilibrium behavior in Proposition 3, the full range of crisis outcomes can occur. Most importantly, though, is the fact that the unresolved type of challenger will bluff even when the defender will not concede with certainty, as well as the fact that war occurs with positive probability. However, these two implications should not be considered separately, but rather in the way that the former (the unresolved challengers incentive to bluff) actually makes the latter (war) more likely. Thus, unlike in the separating equilibrium, war in this case is not unavoidable. Instead, it supports Fearon’s (1995) general argument that informational asymmetries can be an important impediment to the peaceful resolution of a dispute. In this case, the defender’s

uncertainty about the challenger's resolve, which is compounded by the unresolved type of challenger's incentive to bluff, can be a direct source of war. Since the defender knows that the unresolved type of challenger will bluff with positive probability, and because she would prefer not to concede the good to an unresolved challenger, she will resist threats more often than if it believed the challenger was of the resolved type. Ultimately, however, the defender never knows whether she is facing a resolute or irresolute challenger, and sometimes will resist the threats of a resolved challenger, which then leads directly to war.

Comparative Statics and Discussion

The above discussion of the semi-separating equilibrium points to a fundamental problem in international crises: war can sometimes be avoidable if states can credibly reveal their true resolve (Fearon 1995). The problem, however, is that when states have an incentive to misrepresent their true resolve, their opponents never have an incentive to completely believe the signals they receive. This raises the question as to the factors that make some threats more credible than others, and the below comparative statics from the incomplete information equilibria lead to some interesting implications that have yet to be addressed in the international relations and deterrence literature.⁴⁵ Following the main theoretical focus (Chapter II) on the interplay between strategic interests and audience costs, these theoretical expectations are addressed in terms of the independent and

⁴⁵ The comparative statics in this section are primarily based on the conditions required to generate the semi-separating equilibrium, since the predictions from the pooling and separating equilibria are fairly straightforward and already interpreted above. I will, however, reflect on these as well in this section, but the main thrust is based on Proposition 3 (semi-separating equilibrium) and its multifaceted implications.

interactive effects of observable strategic interests and audience costs as they influence (1) the credibility of threats and the defender's willingness to resist and, based on this, (2) the willingness of states (and particularly democratic states) to issue threats including those intended merely as "limited probes". These factors are also discussed in terms of their influence on (3) the probability of war.

Defender's Reciprocation

Starting first with the defender's willingness to resist, and working backwards to deduce the conditions under which a challenger will issue a threat, recall that the defender's strategy for resistance is defined by the function $x = v_A / (v_A + aD_A)$. Thus, the defender's decision to resist a challenger's threat is a function of two variables: the challenger's strategic interests (v_A) and the audience costs that the challenger will pay for backing down (aD_A). Recall, however, that by assumption the value of the disputed good and the magnitude of audience costs that a leader faces are not independent of one another. Rather the magnitude of audience costs that a leader faces is itself a function of the value of the disputed good, denoted by the form $aD_A = r(v_A^2)$. Therefore, the value of the disputed good not only influences the credibility of a challenger's threat directly, but also by influencing the magnitude of the audience costs that he will face for backing down. Thus, a more appropriate analysis of the importance of v_A is done by taking the total derivative of x with respect to v_A , which captures not only the direct influence of the challenger's value of the disputed good on the defender's willingness to reciprocate (as was done with the first partial derivative), but also the indirect effect by increasing the audience costs that a leader faces for backing down.

$$\partial_X / \partial_V = d_V + d_{aD} (\partial_{aD} / \partial_V) \quad (4.11)$$

$$(aD_A / (v_A + aD_A)^2) - (v_A / (v_A + aD_A)^2) * 2r(v_A) \quad (4.12)$$

and since $aD_A = r(v_A^2)$, equation (4.12) reduces to

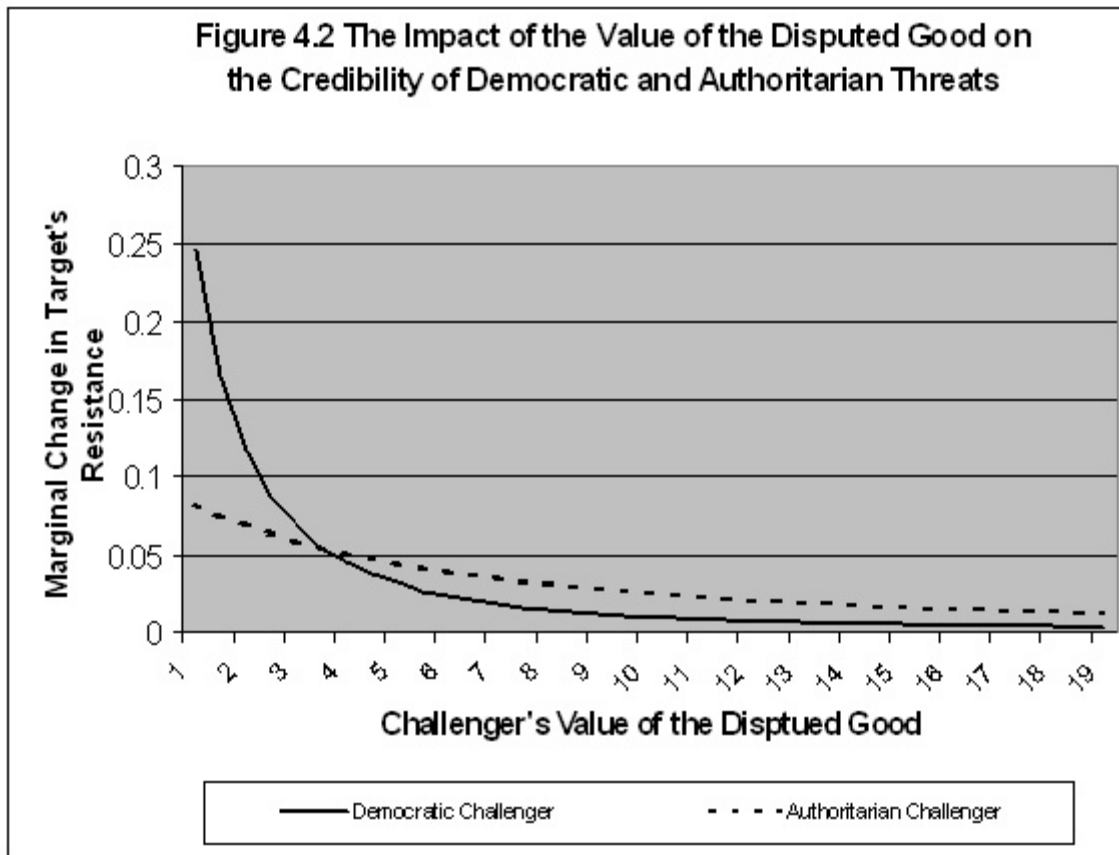
$$\partial_X / \partial_V = (r(v_A)^2 / (v_A + aD_A)^2) - (2r(v_A)^2 / (v_A + aD_A)^2) \quad (4.13)$$

and equals

$$- r(v_A)^2 / (v_A + aD_A)^2 \leq 0 \quad (4.14)$$

Since the relationship in condition (4.14) is negative, I have illustrated it graphically in Figure 4.2, showing the relationship between the value of the disputed good for the challenger (v_A) at two different levels of audience leverage, r , as would be the case, for example, for democracies (say, .7) and autocracies (say, .2).

There are three patterns in Figure 4.2 that are particularly noteworthy. First, consider that, for any given value of r (the magnitude of audience costs, which separates democracies from autocracies), the marginal change in x (the defender's willingness to reciprocate) is decreasing (in an absolute sense) as v_A increases. Moreover, the marginal change in the rate of resistance is greatest at the lower end of the challenger's interests at stake. As v_A increases, the rate at which x decreases is significantly lower. This means that a defender is more likely to question the credibility of a challenger's threats when his interests at stake (v_A) are low; therefore, a move away from the lower range of v_A appears to be more informative to the defender regarding the credibility of a challenger's threat. Alternatively, once the value of the disputed good passes some intermediate-upper level threshold, the threat is more likely to be considered credible, and therefore, any increase in the stakes for the challenger is less informative.



Second, consider what happens as r (regime type) takes on different values (democracy = .7; autocracy = .2). As can be seen in Figure 4.2, an increase in v_A has a different effect on the marginal change in x depending on the value of r — x is actually decreasing at a higher rate at the higher level of r (i.e., the slope is much steeper). Thus, if we consider the main difference between democracies and autocracies to be with respect to r (the audience's leverage), then condition (4.14) leads to an interesting implication for the differences between democracies and autocracies: an increase in the stakes for a democratic challenger has a stronger influence on the credibility of their threats than does the same increase for a nondemocratic challenger. In other words, while

increasing the value of the disputed good for the challenger increases the defender's belief in the credibility of the threat, the value of the disputed good has a stronger impact on the defender's belief about a democratic challenger's resolve than it does for nondemocratic challengers. Therefore, when attempting to evaluate the credibility of a threat, the interests at stake are much more informative for democratic challengers than they are for nondemocratic ones.

Finally, Figure 4.2 shows that democratic threats are not always considered credible, despite domestic audience costs. Instead, it shows the conditions under which democracies send credible threats. Ultimately, once we introduce variation in the audience's evaluation of the disputed good (and hence, the magnitude of audience costs a leader faces) depending on the value of the interests at stake, then we can see that some threats made by democratic states are less credible than others. When these observable interests (v_A) are in the intermediate to high range, an adversary is more likely to believe that the democratic challenger is resolved, and is thus less likely to resist. Alternatively, when (v_A) is low, the adversary is more likely to believe that the challenge is a bluff, and therefore, likely to reciprocate. Although, and as mentioned above, at any given level of v_A , democracies send more credible threats than nondemocracies, I also show that democratic threats are not always credible as generally predicted in the audience cost literature (Fearon 1994a; Schultz 2001).

Challenger's Initiation

What impact, then, does this have on the willingness of challengers to issue threats in the first place? That is, how does the defender's decision rule for resistance

influence the challenger's decision to issue a threat? One interesting result deals with the differences between the value of the disputed good for democratic and authoritarian challengers. Since, at any given value of the disputed good, a democratic challenger's threat is likely to be considered more credible than an autocratic challenge, we can expect that, on average, democratic states will be more likely to initiate disputes at lower values of interests at stake than autocracies, because their threats under these low-range of interests (even the ones that are bluffs) are less likely to be reciprocated. Autocracies, for their part, need to have much larger interests at stake in order for their threats to be considered credible. This, in turn, is in contrast to the monadic version of the democratic peace argument which does not expect democracies to initiate conflicts, and certainly less often than nondemocracies. The results here, however, reveal that democracies may actually be more prone to initiate disputes than autocracies (all else remaining equal) since their threats are more likely to be credible and thus they are more likely to get away with either bluffs or genuine threats.

Secondly, and for similar reasons, the results here would indicate that democratic leaders should actually have, on average, lower levels of interests at stake upon issuing a threat than their nondemocratic counterparts. Again, this result is derived from the fact that democratic threats are considered more credible than those sent by autocracies at all levels of v_A . Consequently, their threats are less likely to face resistance at any level of interests at stake than are nondemocratic threats, which, in turn, allows them to initiate crises at lower levels of interests. Since at least some of these low stakes threats will be

bluffs, this generates an expectation that democratic states should actually be *more* likely (or at least better able to do so successfully) to bluff than nondemocracies.

At the same time, the results here do not predict that democracies are completely unrestrained in their ability to initiate disputes, but instead indicate that their willingness to do so is increasing with the associated stakes. That is, since democratic states know that their threats are increasingly less likely to be reciprocated as their interests at stake rise, they condition their initiatory behavior accordingly. In this respect, the expectation just posited about the heightened willingness of democratic states to initiate disputes is qualified in that they should be more likely to issue threats as their interests at stake increase as opposed to when they are low. This is quite consistent with the implications derived from both the complete information game and from the “separating” equilibrium under imperfect information. In both of these cases, the *resolved* challenger was more likely to issue a threat when placing sufficiently strong emphasis on the good.⁴⁶

In the context of the current discussion, however, the expectation about the initiatory behavior of democratic states derived from condition (4.14) is particularly relevant for predicting the behavior of *unresolved* types of democratic challengers. Namely, unresolved democratic states should be more likely to bluff when they expect to get away with it—that is, when they expect the defender to concede. As was just

⁴⁶ Recall that, under conditions of complete information, the challenger could only initiate a dispute if he was resolved to carry it out, regardless of whether the defender would prefer conceding to resisting, which, as illustrated in Figure 3.3, was more likely when v_A was higher rather than lower. Similarly, under the “separating” equilibrium of imperfect information, the challenger would only issue the threat if the stakes were such that he preferred war to the status quo, since the defender’s strong resolve made war imminent if a threat had been issued.

illustrated in Figure 4.2, this is more likely when their interests are at least “high enough” so as to give their threats some semblance of credibility. Hence, the value of the disputed good produces a constraining effect on the unresolved type of democratic challengers who should only be likely to bluff when their stakes are not too low as to make their threats incredible. At the same time, since this is also the case when the defender is expected to concede the disputed good, it also means that unresolved democratic challengers will *sometimes* succeed in their bluffs.⁴⁷ Therefore, these expectations derived from the imperfect information game are not entirely consistent with the previous studies that do not anticipate democratic states to bluff (Fearon 1994a; Smith 1998). Nor are they consistent with those that do find democratic states bluffing, but ultimately predict that democratic bluffs are unlikely to succeed (Schultz 2001).

Hence, the comparative statics from conditions and (4.14) related to the defender’s resistance strategy produce some interesting insights into the interactive relationship between audience costs and strategic interests as they influence a democratic challenger’s willingness to issue threats and the credibility of their threats. Before concluding, however, consider the implication of this theoretical argument once we allow the defender’s interests at stake to vary as well. That is, apart from considering how the unresolved challenger’s interests influence his willingness to issue threats in a monadic sense, we can also derive some predictions about how the defender’s interests

⁴⁷ Of course, as the challenger’s interests increase, it is also more likely that the challenger will be resolved. Hence, some threats at the intermediate (and most at the high) level of interests will be truly credible. Others, however, will not, and it is precisely because the defender *believes* that some threats under these conditions will be credible that unresolved democratic challengers can initiate, and ultimately succeed in their bluffs.

influence the challenger's decision in a strategic setting. This leads us to the discussion of war versus either the challenger's or defender's acquiescence as an equilibrium outcome.

Crisis Outcomes

Based on conditions (4.5) and (4.6), we should intuitively anticipate that, as the defender's interests at stake increase, the probability of war increases as well. Indeed, I find this to be the case, but the basis for this conclusion is not quite straightforward. Nor is the probability of war the same for democratic and authoritarian challengers when the defender's interests at stake increase. To understand the intuition behind these claims, consider the unresolved challenger's strategy for issuing a threat (n) from condition (4.10) which is chosen to make the defender indifferent between resisting and conceding. In this case, the strategy was $n = s[c_B - v_B(1-p)] / v_B(1-s)$.

As this shows, the willingness of the unresolved challenger to issue a threat is decreasing as v_B (the defender's interests at stake) increases, which makes sense because (a) the unresolved type of challenger would prefer to bluff when he is likely to succeed (i.e., when the defender will not resist), and (b) the probability of a successful bluff decreases as the value of the disputed good for the defender increases (i.e., the defender is more likely to resist when her interests at stake are strong). This means that as the value of the disputed good for the defender increases, it makes it more likely that only the resolved challengers will issue threats. And since the defender is also more likely to resist as her interests at stake rise, the main effect is to increase the *ex ante* probability of war.

At the same time, war is not inevitable unless the value of the disputed good becomes so high that the defender will *always* prefer to resist regardless of the challenger's type (as was the case in the separating equilibrium of Proposition 1). At any level of the defender's interests below this point, the defender still prefers to resist when she believes the challenger is unresolved and concede when she believes the challenger is resolved. Thus, beliefs about the credibility of a threat are still important, and since democratic threats are considered more credible than nondemocratic ones, the general expectation from above about the lower rate of resistance to democratic challengers still holds. Therefore, even though the probability of war is increasing, *ceteris paribus*, when both the challenger's and defender's stakes increase, the likelihood of observing this outcome relative to the defender's acquiescence is lower for democratic challengers than it is when a nondemocracy issues a threat.

Finally, consider what happens under conditions of the defender's low interests, where the results are less clear-cut but interesting nonetheless. Specifically, the formal model generates two effects when the defender's interests at stake are relatively low. First, from condition (4.5) we saw that defenders are less likely to resist threats when they have relatively low interests at stake. Second, we saw (in condition 4.9) that challengers are more likely to issue threats—even at the low end of their interests—when the defender has weak interests in the dispute. That is, reducing the defender's interests has the impact of increasing the willingness of all types of challengers (resolved and unresolved) to issue threats.

At the extreme low end of the defender's interests, these two factors lead to the pooling equilibrium in which all types of challengers issue threats and their threats are never resisted. Hence, one expectation already discussed is that under the conditions of the defender's low stakes, resistance should be unlikely and the defender's acquiescence should be perhaps the most common outcome. However, as we move away from the extreme low end of the defender's interests—when her interests are not too low to ensure that she will always concede—then capitulation is not certain. Instead, while her low interests reduces the *rate* of resistance, she is still resisting probabilistically based on the challenger's level of interests at stake. And since this is also the condition under which unresolved challengers are willing to bluff at their own low level of observable interests, it is quite appropriate to anticipate finding challengers (including the democratic ones) backing down from their threats.

Conclusion

The analysis of the incomplete information game generates a number of predictions about the role of domestic audience costs and strategic interests during international crises. Since my argument starts first by bridging the gap between a few specific theories that examine the independent role of exogenous and endogenous sources of resolve, I expect some of these predictions to be consistent with the main thrust of their assumptions. This indeed turned out to be the case, while also providing further insights about the conditions under which their arguments hold. For example, similar to those that consider uncertainty about a challenger's resolve as a source of war (Fearon 1994a, 1995; Schultz 1999; 2001), I found that the higher audience costs that

democratic leaders generate during a crisis for issuing a threat and subsequently backing down can help reduce this uncertainty. At the same time, consistent with the scholars focusing on the role of the strategic interests at stake (Huth and Russett 1984; Danilovic 2002), I found that signals of resolve are less relevant when the defender's interests at stake are high, and that war is most likely to occur when both the defender and challenger have mutually strong interests in the dispute.

Yet I also find that examining the role of exogenous and endogenous sources of resolve independently of one another provides only an incomplete picture of crisis behavior and outcomes. Rather, my theoretical discussion in Chapter II and the formal analysis in Chapters III-IV show that the interactive effect of these two factors. Specifically, the argument I advance here is that the interests at stake should be expected to matter by influencing the audience's evaluation of the disputed good and consequently affecting the magnitude of a democratic leader's audience costs. In Chapter III I already discussed the confirming results of the complete information game in this respect. The analysis of the incomplete information game provided in this chapter bears out this expectation as well, and lends much validity to modeling the interplay between audience costs and strategic interests to understand the dynamics and outcomes of strategic bargaining. It also generated a number of predictions about crisis initiation, reciprocation, and their outcomes which can be summarized as follows:

- *Crisis Initiation*: (1) Since democratic threats are considered more credible than authoritarian ones at *all* levels of interests, democracies should be more likely (or at least not less likely) than autocracies to issue threats (a) in general, and especially (b)

at the lower range of their interests at stake; (2) since the credibility of both democratic and authoritarian threats is increasing with the level of their interests at stake, the probability of dispute initiation for both democracies and autocracies should increase as their strategic interests increase as well.

- *Threat Resistance*: (1) Both democratic and authoritarian states should be more likely to have their threats reciprocated at the lower range of their strategic interests, and the probability of resistance for both democratic and authoritarian challengers should decrease as their interests at stake increase; (2) an increase in the strategic interests has a stronger impact on strengthening the credibility of democratic threats than it does for authoritarian threats, and the difference in the probability of resistance to democratic and authoritarian challengers should be greatest at the upper end of the interests at stake; (3) as the defender's strategic interests increase, the probability of resistance is more likely, although (4) this increased probability is greater when the challenger is authoritarian than when it is democratic.
- *Crisis Outcomes*: (1) War is more likely than either the challenger's or defender's acquiescence if both sides have strong strategic interests at stake in the crisis; (2) At the same time, given that both the challenger and defender have strong interests, the probability of war *relative to* the defender's acquiescence is higher for authoritarian challengers than it is for a democratic ones; (3) the defender's acquiescence should be more likely than war when the defender's interests at stake are weak; (4) at the same time, given the defender's weak interests, war is less likely than the

challenger's acquiescence when the challenger's (both democratic and authoritarian) interests at stake are weak as well.

In the following chapter, I formulate these expectations as formal hypotheses which are then quantitatively tested in Chapter VI.

Proofs for the Incomplete Information Game

In this appendix, I provide the proofs for the solution to the imperfect information game in Figure 4.1. The solution concept is perfect Bayesian equilibrium, which requires that players' strategies are sequentially rational given their beliefs, and that the players' beliefs are consistent with their equilibrium strategies and are updated according to Bayes' rule, whenever possible. Consistent with the analysis in the text, I analyze the equilibria under the three different conditions of the defender's willingness to resist: (1) $q \leq q^*$, (2) $q \geq q^*$, and (3) $q = q^*$. In each case, I show both that the equilibria in the text do indeed hold, as well as the nonexistence of an alternative equilibrium under that particular condition of the defender's willingness to resist.

Perfect Bayesian Equilibria

- **Case 1: $q \leq q^*$**

Proposition 1. The following strategies and beliefs form a perfect Bayesian equilibrium to the imperfect information game when $q \leq q^*$:

(P1.1): The resolved type of challenger plays (*Challenge, Stand firm*) at the first and final nodes of the game, respectively; ($m = 1$)

(P1.2): The unresolved type of challenger plays (*~Challenge, Back down*) at the first and final nodes of the game; ($n = 0$)

(P1.3): $q = 1$.

(P1.4): The defender resists with certainty.

Proof. For the most part, the proof of this proposition follows directly from conditions and discussion in the text. Specifically, the defender's resistance strategy (P1.4) follows directly from her equilibrium behavior from condition (4.5) in the text (when $q \leq q^*$, the defender will always resist). The unresolved challenger's strategy (\sim Challenge, Back down) also follows from the text and his equilibrium behavior. More specifically, we know that, if the defender will always resist, then the unresolved type of challenger will never issue a threat since doing so would always lead to the payoff $-aD_A$. Since, by definition $-aD_A \leq 0$, then the unresolved type of challenger's payoff from the status quo (0) is always *at least* as good as that from issuing a threat and subsequently backing down ($-aD_A$). Hence, the unresolved type of challenger will never issue a threat and, by definition, backs down at the final node. Thus, whenever $q \leq q^*$, there can be no equilibrium in which the unresolved type of challenger issues a threat with positive probability. B's posterior belief (q) follows directly from the resolved and unresolved type of challenger's initiatory strategy and Bayes' rule. Specifically, since only the resolved type of challenger will issue a threat under the condition $q \leq q^*$, the defender's posterior belief that the challenger is resolved upon observing a threat is $q=1$ (the defender knows the challenger is resolved). Thus, for the defender to be resisting with certainty, then it must be the case that $q^* \geq 1$.

What remains to be shown is the condition under which the resolved type of challenger will always issue a threat (i.e., $m = 1$). It is simple to show that, in order for

this equilibrium to hold, then it must be the case that A's expected utility for war, $p(v_A)$, is greater than his current utility under the status quo (0). In condition (3.9), I show that this is only the case whenever $c_A \leq (c^*_A)_2$ —where $(c^*_A)_2 = p(v_A)$. Whenever this is the case, the resolved type of challenger will always issue a threat ($m = 1$) and, by definition, will stand firm at the final node of the game. In this situation, the equilibrium takes the form of the one specified in Proposition 1, and the strategies and beliefs in Proposition 1 do indeed form a perfect Bayesian equilibrium.

Consider now an alternative scenario for the resolved type of challenger in which the expected utility of war is less than the utility under the status quo ($c_A \geq (c^*_A)_2$). In this case, we know from condition (3.9) that the challenger will never issue a threat when he is certain that the defender will resist. This is because the expected utility from war is less than the challenger's utility derived from the current status quo, which makes a resolved challenger's threat sequentially irrational. Under this condition, then, no type of challenger issues a threat (since $q \leq q^*$, the unresolved type of challenger will still play \sim Challenge), and the status quo remains. Note, however, B's posterior belief in this case, wherein if we substitute a zero for m and n in equation (4.7), we find that $q = 0 / 0$ which is undefined since it would require dividing by zero. In this case, state B can hold any belief about the challenger's type, and the status quo outcome occurs off-the-equilibrium-path. Therefore, there can be no equilibrium under the condition $q \leq q^*$ in which the resolved type of challenger never issues a threat (i.e., $m = 0$).

Finally, consider briefly the case in which the resolved type of challenger's expected utility for war is equal to the utility from the current status quo ($c_A = (c^*_A)_2$), and

hence, the resolved type of challenger is indifferent between issuing a threat and not issuing a threat. In this case, there can be an equilibrium in which the challenger issues a threat with probability $0 \leq m \leq 1$. Once again, substituting a zero for the probability that an unresolved type of challenger will initiate (n) in equation (4.7) then we find that the defender's posterior belief is $q = 1$ (and thus, for the defender to be resisting with certainty, it must be the case that $q^* \geq 1$). Still, this equilibrium relies on relatively restrictive requirement that $(c_A = (c_A^*)_2)$, or equivalently, that $c_A = p(v_A)$. \square

• **Case 2: $q \geq q^*$**

Proposition 2. The following strategies and beliefs form a perfect Bayesian equilibrium to the game with imperfect information when $q \geq q^*$:

(P2.1): The resolved type of challenger plays (*Challenge, Stand firm*) at the first and final nodes of the game, respectively; ($m = 1$)

(P2.2): The unresolved type of challenger plays (*Challenge, Back down*) at the first and final nodes of the game; ($n = 1$)

(P2.3): $q = s$.

(P2.4): The defender concedes with certainty.

Proof. Again, the proof of this proposition follows directly from the discussion and conditions in the text. From condition (4.5), we know that when $q \geq q^*$, the defender will never resist, which confirms her strategy specified in (P2.4). Given that the defender will never resist, it is easy to show that both the resolved and unresolved type of challenger will always issue a threat as specified in (P2.1) and (P2.2), respectively. For both types of challenger, the payoff from issuing a threat when the defender will concede

is v_A . The payoff from not issuing a threat is zero (the status quo payoff). Since, by assumption, $v_A \geq 0$, then both the resolved and unresolved challenger will always issue a threat when the defender always concedes, and thus $m = n = 1$ necessarily. Hence, when $q \geq q^*$, there can be no equilibrium in which either type of challenger issues a threat with probability less than one, since doing so always yields a payoff that is lower than that derived from challenging with certainty. The resolved and unresolved type of challenger's strategies at the final node of the game are determined by the definition of each type in conditions (4.1) and (4.2) respectively: the resolved type will stand firm and the unresolved type will back down. B's posterior belief ($q = s$) follows directly from substituting the resolved and unresolved type of challenger's initiatory strategies into equation (4.7). \square

- **Case 3: $q = q^*$**

Proposition 3. The following strategies and beliefs form a perfect Bayesian equilibrium to the game with imperfect information when $q = q^*$:

(P3.1): The resolved type of challenger plays (*Challenge, Stand firm*) at the first and final nodes of the game, respectively; ($m = 1$).

(P3.2): The unresolved type of challenger plays (*Challenge, Back down*) with probability n ($0 \leq n \leq 1$), and (*~Challenge, Back down*) with probability $1-n$.

(P3.3): $q = s / s + (1-s)n$

(P3.4): The defender resists with probability x ($0 \leq x \leq 1$) and concedes with probability $1-x$.

Proof. Starting at the final node of the game, the resolve and unresolved challengers' strategies at their last move (*Stand firm* and *Back down*, respectively) are determined by the definition of their types in conditions (4.1) and (4.2). Consider now the defender's move at the second node of the game. As seen in (P3.4), the defender is resisting with probability x and conceding with probability $1-x$. For the defender, this is possible since $q = q^*$, which, as pointed out in condition (4.5) and in the discussion, is the requirement for the defender to be indifferent between resisting and conceding. In this case, the defender's probability of resistance is chosen so as to make the unresolved type of challenger indifferent between challenging and not challenging, which results in $x = v_A / (v_A + aD_A)$ as shown in condition (4.8).

Consider now the unresolved type of challenger's initiatory strategy where, as stated in (P1.2), he is challenging with probability n and not challenging with probability $1-n$. Again, this is possible because the defender is neither always resisting (wherein the unresolved type of challenger would never issue a threat) nor always conceding (wherein the unresolved type of challenger would always issue a threat). In condition (4.10), I show that the unresolved type of challenger chooses his mixing strategy (n) such that the defender is indifferent between resisting and conceding, which results in the value of n such that $n = s[c_B - v_B(1-p)] / v_B(1-s)$. Note, however, that since n is a probability, it must be the case that $0 < n < 1$. This results in two inequalities that need to be solved in order to ensure that n is a valid probability (i.e., that $0 \leq n \leq 1$). Setting n greater than or equal to zero and solving for c_B , we find the following:

$$s[c_B - v_B(1-p)] / v_B(1-s) > 0 \quad \Rightarrow \quad c_B > v_B(1-p) \quad (4.15)$$

The result in equation (4.15) is relatively easy to interpret. Specifically, recall from condition (4.6) that the defender will resist with certainty whenever $c_B \leq v_B(1-p)$. Hence, if $c_B \geq v_B(1-p)$, then the defender's costs are high enough to ensure that she is not always resisting, which makes it possible for the unresolved type of challenger to issue a threat with positive probability (i.e., $n > 0$). To test $n < 0$, then we can set (4.14) less than one and solve for c_B , which results in the following:

$$s[c_B - v_B(1-p)] / v_B(1-s) < 1 \quad \Rightarrow \quad c_B < (v_B(1-s) / s) - v_B(1-p) \quad (4.16)$$

This too makes relatively intuitive sense since, in this case, the defender's costs of war are low enough to ensure that it does not always concede, which, in turn, means that n must be < 1 (the unresolved type of challenger will not always issue a threat).

Up to this point, I have shown that the equilibrium conditions (P1.2) and (P1.4) hold. It is still necessary to show (P1.1)—that is, that the resolved type of challenger will resist with certainty. In order for this to be the case, then it must be that the resolved type of challenger's expected utility for challenging, given the defender's resistance strategy x , is greater than the utility from the status quo. That is, it must be the case that for the resolved type of challenger that $x[p(v_A) - c_A] + (1-x)(v_A) \geq 0$. Solving for x , we find the value of x that would make it possible for the resolved type of challenger to issue a threat with certainty:

$$x \leq v_A / (v_A(1-p) + c_A) \quad (4.17)$$

We already know that, in order to ensure that the unresolved type of challenger to be indifferent between challenging and not challenging, then $x \leq v_A / (v_A + aD_A)$, and since the resolved type of challenger will only issue a threat with certainty when (4.17) holds,

then it must be the case that $v_A / (v_A + aD_A) \leq v_A / (v_A(1-p) + c_A)$. Solving for c_A , we can see whether the resolved type of challenger's strategy is consistent with the definition of his type. In this case, we find $c_A \leq p(v_A) + aD_A$ which is the definition of the resolved type of challenger. Hence, the challenger's strategy specified in (P1.1) is consistent with his equilibrium behavior and the strategies and beliefs in Proposition 3 do indeed form a perfect Bayesian equilibrium.

In the remainder of this appendix, I show that this is the only plausible equilibrium under the condition of $q = q^*$. We can consider the remaining alternative equilibria strategies in terms of four different strategies for the resolved and unresolved type of challenger to issue a threat.

A) $0 < m < 1; n = 0$

In this situation, the resolved type of challenger is challenging with probability m (i.e., playing a mixed strategy) and the unresolved type of challenger is not challenging with certainty. It is relatively straightforward to show that, under this scenario, the defender's willingness to herself choose a mixed strategy is based on a restrictive and knife-edge condition. To see this, consider the defender's updated belief after observing a threat: $q = 1$. Upon observing a threat, the defender knows the challenger is resolved, and since the defender will only choose a mixed strategy if $q = q^*$, then it follows that $q^* = 1$. Setting $q^* = 1$ and solving for c_B , we find the value of c_B at which the defender would be willing to adopt a mixed strategy. That is, since the defender will only adopt a mixed strategy if $v_B / p(v_B) + c_B$, then it follows that $c_B = v_B(1-p)$, which is quite restrictive.

Consider now the resolved and unresolved type of challengers' strategies $0 < m < 1$ and $n = 0$, respectively. From equation (4.17) we can infer the value of x (the defender's mixing strategy) that makes these strategies optimal. Specifically, for the resolved type of challenger to be randomizing, then it must be that $v_A / (v_A(1-p) + c_A)$ (we can find this simply by replacing the "less than" sign in condition (4.17) with an equal sign), and for the unresolved type of challenger to be not challenging with certainty, then it must be the case that $x \geq v_A / (v_A + aD_A)$ (again, simply replace the equal sign in condition (4.8) with the "greater than" sign). By setting the latter condition of x greater than the former one, we find: $v_A / (v_A + aD_A) \leq v_A / (v_A(1-p) + c_A)$. Note, however, that this is the same as what we just saw in the case in Proposition 3 where the unresolved type of challenger was willing to use a mixed strategy $0 < n < 1$. Hence, it cannot be the case that the unresolved type of challenger would be play \sim Challenge ($n = 0$). Moreover, we also saw that under this condition of x , then the resolved type of challenger will issue a threat with certainty ($m = 1$). Therefore, there can be no perfect Bayesian equilibrium in which $0 < m < 1$, $n = 0$ and $q = q^*$.

B) $0 < m, n < 1$

Consider now the case in which both types of challenger are adopting a mixed strategy. In this case, in order for the resolved type of challenger to be randomizing, it must be the case that $x = v_A / (v_A(1-p) + c_A)$, and for the unresolved type of challenger to be adopting a mixed strategy, then we know that $x = v_A / (v_A + aD_A)$. Setting these two equal to one another and solving for c_A , we find the conditions that would make it

optimal for both to be adopting a mixed strategy: $v_A / (v_A + aD_A) = v_A / (v_A(1-p) + c_A)$, and solving for c_A , this reduces to $c_A = p(v_A) + aD_A$, which is rather restrictive.

C) $m = 0$; $0 \leq n \leq 1$

Consider now the case in which the resolved type of challenger never issues a threat and the unresolved type does so with probability $0 \leq n \leq 1$. It is relatively straightforward to show that these strategy combinations cannot occur in equilibrium. Note that if $m = 0$ (the resolved type of challenger never issues a threat), then it must be the case that $q = 0$ and the defender knows that the challenger is unresolved if she observes a threat. If $q = 0$, then it is always the case that $q \leq q^*$, and therefore, the defender would never choose a mixed strategy but rather would resist with certainty. If the defender is resisting with certainty, then we know (from the separating equilibrium in Proposition 1) that the unresolved type of challenger will never issue a threat with positive probability. Hence, if $m = 0$, then it must be the case that $n = 0$, and therefore there can be no perfect Bayesian equilibrium in which $m = 0$; $0 \leq n \leq 1$ and $q = q^*$.

D) $0 \leq m \leq 1$; $n = 1$

Finally, consider the possible condition in which the resolved type of challenger is randomizing with $0 \leq m \leq 1$ and the unresolved type of challenger is issuing a threat with certainty. Again, it is straightforward to show that this cannot occur in equilibrium. We know that, in order for the unresolved type of challenger to be challenging with certainty, then it must be the case that $q \geq q^*$ (see the pooling equilibrium in Proposition 2), which means that the defender is conceding with certainty, which is inconsistent with the condition $q = q^*$. Moreover, if the defender is conceding with certainty, then it is

never optimal for the resolved type of challenger to challenge with $m < 1$. Thus, it must be the case that $m = 1$, and since $q \geq q^*$, then this is the same as the pooling equilibrium discussed in Proposition 2. \square

CHAPTER V

HYPOTHESES AND RESEARCH DESIGN

The analysis of the complete and incomplete information models of the crisis game in the two previous chapters highlighted several expectations about the interactive and independent role of audience costs and strategic interests as they influence crisis behavior. These expectations are consistent with my theoretical argument and general intuition outlined in Chapter II. As also pointed out, while the argument and predictions outlined from the game are not entirely inconsistent with the broader body of literature in this area, they are nevertheless novel in showing that the domestic and international sources of resolve do not operate independently from each other as routinely assumed (either explicitly or implicitly) in previous research.

In this chapter, I first formulate the hypotheses generated by the expectations from the formal model. As shown in the previous chapter, my argument has implications for the interactive nature of audiences and interests at *all* stages of an international crisis, and I therefore present the hypotheses as they influence (1) dispute initiation and the challenger's willingness to issue a threat, (2) the credibility of the challenger's threats and the defender's willingness to resist, and (3) crisis outcomes. The hypotheses are then followed by the research design, which includes relevant conceptual definitions and operationalization of the variables (both independent and dependent), data sources and statistical models that will be used to test the hypotheses.

Hypotheses

One of the fundamental questions in the international relations research concerns the issue of when a state has an incentive to misrepresent his true preferences as well as the issue of how its opponent can determine whether or not to resist. From the analysis of the incomplete information game, we saw that the latter question is largely irrelevant under two extreme conditions. On the one hand, when the defender's interests at stake are so low so as to make any probability of resistance unlikely, common knowledge of the challenger's resolve is irrelevant since the defender would always prefer to concede the disputed good (even to an unresolved challenger) than resist with the (even slight) possibility of war. On the other hand, when the defender's interests at stake are so high so as to ensure that resistance (even though war is a certainty) is preferred to concessions, information about the challenger's resolve is again inconsequential.

Still, most international crises do not occur over the areas of the defender's extreme high or low stakes, but rather somewhere in between the two. This is precisely where knowledge of the challenger's resolve becomes important, as the defender would prefer to concede to a resolved challenger and resist against an unresolved one. At the same time, this is also the situation when a challenger has an incentive to misrepresent his resolve. As we can learn from the previous research, audience costs can help in this regard. By increasing the political costs that a leader will pay for backing down after issuing a threat, audience costs can be used as a source of information about a challenger's resolve. The problem, however, is that the magnitude of a leader's audience costs is not uniform across different regime types, that is, *always* high in democracies

and *always* low in nondemocracies. Nor is the magnitude of these audience costs uniform among democracies across different crisis situations. Hence, the magnitude of audience costs is as relevant for a defender's belief in the credibility of a threat as the *ability* (in terms of the simple dichotomy of whether or not a leader relies on a domestic audience for his tenure) of the domestic audience to punish a leader. In other words, if the magnitude of audience costs can vary between different regime types, as well as within each particular regime type from crisis to crisis, then it would be suboptimal for a defender to always concede to democracies in the erroneous belief that the democratic leader has generated uniformly high audience costs by issuing a threat.

The question, therefore, is related to identifying the factors that influence the magnitude of a leader's audience costs, and how these factors influence the crisis behavior of both challengers and defenders as well as crisis outcomes. The answer that I provide here is centered on the idea that the domestic audience does not consider all crises equally salient and therefore is not uniformly willing to punish a leader for backing down. Rather, the domestic audience can differentiate between crises based on the relevance of the strategic interests at stake, and will variably punish a leader for his failure to protect those interests by standing firm in light of resistance. In this view, the credibility of threats is determined both by the ability of a domestic audience to punish a leader for backing down as well as their variable willingness to do so depending on the importance of the disputed issue. This, in turn, has implications for the following three critical sets of research questions:

1. What impact do the interests at stake in the crisis have on a challengers' decision to issue threats? Are there any differences between democratic and authoritarian states in this respect?
2. If a threat has been issued, how do the challenger's interests at stake influence its threat credibility and the defender's willingness to resist? Are there any differences between democratic and authoritarian challengers in this respect as well?
3. How do the challenger's and defender's interests influence crisis outcomes?

In terms of the challenger's willingness to issue a threat, recall that the interests at the stake have a *direct* influence on this willingness (i.e., independent of the magnitude of audience costs) by affecting the challenger's expected-utility for war.⁴⁸ In this respect, it was formally shown that when the challenger's interests at stake increase, the challenger is more likely to consider the potential gains from war to exceed the costs. This, in turn, makes it more likely that a leader will be resolved to issue *and* carry out a threat. At the same time, the defender is more likely to believe that threats at the higher range of the challenger's interests are more credible than those that are at the lower range of interests. This, in turn, results in a lower rate of resistance under the former condition than under the latter. Ultimately, this relationship is expected to hold regardless of whether the challenger is democratic or nondemocratic, and therefore my first two hypotheses are as follows:

⁴⁸ Recall from the utility functions in the formal analysis that v_A was a separate parameter in A's expected-utility for war. Generally, as v_A increases, a leader is more likely to be resolved and hence, more likely to issue threats, all other things remaining equal.

Hypothesis 1. *Both democratic and authoritarian states are more likely to initiate disputes as their interests at stake in the crisis increase.*

Hypothesis 2. *Both democratic and authoritarian states are less likely to have their threats resisted as their interests at stake in the crisis increase.*

Yet the main argument here is that the interests at stake also have an influence on resolve via increasing (or decreasing) the magnitude of audience costs that a leader will pay for backing down. More specifically, as shown in the formal analysis the value of the interests at stake has a variable impact on the credibility of democratic and authoritarian threats. This, in turn, leads to several important distinctions between democracies and autocracies, directly bearing on their willingness to initiate disputes (whether genuine challenges or bluffs) as well as in terms of the credibility of their threats.

Consider first the differences between democratic and authoritarian states in terms of the likelihood of dispute initiation. In this respect, some important results were derived from the comparative statics of the incomplete information model. At nearly all levels of the interests at stake, the model predicts a lower rate of resistance for democratic challengers than it does when threat are issued by autocracies. This directly results from the fact that democratic leaders generate, on average, higher audience costs than authoritarian ones. Relatedly, one of the most interesting expectations generated under both complete and incomplete information is that democracies are better suited to “force” their adversaries into conceding than are autocratic challengers. Moreover, democratic threats are increasingly more credible than authoritarian ones as their stakes increase as well. Hence, a comparison of democratic and authoritarian threat credibility

would lead to the expectation that democratic leaders should actually have more leeway in their ability to initiate disputes at the lower level of interests at stake than autocratic ones. Alternatively, leaders of authoritarian states, in their search for credibility, would appear to need higher interests at stake than democratic ones when initiating a dispute in order to make up for their credibility deficit.

The implications for dispute initiation, therefore, are clear. Since challengers condition their initiatory behavior, at least in part, on the likelihood that the defender will resist, we should expect to find (1) democratic states issuing threats at a higher rate than autocratic ones, (2) lower *average* interests at stake for democratic as opposed to authoritarian challengers, and (3) the interests at stake to have a stronger bearing on an authoritarian leader's willingness to issue threats than they do for a democratic incumbent. Thus, hypotheses 3-5 are as follows.

Hypothesis 3. *Democratic states should be (at least weakly) more likely to initiate disputes than authoritarian states.*

Hypothesis 4. *Democratic challengers will, on average, have lower interests at stake than authoritarian challengers when they issue a threat.*

Hypothesis 5. *The interests at stake have a stronger influence on an authoritarian challenger's willingness to initiate disputes than they do for democratic challengers.*

These three hypotheses follow directly from the analysis of the formal model and, rather than expecting democracies to be more constrained than autocracies in terms of the conditions under which they are willing to initiate disputes, they actually predict

quite the opposite. That is, unlike previous scholars that anticipate democracies to be less conflict prone than autocracies in general (see e.g., Morgan and Campbell 1991; Bueno de Mesquita and Lalman 1992; Schultz 2001) or more likely to “select” themselves into disputes based on factors such as their observable interests (Fearon 1994a), hypotheses 3-5 suggest that we should expect democratic states to have more leeway in their initiatory behavior than generally expected in the literature.

Regarding the defender’s willingness to resist, the formal stylization showed that democratic challengers can benefit from the enhanced credibility of their threats due to the greater leverage of their domestic public compared to those in autocracies. This should, in turn, result in a lower rate of resistance against democratic threats than for authoritarian ones. Hence, consistent with some audience cost arguments (Schultz 2001), I would expect to find the following general relationship:

Hypothesis 6. *Democratic challengers are less likely to have their threats reciprocated than authoritarian challengers.*

Still, two of the most important conclusions derived from the formal analysis were that (1) not all democratic threats are equally credible, and (2) the difference in the credibility of democratic as opposed to authoritarian threats is not always large. Together, these two conclusions depart significantly from the audience cost expectations that democratic threats are typically considered credible in general, and always more so than authoritarian ones. Considering the first point, recall from Figure 3.3 that democratic states do not always generate high domestic political audience costs. Rather, at the lower range of interests, a democratic leader is unlikely to generate enough

audience costs to make him resolved by ensuring that standing firm at the final node is optimal. As these observable interests increase, it is more likely that the democratic incumbent would face high domestic political costs for backing down, thus making him more resolved to carry out the threat. The implications for the defender's willingness to resist a threat should therefore be straightforward. A democratic state's threat is unlikely to be considered credible, and thus more likely to be resisted, at the lower range of its interests at stake. As its interests increase, however, democratic threats are more likely to be believed credible and should be less likely to be resisted. Therefore:

Hypothesis 7. *Democratic challengers are less likely to have their threats resisted when their interests are strong compared to their threats when having weak interests.*

With respect to the differences (or lack thereof under certain circumstances) between the credibility of democratic and authoritarian threats, we can once again draw on the discussion of Figure 3.3 and the relationship between the magnitude of a democratic leader's audience costs and the level of strategic interests. Recall from Figure 3.3 that, at the low level of strategic interests, democratic leaders are essentially similar to authoritarian ones in their *inability* to generate sufficient audience costs to make standing firm and fighting optimal. Rather, the differences between democratic and authoritarian states, in terms of the magnitude of audience costs for their leaders, only become more pronounced as their strategic interests move away from the lower to higher ranges. That is, as their strategic interests increase, democratic incumbents can generate significantly higher domestic audience costs than nondemocratic leaders. Accordingly, if the challenger's interests are high, we should anticipate the greatest differences between

democratic and authoritarian states in terms of the credibility of their threats and the rate of the defender's resistance.

Thus, while Hypothesis 6 predicts a lower rate of resistance against democratic challengers than autocratic ones in general, we need to condition this general relationship on the level of the challenger's interests at stake. As just discussed, there should be little difference in the rate of resistance to democratic and authoritarian challengers at the low end of the disputed stakes. However, as the interests at stake increase, democratic threats should be (increasingly) less likely to be resisted than authoritarian ones. Hence, the next two hypotheses related to the defender's willingness to resist are as follows:

Hypothesis 8: *At the low range of the challenger's interests at stake, there should be little difference in the rate of resistance to democratic as compared to authoritarian challengers.*

Hypothesis 9: *As the challenger's interests at stake increase, democratic challengers should be (increasingly) less likely than authoritarian challengers to have their threats resisted.*

Both hypotheses challenge the conventional wisdom and Hypothesis 9 is also counterintuitive, but the formal stylization proved its logical validity. It remains to test the empirical validity as will be done in Chapter VI.

The above hypotheses refer to the relationship between audience costs and strategic interests as they influence dispute initiation and threat reciprocation in a monadic sense. The remaining hypotheses deal with the expectations regarding the challenger's and defender's crisis behavior when we introduce the defender's interests at

stake. Moreover, all but one of the remaining hypotheses predict crisis behavior and outcomes within a dyadic framework as well. I will first specify the impact of the defender's strategic interests on her willingness to resist, and then proceed with the hypotheses about the probability of different crisis outcomes as a function of both sides' attributes/behavior.

As shown in the formal model, the defender's interests at stake directly affect its likelihood of resistance, apart from the defender's beliefs about the credibility of the challenger's threat. More precisely, and which is itself relatively intuitive, when the defender's interests in the crisis increase, she is more likely to resist a challenger's threats. As will be made clear in Hypothesis 11, this is the case *almost* regardless of her belief in the challenger's resolve, and therefore, I expect to find:

Hypothesis 10. *As the defender's interests at stake increase, it is more likely to resist a challenger's threat.*

Before specifying the hypotheses about crisis outcomes as a result of interdependent choices between a challenger's willingness to initiate and the defender's willingness to resist, let me briefly show how the relationships posited in hypotheses 1-9 are reinforced and indeed even strengthened once we allow defender's interests to vary as done in hypothesis 9. For example, the formal stylization in the previous chapter showed that as the defender's interests increase, unresolved challengers will opt not to issue threats (i.e., will "select" themselves out of disputes), and instead only resolved challengers (those with stronger interests at stake) should be likely to do so. This, in turn, means that the challenger's own interests at stake should have an even stronger impact

on his willingness to issue a threat if facing an equally resolved defender. Thus, it is consistent with the formal results to expect Hypothesis 10 to reinforce and even strengthen the relationship stated in Hypothesis 1.

At the same time, it was also shown in the formal analysis that increasing the defender's interests at stake neither completely "separates" resolved from unresolved challengers, nor ensures that the defender will *always* resist a challenge.⁴⁹ Instead, it limits the conditions under which unresolved challengers—either democratic or authoritarian—are willing to bluff, and since the defender is not resisting with certainty, her belief in the credibility of a threat is still an important factor influencing her decision to resist. Ultimately, then, the differences between democratic and authoritarian leaders to generate audience costs again become important. Specifically, the higher audience costs that democratic incumbents generate (compared to those of autocratic leaders) means that we can expect to find a lower rate of resistance to democratic than authoritarian challengers—even given the defender's high interests—and especially at the higher levels of the challenger's strategic interests. This, of course, is consistent with hypotheses 7 and 8 and leads to the following hypothesis about threat reciprocation:

Hypothesis 11. *Given the defender's strong interests, a democratic challenger is*

(increasingly) less likely to have its threat resisted than authoritarian ones as the challenger's interests increase.

⁴⁹ Recall from the formal analysis that, under incomplete information, a defender will only resist with certainty if her interests at stake are high enough to satisfy the condition $q^* > 1$. Therefore, although a rise in the defender's interests also increases the likelihood that she will resist, it does not ensure that she will always resist.

The remaining hypotheses relate to the factors that give rise to different crisis outcomes and are stated only in a dyadic sense. This is because the ultimate outcome of a crisis, especially in terms of war, needs to be understood as a result of interdependent choices.⁵⁰ Consider first the probability of war which, as the results of the formal model show, is a function of both the challenger's and defender's interests at stake. More specifically, as pointed out in the above discussion, increasing the defender's interests has two effects: first, it increases, *ceteris paribus*, the likelihood of resistance (as stated in Hypothesis 10); second, it makes it more likely that only resolved challengers will issue threats (thus issuing only those threats they intend to carry out). Combined, these two factors should increase the probability of war relative to either the challenger's or defender's acquiescence, since both sides are essentially highly resolved.

Hypothesis 12. *War is more likely than the challenger's or defender's acquiescence when both sides have strong interests at stake.*

Still, the probability of war does not increase uniformly regardless of whether the challenger is a democracy or autocracy. Instead, while it is generally increasing vis-a-vis both types of challengers, it is rising at a different rate for democratic as opposed to authoritarian challengers. This is because the defender is not always resisting, but rather would still prefer to resist against unresolved challengers and concede to resolved ones. Since, on average, democratic challengers send more credible threats than nondemocratic

⁵⁰ Note that even the hypotheses that are monadic in an empirical sense are all inferred from the formal analysis of an interdependent strategic game. That is, their logical foundations are based on the game equilibria *given* the interdependent choices of players. Thus, even the monadic hypotheses have a dyadic (interdependent choice) rationale behind them.

ones (especially as their interests increase) this implies that—even given the defender’s strong interests—the probability of war is lower when the challenger is democratic rather than authoritarian. Thus, we can logically expect to find the following:

Hypothesis 13. *Given the defender’s and challenger’s strong interests, the probability of war relative to the defender’s acquiescence is higher when facing nondemocratic challengers than democratic ones.*

Hypothesis 11 also logically predicts that defender is more likely to acquiesce to a democratic challenger than it is against a nondemocratic state. Indeed, this is the case regardless of whether the defender’s interests are high or low, though the probability of the defender’s acquiescence would intuitively be expected to be higher in the latter case than in the former.

Yet the question remains when we should anticipate a challenger to acquiesce. This, in turn, most importantly depends on when we should anticipate unresolved challengers (including democratic ones) to challenge the status quo in the first place, since these are the only ones who would be willing to issue threats and subsequently back down. As discussed above, unresolved states should be unlikely to bluff when the defender has strong (vital) interests at stake because, under such conditions, an irresolute challenger is least likely to succeed in its bluff (i.e., the defender is more likely to resist, thus forcing the irresolute challenger to back down). Alternatively, when the defender’s interests are weak, then she is less likely to resist and, consequently, this condition can give rise to an unresolved challenger’s bluff. However, while we should also expect to find the defender opting not to resist when her interests are low (see Hypothesis 10), I

also do not anticipate such defenders to concede with certainty. Rather, the formal model predicts the defender to resist probabilistically based on the challenger's interests—that is, she will resist when the challenger has relatively weak strategic interests. Since this is also the condition under which a challenger is indeed more likely to be bluffing given his low interests, we can anticipate finding challengers (including democratic ones) backing down under such conditions. Thus, the final hypotheses can be inferred as follows:

Hypothesis 14. *Given the defender's weak interests, the (democratic or authoritarian) challenger's acquiescence should be more likely than war when the challenger's interests are weak.*

Hypothesis 15. *Given the defender's weak interests, the defender's acquiescence should be more likely than the challenger's acquiescence or war when the (democratic or authoritarian) challenger's interests are strong.*

The above hypotheses capture the main thrust of my theoretical argument as deduced from the formal analysis and as they apply to crisis initiation (Hypotheses 1, 3-5), threat resistance (Hypotheses 2, 6-11) and crisis outcomes (Hypotheses 12-15). In the remainder of this chapter, I discuss the research that will be used to quantitatively test these hypotheses in Chapter VI.

Research Design

To reiterate, the main goal of this study is to explore the independent and interactive effects of domestic audiences and strategic interests as they influence the dynamics of crisis bargaining and crisis outcomes. The data I use for testing the implications of my theoretical argument is therefore driven by two main considerations.

First, whereas measures and data for regime type and democracy are well-developed (both conceptually and empirically), scarce efforts have been made to operationalize strategic interests (see below for a discussion of some of these indicators). This is the case despite the centrality of this concept for many theories of international conflict, such as realism and neorealism (e.g., Morgenthau 1967; Waltz 1979). Second, a proper test of my hypotheses would require a dataset that captures the dynamics of strategic interaction and bargaining during international crises as well as their outcomes. That is, any dataset I use needs to specify the different stages of international crises in terms of threats, counter-threats and crisis outcomes.

Given these two considerations, I use the major power deterrence dataset developed by Danilovic (2002) to identify the crises for my empirical analysis. Although my argument is generalizable to all states, I use this dataset because it is sensitive to both of these requirements. This dataset covers the period 1895-1985 and contains 158 cases of general deterrence failure (both direct and extended)—i.e., a case in which a major power attempts to upset the status quo by issuing a threat against another state—that either did or did not escalate to immediate deterrence with another major power. It also codes the outcomes of those crises that escalated to immediate deterrence between major powers. More precisely, this dataset is appropriate for testing hypotheses such as the ones I have posited for three main reasons.

First, these data allow me to capture two of the three main stages of an international crisis in my hypotheses: threat reciprocation in terms of whether the dispute escalated to immediate deterrence as a result of another major power's counter-threat,

and crisis outcomes. However, since Danilovic was not interested in the factors leading to general deterrence failure in the first place (but instead, whether such a failure would lead to immediate deterrence as well as its outcome), her data does not include those observations in which the challenger did not attempt to upset the status quo by issuing a threat. Since this is obviously relevant to my hypotheses, I extended her data to include cases where a state did not attempt to upset the status quo (i.e., cases in which a dispute was not initiated).

Second, these data contain explicit measures of each major power's interests at stake in a particular crisis, which is one of the central components of my theoretical argument. Other datasets (e.g., Huth 1988 or the Militarized Interstate Disputes (MID) dataset, Jones, Bremer and Singer 1996) do not include this variable. While the specific operationalization of these stakes is described in more detail below, it is important for the discussion of the units of analysis in the next section to note that they are measures of a major power's *regional* interests in a given geopolitical region for every year. Alternative notions of interests, as well as why this measure is most suitable for my quantitative analysis, is discussed in more detail below.

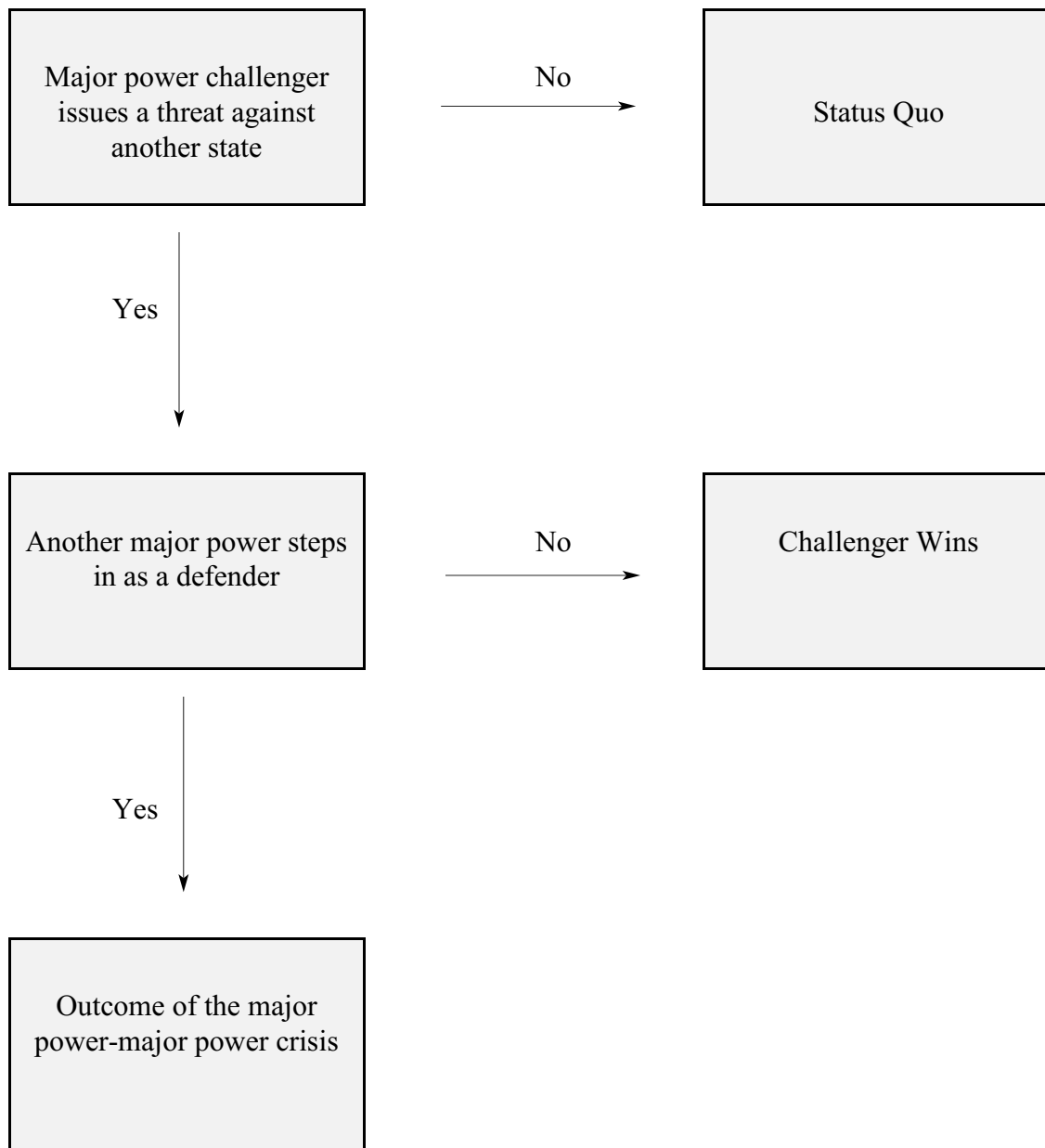
A third, but no less important, reason for using this major power dataset is empirical. In order to test the hypotheses such as the ones above, it is important that there be significant variation in terms of states' interests at stake when they initiate a dispute. That is, it is necessary to have situations in which states issue threats in areas of both high and low salience. If I were to use the standard politically relevant dyad framework as taken from the Militarized Interstate Dispute dataset, then many of the dyads included

in the analysis would be those small and geographically contiguous states. In this case, the close proximity of the two states would most likely, by definition, make the crisis highly salient for both states and a vast majority of the cases in which a threat is issued would be considered highly salient. A major power dataset, on the other hand, allows me to attain a greater amount of variation due to the fact that major powers, by definition, have the capability to issue threats outside of their home regions, and in areas that are and are not necessarily strategically important. Hence, by using this dataset, I can obtain the amount of variation that is necessary to test my hypotheses.

Units of Analysis

There are three different stages of an international crisis that correspond to my hypotheses: dispute initiation, the potential defender's reciprocation, and the crisis outcome. These different stages are also consistent with the generic form of the game in the formal analysis. However, as with any formal analysis, the models depicted in Figures 3.1 and 4.1 were necessarily simplifications of reality—trading-off descriptive accuracy for parsimony and logical consistency—that helped to generate some general insights into the dynamics of crisis behavior and outcomes. At this point, it is now necessary to move to an empirical depiction of the key moves and crisis outcomes as they will be tested in the quantitative analysis. These moves and the crisis outcomes are further represented in Figure 5.1. Note that the stages of the crisis as depicted in Figure 5.1 are consistent with those outlined in the formal analysis, as they should be. As will be seen, however, some of the terminology will be different (such as replacing the player “defender” from the game analysis, with the empirically appropriate “potential defender”

Figure 5.1 Strategic Interaction and Crisis Outcomes



in the empirical analysis). Note also that since the quantitative tests at each different stage require a different unit of analysis, I discuss dispute initiation, reciprocation, and crisis outcomes separately.

Stage 1: The (Potential) Challenger's Decision to Issue a Threat

As seen in Figure 5.1, the first stage of an international crisis refers to a major power's decision to challenge the status quo by issuing a threat against another state. As hypothesized, this is a function of the interests at stake for both the challenger (i.e., in a monadic sense) and the defender (i.e., in a dyadic sense). Recall from above, however, that the data only code those cases in which a challenger issued a threat (that is, when general deterrence has failed), and therefore, it was necessary to create a dataset that also includes observations in which a state did not issue a threat. In order to capture both the monadic and dyadic nature of my hypotheses, I created two different datasets using the regional specifications specified by Danilovic (2002) and the measures of regional interests that were readily available.

In the first dataset, the unit of analysis is the major power region-year, and it includes multiple observations for each major power per year based on the number of geopolitical regions.⁵¹ Hence, for each major power, the data have 15 yearly observations (based on the 15 geopolitical regions), which include observations in which the major

⁵¹ In this dataset, the classification of fifteen geopolitical regions is as follows: four separate regions for Africa (West, Central, East, and Southern Africa), four regions in Asia (North, South, Southeast, and East Asia), three in the Americas (North, South, and Central America and the Caribbean), two in Europe (Western and Eastern Europe), as well as the Middle East and Oceania. See Danilovic (2002) for further discussion of these geopolitical regional classifications.

power both did or did not attempt to upset the status quo. For example, in the year 1985, there are 15 different regional observations for the United States, regardless of whether it issued a threat in any of these particular regions during that year. The resulting dataset was then used for testing the monadic versions of the hypotheses.

To test the remaining hypotheses of dispute initiation and escalation, it was necessary to add a dyadic component to the above specified monadic dataset. I did so by coding the remaining (non-initiating) major powers as the *potential* defenders for each region-year observation. That is, I further disaggregate the monadic region-year dataset by introducing the dyadic component. The unit of analysis is thus the dyadic region-year.⁵² This, in turn, means that a challenger must consider the possible responses of multiple different actors, regardless of which (if any) major power actually resists the threat *ex post*. For example, even though China was the only major power to eventually step in (*ex post*) as a defender during the Korean War, this does not mean that US considerations *before* the war as to the possible response by the Soviets as well was any less relevant. In my dyadic dataset, I thus allow for there to be many *possible* defenders in any region. Of course, this also means that when one major power challenges the status quo, it is doing so vis-a-vis all other major powers as potential defenders, each of whom have an opportunity to resist. This brings us to the second stage of the crisis.

⁵² Ultimately, my dyadic version of the dataset simply adds a regional component to the standard directed dyad-year unit of analysis (see e.g., Bennett and Stam 2000). That is, for every major power dyad, there are multiple observations per year based on the number of regions, as opposed to just one yearly observation.

Stage 2: The (Potential) Defender's Decision to Resist

The second stage of an international crisis concerns the decision by another major power to resist the challenger's threat. Consistent with the above discussion, I again allow for multiple possible major power defenders per each instance of a challenger's threat. However, at this point, it was necessary to censor the dyadic region-year dataset to include only those regions in which a challenger issued a threat.

Thus, for each instance of a threat, there are again multiple dyadic combinations to test for whether one or more major powers would step in to resist the threat. For example, the case of the 1938 German annexation of Czechoslovakia is coded as having six dyadic observations. In all cases, Germany was coded appropriately as the challenger, and the relevant question is whether any other remaining major power at the time (UK, France, Italy, Japan, or the United States) would have stepped in as a defender (in this case, none did). The same dyadic combinations apply for the case of Germany's invasion of Poland less than one year later, though this time the outcome was different. The unit of analysis here is thus the dyadic crisis region, with each crisis region having multiple dyadic combinations based on the number of non-initiating major powers.

Stage 3: Crisis Outcomes

Finally, I analyze crisis outcomes, if the threat was reciprocated by another major power, in terms of either the challenger's or defender's acquiescence, compromise, or war. The unit of analysis for the models of crisis outcomes is therefore the major power crisis dyad, which includes only those dyads in which a major power challenger's threat was reciprocated and thus, the two states are actively involved in the crisis.

Variable Operationalization

Dependent Variables and Statistical Models

Since the hypotheses stipulate how each of my independent variables influence dispute initiation, reciprocation, and crisis outcomes, the dependent variables used in each of these three stages of the quantitative tests are as follows:

(1) *Dispute Initiation*. For the models of the (potential) challenger's dispute initiation, I created a simple dichotomous variable that takes a value of one when a major power challenger issued a threat in a particular geopolitical region, and zero otherwise. These threats can take the form of official statements, the mobilization of military forces, or any other behavior commonly understood to imply a threat, which is consistent with the coding of military threats (both verbal and behavioral) in previous analyses (see e.g., Danilovic 2002; Jones, Bremer and Singer 1996; Huth and Russett 1984).

Note, however, that the precise coding of this dependent variable differs between the monadic and dyadic datasets. In the monadic case, only one challenge can be coded for each threat that is issued, whereas in the dyadic case, there would be multiple challenges coded for each instance of a threat. To illustrate, in the monadic dataset for the Korean War, there is only one instance of a challenge, that is, for the US in East Asia. Alternatively, for the same example of the Korean War in the dyadic dataset, there would be multiple observations for the US challenge (US-China, US-USSR, US-France, and US-UK). Again, this is because it is conceptually appropriate to argue that when a major power challenges a particular regional status quo, it poses a potential threat to all the other major powers. Due to the dichotomous nature of both the monadic and dyadic

version of the dependent variable for dispute initiation, I estimate the models of the challenger's willingness to issue a threat using probit.

(2) *Threat Reciprocation*. For the models of the potential defender's threat resistance, the dependent variable is dichotomous. It takes a value of one when another major power reciprocates the challenger's threat, and zero otherwise. I identify cases of threat reciprocation as those in which a major power defender escalated the "general deterrence failure" into a situation of "immediate deterrence" with the challenger by explicitly issuing a counter-threat. I estimate the models of threat reciprocation with probit due to the binary nature of the dependent variable.

(3) *Crisis Outcomes*. For the model of crisis outcomes, the dependent variable is polychotomous, and differentiates between four different types of outcomes, including (1) the challenger's acquiescence, (2) the opponent's acquiescence, (3) compromise, or (4) war. This is a more appropriate measure than a binary one such as escalation/no escalation or war/no war, both of which are common to tests of international conflict and deterrence (see e.g., Huth and Russett 1984; Schultz 2001), but which also conflate the zero category with diametrically opposed outcomes.⁵³ For example, simply dichotomizing the outcome into war/no war would not allow me to distinguish cases in which war was successfully avoided as a result of the challenger's acquiescence from

⁵³ Note, however, that the empirical category of "compromise" as a crisis outcome is not included in the hypotheses or in the formal analysis, though it is a category of the dependent variable in the Danilovic (2002) data. While I do not make any formal predictions regarding this outcome, it is reasonable to anticipate that compromise should be less likely when the challenger has strong interests at stake and less likely than war when both the challenger and defender have strong strategic interests.

those in which the defender conceded. Even though both of these outcomes represent situations in which war was successfully avoided, they would also carry “different *political* implications for either side in terms of winning or losing the conflict” (Danilovic 2002, 58; emphasis in original). Most importantly, these also correspond to the outcomes in hypotheses 12-15 and included in the formal game structure (Figures 3.1 and 4.1) as well. Due to the nominal and unordered nature of this variable, I estimate the models of crisis outcomes with multinomial logit.⁵⁴

Independent Variables

The main independent variables in my analysis need to capture the independent and interactive nature of regime type (as an indicator of a leader’s domestic audience costs) and the interests at stake in a crisis for a challenger and defender. To capture their independent role, I first operationalize regime type and strategic interests, which will serve as a baseline (or comparison) model in the tests of the challenger’s willingness to issue a threat and the defender’s willingness to reciprocate.

(1) *Democratic Challenger*. A central component of my argument is that a leader’s susceptibility to domestic punishment for issuing a threat and subsequently backing down has an important impact on his conflict behavior. Consistent with previous scholars (e.g., Fearon 1994a; Partell and Palmer 1999; Schultz 2001), I consider a leader’s vulnerability to domestic audience costs to be a function of whether he presides

⁵⁴ I ran a Hausman test for the independence of irrelevant alternatives (IIA) assumption that is critical to multinomial logit estimation. The results indicate that the IIA assumption has not been violated. I also ran a Wald test to check if any of the outcome categories can be combined, and again, I was able to reject the null hypothesis that any given pair of outcomes can be combined.

over a democratic or nondemocratic government since democratic leaders are more dependent on the domestic public for their office retention.⁵⁵ While various indicators of democracy have been proposed in both the comparative politics and international relations literature (see e.g., Przeworski et. al. 1999; Gastil 1990), I opt for the Polity IV dataset (Marshall and Jagers 2002; Jagers and Gurr 1995) for two reasons. First, since the Polity measure of democracy is the most commonly used in the international relations research (see Ray 1998 on this point), its use in this study further facilitates comparisons to previous research. Second, it is the only available dataset that covers the entire temporal span of my conflict dataset.⁵⁶

The Polity IV data are based on five main components of institutional democracy: the competitiveness of political participation, the openness of political participation, constraints on the chief executive, regulation of political participation and the openness of political participation. Based on the coders' subjective evaluation for each component, every state is scored on an 11-point democracy scale and 11-point autocracy scale (thus, any state can simultaneously have characteristics of both democracy or autocracy; see Jagers and Gurr 1995). A state's Polity score is then

⁵⁵ This by no means ignores the possibility of variation within democracies and autocracies in terms of their leader's susceptibility to domestic punishment. Even then, however, it is reasonable to believe that even the *most* susceptible autocratic leaders are not as vulnerable to domestic punishment as the *least* susceptible democratic leader. Regardless, since the main theoretical thrust of this study deals with the differences between democracies and autocracies, I leave an analysis of the variations within each regime type to future research.

⁵⁶ The ACLP dataset (Przeworski et. al. 1999) only covers the period 1950-1990. The Freedom House measures of political and civil liberties is updated to the year 2000, but does not start for years before 1974.

calculated when the 11-point autocracy score is subtracted from the 11-point democracy score. The resulting 21-point variable thus ranges from -11 (complete autocracy) to 11 (complete democracy).

To measure the challenger's democracy, I use a dichotomous version of the Polity variable following the standard cutoff point suggested by Jagers and Gurr (1995, 474). That is, I created a binary variable *Democratic challenger* that takes a value of one when a state has a polity score of +7 or above, and zero otherwise (i.e., Polity score ≤ 6).

(2) *Challenger's strategic interests*. The second main important concept in my theoretical argument is the strategic interests at stake that each state has in the crisis, which is hypothesized to have both an independent and interactive influence on crisis behavior. To measure strategic interests, I use the contextual variable developed by Danilovic (2002), which is based on the salience of a major power's linkages with an entire geopolitical region. Operationally, this is a composite measure based on four main components: (1) *colonial possessions* (in square miles) in the region as a proportion of the major power's total colonial possessions, (2) the number of *diplomatic missions* in the region as a proportion of its world total, (3) the number of *alliance ties* with the region as a proportion of the world total, and (4) *foreign trade* with the region as a proportion of total foreign trade. The composite measure is then created by adding each component and dividing it by the total number of components.⁵⁷ The resulting variable

⁵⁷ Colonial possessions and diplomatic exchanges are only included during the 1895-1945 period, reflecting the erosion in their importance since World War II.

ranges from 0 (the major power has no interests in the region) to 1 (the state's interests are entirely concentrated in that particular region).

This measure of strategic interests thus recognizes that major powers think in terms of their regional interests (or spheres of influence), and it has at least two appealing characteristics that make it more appropriate for the purposes of testing my theoretical argument than the relatively few alternative indicators (see below). First, as a *composite* measure of the *salience* of linkages, it captures three main aspects of the national interest: economic (foreign trade and colonial possessions), political (diplomatic missions) and military (alliances). These factors should no doubt have an independent influence on the national interest. However, through their influence on the nation's economic livelihood and the political and geostrategic importance of a region for national prestige or reputation, this composite measure can also be seen as a valid indicator of how much the domestic *audience* also cares about the issue.

Second, as a contextual measure, it is more appropriate than previous measures of interests or issues.⁵⁸ Besides Danilovic's (2002) attempt for providing a measure of strategic interests, there are two other related notions in the empirical literature. One notion depends on *issue areas* for a particular dispute, in terms of whether involves territorial/border, economic or political issue areas (Vasquez 1993, 1996). Ultimately, however, scholars that use this notion of interests rely on an *a priori* assumption about the heightened importance of one issue area—typically territoriality/contiguity—over the

⁵⁸ For an early review of some previous attempts to measure interests or issues, see Diehl (1992).

others, regardless of the context in which a territorial claim arises. “Of all the various issues over which wars can arise. . . territorial disputes between neighbors are the main source of conflict that can give rise to a sequence of actions that ends in war (Vasquez 1996, 534).⁵⁹ By contrast, the measure of interests that I use here allows for each dispute to be characterized by a state’s variable interests, regardless of the issue area of the dispute as a political, economic or territorial one. Moreover, given that I am using a major power dataset, territorial and/or contiguous border issues (as the central issue to the Vasquez measure) are not as relevant since the interests of major powers (by definition) transcend beyond their own borders.

Another related notion developed in the deterrence research by Huth and Russett (1984; see also Huth 1988) concerns the salience of either the economic, political or military linkages between a defender and a particular third-party (protege). While this is similar to the notion of interests used here, it is problematic for my particular purpose because if I identify strategic interests with, say, a defender’s alliance ties with a particular protege, then there is a risk of conflating my argument about strategic interests with those related to alliance reliability. Alternatively, if I relate it only to trade ties with a particular protege, then there is the potential that my empirical results tell us something more about interdependence and conflict rather than a much broader notion of strategic

⁵⁹ This type of *a priori* assumption is also the basis behind the International Conflict Behavior’s (Brecher and Wilkenfeld (1997) classification of crisis issues into five main categories: military/security, political/diplomatic, economic, cultural, and other. It is also the primary motivation behind some data collection efforts such as the Issue Correlates of War (ICOW) dataset (Mitchell and Prins 1999; Hensel 2001) which classifies disputes as either territory, river, maritime, or regime claims.

interests and international behavior. Moreover, a measure that confines a major power's interests to its relations vis-a-vis one particular protege does not allow for the fact that, while "a particular state may be less significant for a major power, it may be located in a region of greater national interest for that power (Danilovic 2002, 109). I thus use the contextual measure of the interests developed by Danilovic (2002) rather than assuming the heightened importance of one particular issue area (i.e., territory), or confining my notion of interests to economic or military ties with another country.

(3) *Democratic challenger's interests*. Since I argue that the independent influences of democracy and observable interests can only provide partial insights into a state's crisis behavior, I also need to model their interactive effects. I therefore create an interaction term by multiplying the binary measure *Democratic challenger* with the continuous measure *Challenger's interests*. The resulting variable is continuous and, when included in the dispute initiation model with the lower-order (component) variables measures of democracy and interests, it captures the differential impact of the challenger's interests for democratic states *relative to* authoritarian ones.⁶⁰

The above three variables form the basis for the models of dispute initiation as specified by hypotheses 1, and 3-5. They are also central to hypotheses 2, and 6-9 that relate to the conditions under which a (potential) defender is willing to resist a challenger's threat. Two additional variables, however, are also relevant for the

⁶⁰ As can be expected, the inclusion of the interactive terms in the models also has an impact on the interpretation of the coefficients for the lower-order component variables. I later discuss these interpretive issues in the discussion of the quantitative results in the next chapter.

remaining hypotheses related to the independent and interactive (dyadic) impact of the defender's interests at stake. These are discussed in turn.

(4) *Defender's strategic interests*. As stated in Hypothesis 10 and predicted by the formal model, the defender's decision to resist is a function of both her belief in the credibility of a threat (as indicated by the challenger's regime type, interests, and their interaction) as well as by her interests at stake. That is, as the (potential) defender's interests increase, she should be more likely to resist the challenger's threats. I therefore include the continuous measure of the defender's interests—operationalized in the same fashion as the challenger's interests discussed above—as a separate variable in the models of threat reciprocation.

(5) *Democratic challenger's interests * Defender's strong interests*. The remaining hypotheses (11-15) are stated in terms of the influence on threat resistance and crisis outcomes of a democratic challenger's interests at stake *conditional upon* the defender's high/low interests. I therefore include a three-way interaction between the dichotomous measure *Democratic challenger*, the continuous measure *Challenger's interests* and a dichotomous measure of the *Defender's strong interests*. While the former two measures were introduced above, the latter measure (*Defender's strong interests*) has yet to be discussed. It is created simply as a dichotomous variable that takes a value of one if the defender's strategic interests in a crisis region are greater than

or equal (\geq) to its mean regional interests in the same year, and zero if the strategic interests in the crisis region are less than its mean regional interests.⁶¹

Once this dichotomous measure of the defender's strong interests was created, it was then multiplied with the two-way interaction variable *Democratic challenger's interests*. The resulting three-way interaction is a continuous measure. The sign and statistical significance for the coefficient on the resulting three-way interaction represents how an increase in a democratic challenger's interests influence the likelihood of resistance when the democratic challenger is facing a defender with strong as opposed to weak interests.

Control Variables

In addition to the main independent variables, I also include a set of variables that are commonly controlled for in the related conflict literature.

(6) *Alliance ties*. I include two variables representing the presence of alliance ties between the challenger and the defender as well as an alliance between the defender and protege. Both variables are dichotomous. *Alliance ties (challenger-defender)* is coded one when there is an alliance between the challenger and defender (regardless of its type) and zero otherwise. *Alliance ties (defender-protege)* also takes a value of one when there is an alliance between the defender and the protege, and zero otherwise.

(7) *Relative capabilities*. To account for the possible confounding impact of relative power between the challenger and potential defender (and the challenger and

⁶¹ The mean of a defender's regional interests in a given year is calculated as the sum of the individual regional interests divided by the total number of regions.

protege), I use a standard measure for *relative capabilities*, as the ratio of the challenger's capabilities to the sum of the challenger and defender's capabilities. The values for this variable can range from zero (power disparity in favor of the defender) to one (power disparity in favor of the initiator). I used the MID dataset (Jones, Bremer and Singer 1996) as the data source for both alliances and national capabilities.

Conclusion

In this chapter, I outlined the hypotheses that are derived from my theoretical argument as well as the steps that will be taken in order to test them. Much like offensive linemen in American football, research design chapters do not always receive the amount of attention they deserve. Nor are they necessarily as much fun to watch (read) as the more skilled positions, such as quarterback (theory) or running-back and receiver (formal models). Still, it plays an essential role in the eventual success or failure of the final effort. And by devoting a separate, individual chapter to the research design, this serves as a shout-out to the role players all around the world.

CHAPTER VI

QUANTITATIVE ANALYSIS

In the previous chapters, I have outlined the theoretical argument (Chapters II-IV), the hypotheses to be tested (Chapter V), and the research design that will be used to test these hypotheses (also Chapter V). I now move to a quantitative test of the observable implications and hypotheses derived from my theoretical model. Consistent with the discussion of the research design in the previous chapter, I analyze the independent and interactive role of audience costs and strategic interests as they influence crisis behavior at three different stages of an international crisis. I begin with an analysis of dispute initiation, which includes a brief discussion of the interpretation of coefficients and effects in interactive models. I then move to the models of threat reciprocation and crisis outcomes. Throughout, I discuss the implications of my findings in terms of their support for the hypotheses.

Dispute Initiation

To begin the analysis of the hypotheses dealing with dispute initiation (Hypotheses 1, 3-5), I first report some descriptive statistics and the results of a simple bivariate analysis. In Table 6.1, I provide a frequency distribution of the number of monadic region-years in which a dispute was (column 2) or was not (column 1) initiated by nondemocratic and democratic challengers, respectively. The numbers in parentheses below each main cell entry indicate row percentages.

TABLE 6.1 Frequency Distribution of Dispute Initiation for Democratic and Nondemocratic Major Power (Potential) Challengers

	No Dispute Initiated	Dispute Initiated	Total
Nondemocratic Challenger	4,136 (98.10%)	80 (1.9%)	4,216 (100%)
Democratic Challenger	3,499 (98.23%)	63 (1.77%)	3,562 (100%)
Total	7,635 (98.16%)	143 (1.84%)	7,778 (100%)
		$\chi^2 = .178$ $p = .673$	

Note: Cell figures represent nation region-years in which a potential challenger either did (second column) or did not (first column) initiate a dispute. Numbers in parentheses are row percentages.

Perhaps the most important result to note in Table 6.1 is the overall lack of a difference between democratic and authoritarian states in terms of their dispute initiatory propensity. That is, while 1.9% of all authoritarian region-years were characterized by an autocrats attempt to challenge the status quo, the percentage of democratic region-years characterized by a dispute is only slightly lower (1.77%). Moreover, as indicated by the insignificant chi-square statistic ($\chi^2=.178, p=.673$), the difference between democracies and autocracies in their initiatory behavior is not statistically significant. Thus, I find limited support for Hypothesis 3 about the heightened willingness of democratic leaders to initiate disputes, as mentioned in the domestic model, and as the bivariate analysis

shows, that they are neither more nor less likely to do so than nondemocratic leaders. Note that this hypothesis does not capture the interactive effect of regime type and interests, but is rather a transitional hypothesis to this end. At the same time, note that these results also lend validity to the dyadic rather than monadic arguments for the democratic peace (Rousseau et. al. 1996), which consider democratic states to be just as conflict prone as nondemocracies.

As my argument is not so much about the independent role of democracy as it influences crisis behavior, but rather its interactive role when considered in conjunction with the interests at stake, further bivariate analysis (this time incorporating the challenger's interests as well) validates it. It also points to some interesting dynamics about the differences between democracies and nondemocracies in this respect, all of which are consistent with the logic of my argument and relevant hypotheses. In Table 6.2, I report the results of a difference of means test for the interests at stake for democratic and authoritarian challengers *given* that a dispute has been initiated.

In this test, the null hypothesis is that there is no difference between the mean level of a democratic challenger's interests as compared to those of a nondemocratic challenger, once a dispute has been initiated. This is, of course, relevant for testing my fourth hypothesis which states that democratic challengers should, on average, have lower interests at stake than autocratic ones when they issue a threat due to their heightened credibility at all levels of interests. An analysis at Table 6.2 would indicate that this indeed appears to be the case, as the mean level of interests for a democratic

TABLE 6.2 Democratic and Authoritarian Challenger's Interests (Mean Levels) in the Dispute Region

	Interests (Mean Levels)
Authoritarian Challenger	19.175
Democratic Challenger	8.221
Difference	14.349***

Note: Null hypothesis is that the mean level of interests for democratic challengers is equal to the mean level for authoritarian challengers.

* $p < .10$, ** $p < .05$, *** $p < .01$.

challenger (8.221) is significantly lower than that for authoritarian challengers (19.175). The difference in means (14.349) is statistically significant ($t=5.470$, $p<.000$). This, in turn, provides solid support for Hypothesis 4, and further lends validity to my claim that democratic states have more leeway than autocracies in their ability to initiate disputes at the lower level of their strategic interests at stake.

While interesting, the results of the bivariate analyses are limited in their ability to provide any definitive evidence for the causal relationships posited in the hypotheses. With this in mind, I now turn to an analysis of the multivariate statistical tests which allow me to further examine the independent and interactive role of democracy and interests as they influence dispute initiation, while controlling for some other possible confounding factors. Before examining the results of the multivariate analyses, however, it is necessary to discuss some issues of interpretation that arise when the analysis includes interaction terms, as is the case with the current analysis. While these issues are

just recently gaining attention (see Braumoeller 2004; Kam and Franzese 2005; Brambor et. al. 2006; see also Friedrich 1982), I discuss them here in order to aid in interpreting the results presented below.

To motivate the discussion of these interpretive issues, consider the generic form of the regression model that includes a single multiplicative interaction term between two variables (setting aside the control variables for now) as follows:

$$Y = \beta_0 + \beta_1x + \beta_2z + \beta_3xz \quad (6.1)$$

Where: x = Democratic challenger (dichotomous)

z = Challenger's interests (continuous)

In the case of the model with a two-way interaction, two factors arise that must be considered when interpreting the coefficients. The first is that, rather than considering the coefficients on the lower-order variables as the average effect of x and z on dispute initiation, these coefficients need be interpreted conditionally on the other(s) being equal to zero.⁶² That is, rather than signifying the unconditional influence of democracy on a challenger's decision to issue a threat, β_1 signifies the effect of a democratic challenger when the challenger has no interests at stake (i.e., $z = 0$). Similarly, β_2 shows the effect of the challenger's interests when $x = 0$ (i.e., for a nondemocratic challenger). Yet β_2 only represents one effect of the challenger's interests (that is, when $x = 0$), whereas the challenger's interests have an influence for a democratic challenger (i.e., when $x \neq 0$) as

⁶² I use the term "lower-order variable" and "lower-order coefficient" to represent the variables (and coefficients for those variables) that are used to form the interaction term. For example, in the two-variable interaction in equation (6.1), x and z are the lower-order variables and β_1 and β_2 are the lower-order coefficients for x and z , respectively.

well. To find the influence of the challenger's interests on dispute initiation, we can see simplify equation (6.1) by isolating the parameters that are effected by z as follows:⁶³

$$Y = (\beta_0 + \beta_1x) + (\beta_2 + \beta_3x)z \quad (6.2)$$

By substituting the different possible values of x (0 and 1) into equation (6.2), we can two different ways in which the challenger's interests influence dispute initiation.

1. When $x = 0$, the effect of z is: $\beta_0 + \beta_2z$
2. When $x = 1$, the effect of z is: $(\beta_0 + \beta_1) + (\beta_2 + \beta_3)z$

An examination of these different conditions in which the challenger's interests can come into play has an important implication for the interpretation of the results presented below.⁶⁴ More specifically, it provides an interesting implication for the interpretation of the coefficient on the interaction term (β_3); that is, as the change in effect of the challenger's interests for democratic challengers *relative to* autocratic ones. Note that, when $x = 0$ (the challenger is a nondemocracy), the influence of the challenger's interests is β_2 (which reinforces the above discussion of the conditional interpretation of the lower-order coefficients). However, when $x = 1$ (the challenger is democratic), the influence of the challenger's interests is $(\beta_2 + \beta_3)$ or, alternatively, the

⁶³ For an excellent treatment of these issues, including a discussion of the difference between coefficients and "effects", see Kam and Franzese (2005) and Brambor et. al. (2006).

⁶⁴ Note that it is not necessary to include β_0 and β_1 in the discussion of the effect of z . Instead, they are intercept parameters with β_1 indicating the increase (or decrease) of the intercept for democracies relative to nondemocracies. Note also, however, the importance of including the lower-order variable x into the analysis; leaving it out would be the same as assuming a common intercept for democratic and authoritarian challengers (for a discussion on the importance of including all lower-order variables, see Braumoeller 2004; Brambor et. al. 2006)

change in influence of the challenger's interests from when $x = 0$ (β_2) to when $x = 1$ (β_3). Depending on the sign of the coefficient β_3 , this relative change in the impact of the challenger's interests can be either positive or negative. Thus, the effect of interests (z) depends on whether the challenger is democratic or autocratic (i.e., it depends on the value of x) which is precisely what I am proposing in my hypotheses.

At the same time, note that the effect of the challenger's interests also depends on the particular value of z —that is, the effect is either $\beta_2 * z$ or $(\beta_2 + \beta_3) * z$, depending on whether $x = 0$ or $x = 1$, respectively. Hence, the effect of the interests depends not only on the value of x and the particular coefficients β_2 and β_3 , but also on the particular value of z . This, in turn, means that it is necessary to provide some way of determining the impact of the challenger's interests at all levels of z (as opposed to simply based on the coefficients β_2 and β_3), as well as across the two different conditions of democratic and authoritarian challengers, which I do with predicted probabilities.

The above discussion of the interpretation of coefficients in the models with interaction terms applies to the case of two-way interactions. However, several of my hypotheses (hypotheses 11-15) deal not only with the interactive effect of democracy and strategic interests, but also about their interactive effect conditional upon the level of the defender's interests as well. That is, they predict crisis behavior as a result of a three-way interaction. While, for the most part, the logic behind the above interpretive issues continues to apply, it is slightly more complex. To illustrate, consider the generic form of the regression model with three independent variables (x , z and w), the interaction between these variables, and all pair-wise interactions as follows:

$$Y = \beta_0 + \beta_1x + \beta_2z + \beta_3w + \beta_4xz + \beta_5xw + \beta_6zw + \beta_7xzw \quad (6.3)$$

Where: x = Democratic challenger (dichotomous)

z = Challenger's interests (continuous)

w = Defender's strong interests (dichotomous)

Once again, the lower-order coefficients (β_1 , β_2 , and β_3) signify the effects of each lower order variable (x , z and w) when the others equal zero. That is, β_1 is the effect of x when both z and $w = 0$ (i.e., the effect of a democratic challenger (x) with no interests at stake ($z = 0$) against an defender with weak interests at stake ($w = 0$)). Likewise, β_2 is the effect of z (challenger's interests) when both x and $w = 0$; β_3 is the effect of w (the defender's strong interests) when both x and $z = 0$.

At the same time, note also that each pair-wise interaction (xz , xw , and zw) is itself a lower-order variable in the three-way interaction xzw , and thus, the interpretation of their coefficients must follow the same conditional logic. Hence, β_4 represents the effect of a democratic challenger's interests ($x*z$) when the defender has weak interests at stake (i.e., $w = 0$). Similarly, β_5 represents the interactive effect of x and w when $z = 0$; β_6 represents the interactive effect of z and w when $x = 0$. Note, therefore, that the interests at stake (z) can once again (similar to the case of the two-way interaction) have multiple "effects", depending on the values of the variables x and w . To find these multiple effects, we simplify equation (6.3) as follows:

$$Y = (\beta_0 + \beta_1x + \beta_3w + \beta_5xw) + (\beta_2 + \beta_4x + \beta_6w + \beta_7xw)z \quad (6.4)$$

By substituting different values of x and w (0 and 1 in both cases) into equation (6.4) we find the following different effects of the challenger's interests (z):

1. When $x = 0$ and $w = 0$: $\beta_0 + \beta_2z$
2. When $x = 0$ and $w = 1$: $(\beta_0 + \beta_3) + (\beta_2 + \beta_6)z$
3. When $x = 1$ and $w = 0$: $(\beta_0 + \beta_1) + (\beta_2 + \beta_4)z$
4. When $x = 1$ and $w = 1$: $(\beta_0 + \beta_5) + (\beta_6 + \beta_7)z$

As was the case with the two-way interaction, these different effects of the challenger's interests, which depend on the different values of x and w , lead to some useful interpretations of the coefficients on the interaction terms. For example, the coefficient β_6 represents the changing impact of the interests at stake for nondemocratic challengers ($x = 0$) when the defender has strong interests *relative* to when the defender's interests are weak (that is, it represents the change from condition 1 to condition 2). β_7 represents the impact of a democratic challenger's interests relative to those of an authoritarian challenger when both are facing a defender with strong interests at stake (i.e., $w = 1$). At the same time, since the effect of the challenger's interests is not constant, but rather can vary from one level of interests to another, then relying on the coefficient estimates alone can only provide part of the story. For this reason, I provide graphical illustrations of the effect of the challenger's interests at each stage of the crisis and under the different conditions of democratic versus authoritarian challengers and the defender's weak versus strong interests. For ease of interpretation, Table 6.3 summarizes the interpretation of the coefficients for each variable in both the two- and three-way interaction models.

With this discussion of the interpretation of the interactive and lower-order coefficients in mind, I now turn to the multivariate analyses of dispute initiation. As

TABLE 6.3 Interpretation of the Coefficients in the Interactive Probit Models

Two-Way Interactive Model	
<i>Independent Variable:</i>	<i>Interpretation of Coefficient:</i>
Democratic challenger	The conditional effect of a democratic challenger when the challengers interests equal zero.
Challenger's interests	The conditional effect of the challenger's interests when the challenger is nondemocratic (i.e., democratic challenger = 0).
Democratic challenger * Challenger's interests	The change in the effect of the challenger's interests for democratic challengers relative to nondemocratic ones.
Three-Way Interactive Model	
<i>Independent Variable:</i>	<i>Interpretation of Coefficient:</i>
Democratic Challenger	The conditional effect of a democratic challenger when the challengers interests equal zero <i>and</i> the defender has weak interests at stake (i.e., defender's strong interests = 0).
Challenger's interests	The conditional effect of the challenger's interests when the challenger is nondemocratic <i>and</i> the defender has weak interests at stake (i.e., democratic challenger = 0 and defender's strong interests = 0).
Defender's Strong Interests	The conditional effect of defender's strong interests for nondemocratic challengers with zero interests at stake (i.e., democratic challenger = 0 and challenger's interests = 0).
Democratic challenger * Challenger's interests	The change in the effect of the challenger's interests for <i>democratic</i> challengers relative to nondemocratic ones when the defender has weak interests.
Democratic challenger * Defender's strong interests	The effect of a democratic challenger facing a defender with strong interests given that the challenger has no interests (i.e., challenger's interests = 0).
Challenger's interests * Defender's strong interests	The change in the effect of an <i>authoritarian</i> challenger's interests when the defender has strong interests relative to when the defender has weak interests.
Democratic challenger * Challenger's interests * Defender's strong interests	The change in the effect of a democratic challenger's interests when the defender has strong interests relative to the effect of interests for an authoritarian challenger against a defender with strong interests.

pointed out in the research design, I analyze two different sets of models to test my hypotheses about the challenger's willingness to challenge the status quo—that is, monadic and dyadic sets of analysis. Table 6.4 provides the results of the monadic analyses, with the nation region-year as the unit of analysis.

In order to effectively gauge the independent and interactive effects of democracy and strategic interests, I provide estimates of two models of monadic dispute initiation. In Model 1 I present the results of the probit analysis without the interaction term. In Model 2, I present the results of the probit analysis that includes the interaction term *Democratic challenger * Challenger's interests*. Consistent with the suggestions of previous scholars (Braumoeller 2004; Brambor et. al. 2006), all interactive models in the analysis include the lower-order variables that are used to create the interaction term, and the interpretation of their coefficients follows the conditional logic discussed above.

Perhaps the first thing to notice in Table 6.4 is the lack of statistical significance for the variable *Democratic challenger* which, when compared to the excluded (baseline) category representing an authoritarian challenger, indicates that democracies are neither more nor less likely to initiate disputes than autocracies. Note also that this is the case in both models. Since, in Model 2, the coefficient is interpreted *conditional upon* the challenger's interests equaling zero, whereas in Model 1, the coefficient represents the (essentially) unconditional influence of democracy on dispute initiation, we can conclude that democratic challengers are not substantively different from authoritarian ones in their dispute initiatory propensity. This confirms the results of the chi-square test in Table 6.1 as well as the intuition underlying dyadic approaches to the democratic peace.

TABLE 6.4 Monadic Model of Dispute Initiation, Probit Estimates

	Dispute Initiation	
	Model 1	Model 2
Democratic challenger	-.055 (.134)	.158 (.140)
Challenger's interests	.022*** (.003)	.028*** (.003)
Democratic challenger * Challenger's interests	—	-.021*** (.008)
Challenger's capabilities	1.873** (.979)	1.914** (.960)
Constant	-2.463*** (.133)	-2.555*** (.133)
N	7587	7587
Log-likelihood	-669.449	-662.362
Wald χ^2	34.37***	74.72***

Note: Numbers in parentheses are robust standard errors.

* $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed)

At the same time, note that an increase in the challenger's interests does have a statistically significant influence on dispute initiation in both the independent and interactive models. In Model 1, the coefficient for the variable *Challenger's interests* is positive and statistically significant which means that as a potential challenger's interests increases, he is more likely to initiate a dispute. Moreover, since this model does not include the interaction term, the coefficient for this variable represents the independent influence of the challenger's interests (that is, independent of regime type), which indicates that both democratic and nondemocratic challengers are more likely to initiate disputes as their interests at stake increase. I therefore find solid support for Hypothesis 1

that predicts a heightened likelihood of dispute initiation as the (potential) challenger's interests at stake increase.

An even more interesting relationship arises when we consider the interactive effect of democracy and strategic interests. In this respect, note particularly the coefficient for the interaction term *Democratic challenger * Challenger's interests*, which represents the changing influence of interests on dispute initiation for democratic challengers relative to a nondemocratic ones. In this case, the coefficient is negative and statistically significant which indicates that as a democratic challenger's interests increase, it is *less* likely to initiate a dispute than an authoritarian challenger. Hence, I do find some differences between democratic and authoritarian states in their dispute initiatory behavior, but only once I introduce their variable interests at stake. When put together with the above discussed results about the conditional influence of a democratic challenger, the monadic analyses yield some interesting insights. Ultimately, the differences between democracies and autocracies is minimal (and not statistically significant) when either type of challenger has no interests at stake (note the statistically insignificant coefficient on the variable *Democratic challenger* which indicates the influence of regime type when the challenger's interests equal zero). As the challenger's interests increase, however, autocrats are more likely than democrats to initiate a dispute which, in turn, provides support for my Hypothesis 5 about the greater importance of the interests at stake for a nondemocratic challenger than for a democratic one.

The results of the monadic analysis presented in Table 6.4 thus lead to some solid support for Hypotheses 1 and 5 about the independent and interactive role of

democracy and strategic interests for dispute initiation. I now turn to a dyadic analysis of dispute initiation which includes the defender's interests at stake as a further modifying variable influencing the relationship between democracy and strategic interests. Note that, while I do not posit any explicit hypotheses about the role of the defender's interests for dispute initiation, I intuitively discussed that the general pattern of relationship between regime type and interests, on the one hand, and dispute initiation on the other, should continue to hold once I introduce the defender's interests. The dyadic analyses thus allow me to empirically test these implicit expectations.

The results of the dyadic analysis of dispute initiation are reported in Table 6.5. The unit of analysis here is the dyadic region year. Similar to the monadic analyses, I first estimated an independent model of dispute initiation without the interaction term (Model 1), as well as an interactive model that includes the interaction term *Democratic challenger * Challenger's interests* (Model 2). Yet I also present the results of a third model that includes the three-way interaction *Democratic challenger * Challenger's interests * Defender's strong interests* (Model 3). This model with the three-way interaction term includes estimates of all lower-order variables (*Democratic challenger*, *Challenger's interests*, and *Defender's strong interests*), as well as all pair-wise interactions between the lower-order variables (see Braumoeller 2004; also Table 6.3).

If we consider first models 1 and 2 in Table 6.5 (which are estimated with similar variables as models 1 and 2 in the monadic analysis of Table 6.4), then we can note two important similarities that continue to hold.

TABLE 6.5 Dyadic Models of Dispute Initiation, Probit Estimates

	Dispute Initiation		
	Model 1	Model 2	Model 3
Democratic challenger	-.011 (.185)	.230* (.154)	.255** (.158)
Challenger's interests	.025*** (.006)	.032*** (.005)	.038*** (.005)
Defender's strong interests	—	—	.226** (.005)
Democratic challenger * Challenger's interests	—	-.023*** (.007)	-.015* (.012)
Democratic challenger * Defender's strong interests	—	—	-.076 (.218)
Challenger's interests * Defender's strong interests	—	—	-.014* (.009)
Democratic challenger * Challenger's interests * Defender's strong interests	—	—	-.022* (.015)
Alliance ties (challenger-defender)	-.019 (.064)	-.023 (.063)	.019 (.064)
Relative capabilities (challenger vs. defender)	.554*** (.203)	.566*** (.212)	.542*** (.200)
Constant	-2.550*** (.143)	-2.651*** (.151)	-2.720*** (.155)
N	42385	42376	42376
Log-likelihood	-4077.659	-4024.919	-3978.808
Wald χ^2	28.40***	96.4***	190.20***

Note: Numbers in parentheses are robust standard errors.

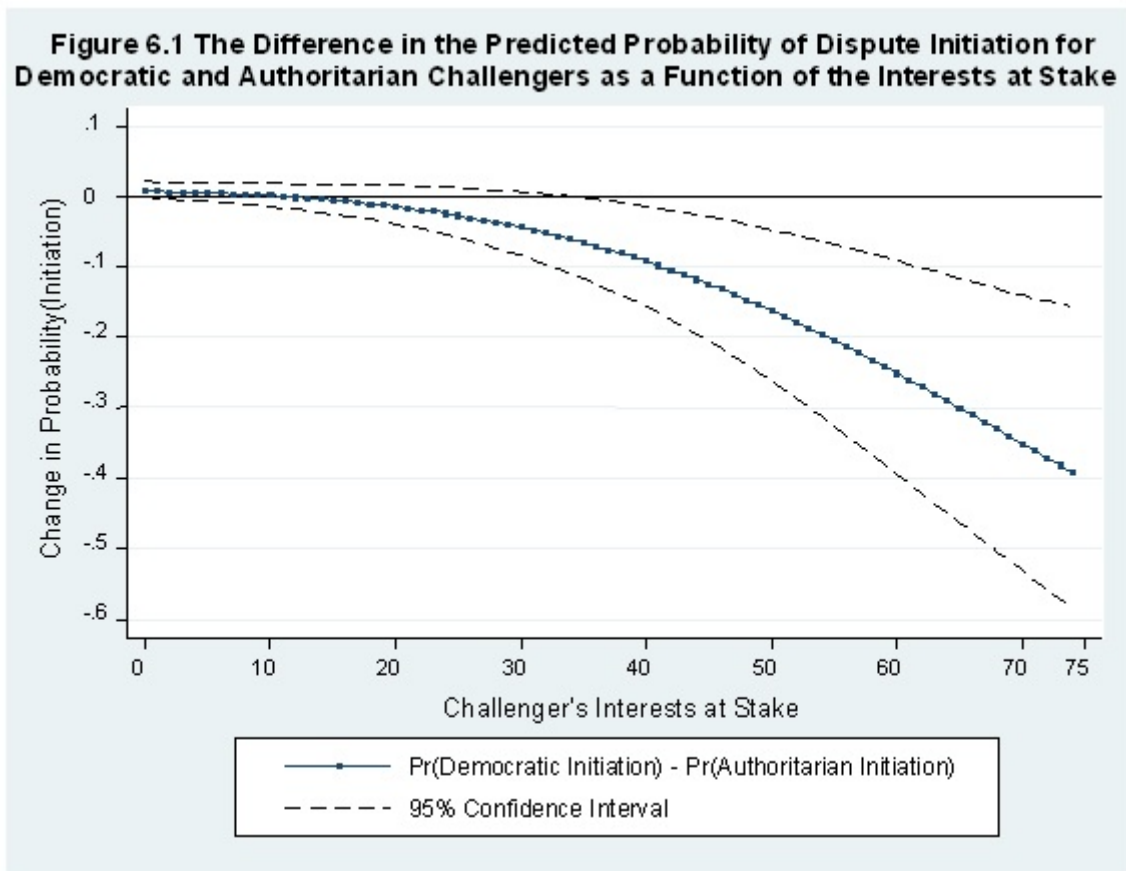
* $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed)

The first is that, consistent with the monadic analysis, regime type (whether the challenger is democratic or autocratic) does not have a statistically distinguishable *independent* influence on the likelihood of dispute initiation. The coefficient for the variable *Democratic challenger* in Model 1 is not statistically significant indicating that, when compared to nondemocracies (the baseline category) democratic leaders are neither more nor less likely to initiate disputes. Note also in Model 1 that the challenger's interests at stake has a statistically significant *independent* impact on dispute initiation, which indicates that both democratic and authoritarian leaders are more likely to initiate disputes as the interests at stake increase. The second similarity to the monadic analysis is that the coefficient for the interaction term (Model 2) is negative and statistically significant, which indicates that, given an increase in the challenger's interests at stake, democratic leaders are less likely than authoritarian ones to initiate a dispute. Again, therefore, I find strong support for Hypotheses 1 and 5 about the independent and interactive influence of the challenger's interests at stake for a leader's decision to initiate a dispute.

Yet the estimates of Model 2 also point to an interesting pattern that was not previously uncovered in the monadic analysis. Note here the coefficient for the lower-order variable *Democratic challenger*, and recall that the conditional interpretation of this coefficient as the difference between democratic and authoritarian challengers in their initiatory behavior *given* zero interests at stake in the dispute. The positive and statistically significant coefficient for this variable indicates that, at the extreme low end of the challenger's interests (i.e., strategic interests = 0), democratic leaders are actually

more likely than authoritarian ones to initiate disputes. While this relationship was not explicitly hypothesized, it is consistent with my expectation that democratic challengers will have lower interests at stake (on average) than nondemocratic ones when they initiate a dispute. It is also strongly supportive of the intuition derived from the formal analysis that, due to the heightened credibility of their threats, democratic incumbents have more leeway than nondemocratic leaders in their ability to initiate disputes at the lower range of their strategic interests.

Figure 6.1 further illustrates the interactive relationship between regime type and strategic interests as it influences dispute initiation. In Figure 6.1, I graphed the difference in the predicted probability of dispute initiation for democratic and authoritarian challengers (as well as the upper and lower bounds of the 95% confidence interval for this difference) as a function of their interests at stake. To generate this graph, I first calculated the predicted probability of dispute initiation for democratic and authoritarian challengers separately at each level of their interests at stake, which resulted in two sets of predicted probabilities. I then calculated the difference in these predicted probabilities by subtracting the predicted probability that an authoritarian state will initiate a dispute (given a particular level of interests) from the predicted probability that a democratic state will do so (at the same level of interests). That is, I calculated the difference $Pr(\text{Democratic initiation} \mid \text{interests}) - Pr(\text{Authoritarian initiation} \mid \text{interests})$. In this case, a difference resulting in a positive value indicates that democratic states have a higher probability of initiation, whereas a negative value would indicate the opposite (i.e., that authoritarian states have a higher probability of initiation). Differences



resulting in a value of zero indicate that there is no difference between democracies and autocracies in the probability of dispute initiation.⁶⁵

Perhaps the first thing to notice in Figure 6.1 is that democratic states only have a higher probability of dispute initiation than authoritarian ones at the extreme low end of their interests at stake—and more precisely, when their interests at stake = 0. This, in turn, confirms the relationship found in Table 6.5, wherein the coefficient for the lower-

⁶⁵ This figure, as well as all remaining graphs of predicted probabilities, are created using the procedures identified by Brambor et. al. 2005 and as outlined in their article's accompanying webpage.

order variable democratic challenger (representing the differences between democracies and autocracies in their initiatory propensity when they have no interests at stake) was positive and statistically significant. At almost any level of the interests at stake beyond this point, however, authoritarian challengers have a higher probability of initiation (note the downward slope of the line, indicating that the difference in the predicted probability of initiation is higher for autocracies than democracies).

Note also, though, that this difference is only statistically significant as we move beyond the intermediate range of the challenger's interests at stake, as the 95% confidence interval for the difference in probability includes zero until the challenger's interests are above nearly 35% of their world total (indicating that we cannot reject the possibility that the difference between democracies and autocracies is effectively zero). That is, with the exception of the extreme low end of the challenger's interests (where democracies are slightly more likely than autocracies to initiate disputes) and beyond the moderate-high range of interests (where autocracies have a higher probability of initiation) the difference between democratic and autocratic states in the probability of dispute initiation is not statistically significant. Ultimately, then, the relationship shown in Figure 6.1 provides solid support for Hypothesis 5 about the greater importance of the interests at stake for an authoritarian leader's willingness to initiate a dispute. At the same time, it also brings into question the prediction of some previous scholars (see e.g., Fearon 1994a) that democracies are more likely to 'select themselves' into disputes based on their *ex ante* observable interests. Rather than finding support for these 'selection effect' arguments, the results presented here indicate that democracies are as

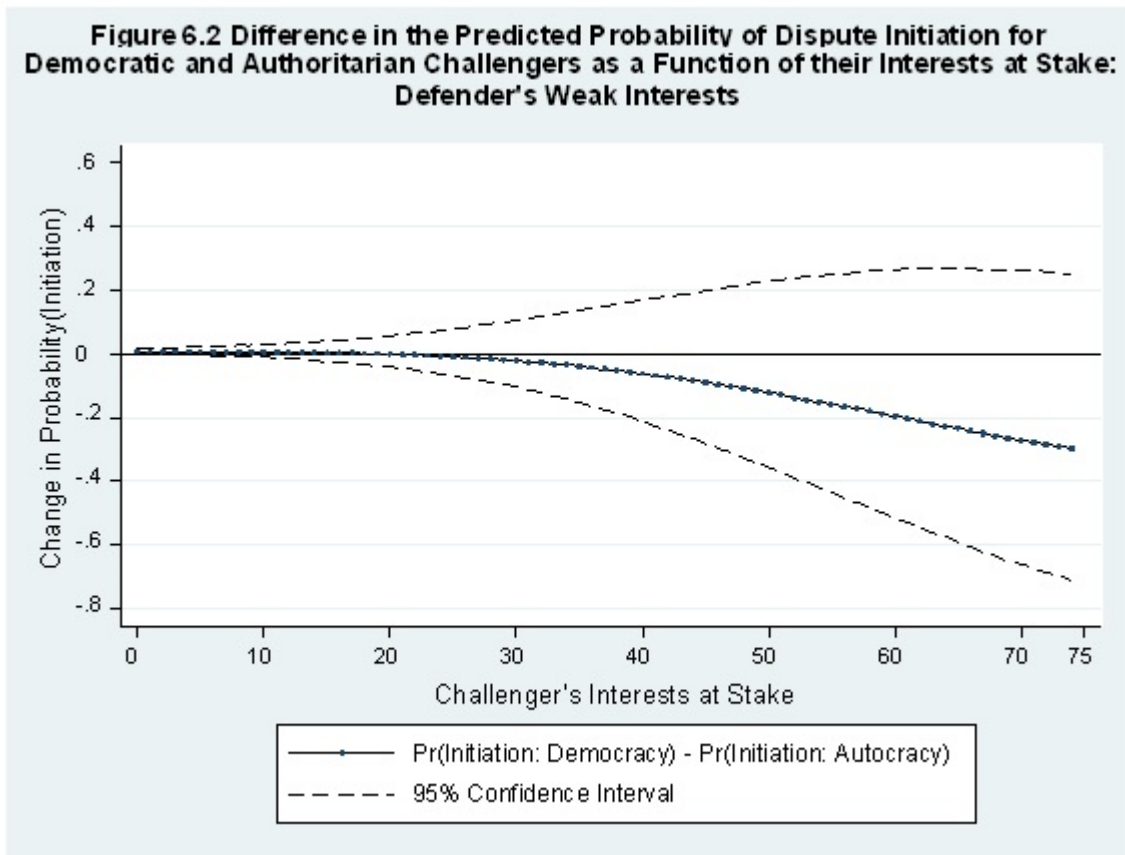
willing as autocracies (if not more so in some cases) to initiate disputes at the lower range of their strategic interests.

Moving now to Model 3 in Table 6.5, it is interesting to see whether the above relationships are modified by introducing the defender's strong interests as an additional variable in the interaction. For the most part, many of the above findings continue to hold, though in a slightly modified way. Consider first of all the coefficient for the lower-order variable *Democratic challenger* which now (with the inclusion of the three-way interaction) represents the difference between democratic and authoritarian challengers when (1) they have no interests at stake, and (2) the (potential) defender has weak interests at stake. In this case, the coefficient is positive and statistically significant, which indicates that democratic challengers are more likely than authoritarian ones to initiate disputes under these two conditions. At the same time, this finding seems to be limited to the condition of the defender's weak interests. Note here the coefficient on the interaction term *Democratic challenger * Defender's strong interests*, which, similar to the above case, represents the difference between democracies and autocracies when (1) they have no interests at stake, but this time (2) the defender has strong interests. In this case, the statistically insignificant coefficient indicates that democracies are not statistically distinguishable from autocracies in their willingness to initiate low-interest disputes when the defender has strong interests at stake.

I find similarly consistent results for the interactive relationship between regime type and interests once I include the defenders weak versus strong interests as a separate condition. In all cases, the coefficients are statistically significant and the direction of

correlation is as would be intuitively anticipated. For example, when compared to an authoritarian challenger against a defender with weak interests, democratic challengers facing a potential defender with *either* weak or strong interests are less likely to initiate a dispute as their interests at stake increase. This can be seen by examining the coefficients for the interactive terms *Democratic challenger * challenger's interests* and *Democratic challenger * Challenger's interests * Defender's strong interests*, respectively, which are both negative and statistically significant. This is consistent with my intuitive expectation that the same patterns stated in my monadic hypotheses of dispute initiation should continue to hold once we include the defender's interests as well.

Note, however, that the coefficients for all the interaction terms in this model are interpreted relative to the case of an authoritarian challenger facing a defender with weak interests—that is, relative to the lower-order variable *Challenger's interests*. (This was also illustrated in the above discussion about the interpretation of the coefficients for interaction variables.) Thus, by examining the coefficients alone, it is not possible to compare, for example, the relative influence of the interests at stake for a democratic challenger's decision to initiate a dispute in the cases of the defender's weak versus strong interests (that is, it is not possible to make a comparison between democratic challenger's based on the defender's interests as a moderating factor). Therefore, rather than reporting and discussing the individual coefficients estimated in Model 3, I instead provide graphical representations of the predicted probabilities for relevant and interesting comparisons of the different interaction terms. More specifically, I illustrate the relative importance of the interests at stake as it influences the challenger's decision



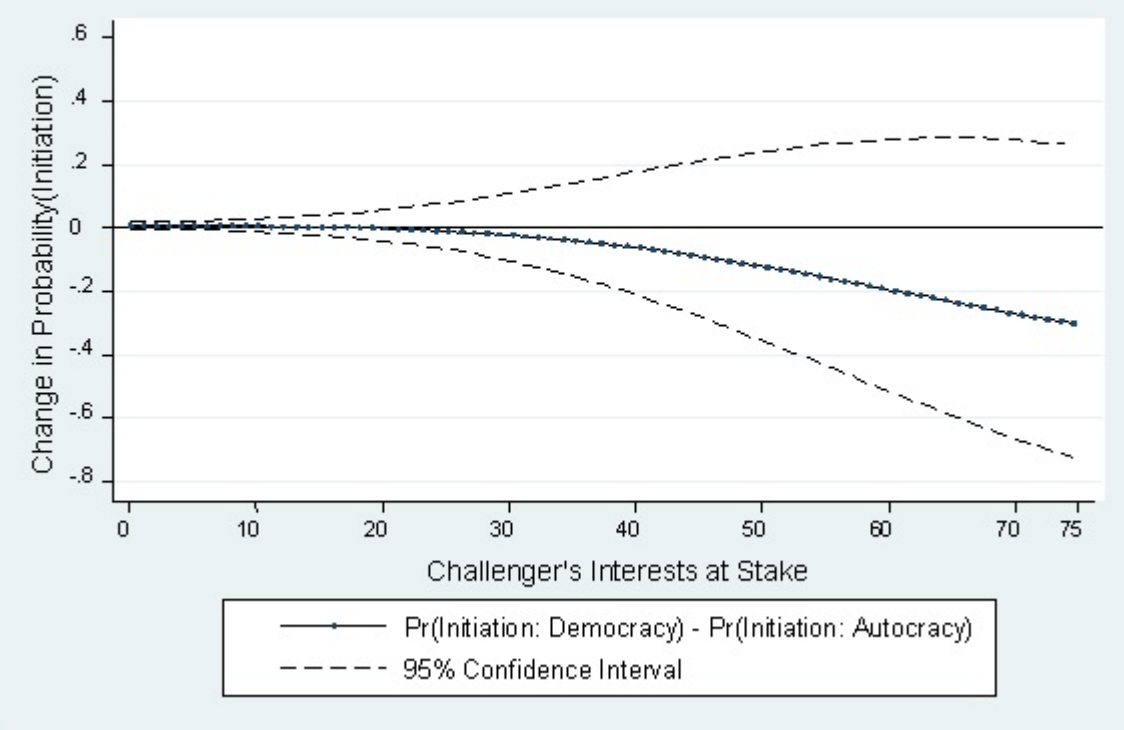
to initiate a dispute for three different comparison groups: (1) among democratic states facing a defender with weak versus strong interests, (2) between democratic and authoritarian states facing a defender with weak interests, and (3) between democratic and authoritarian states facing a defender with strong interests.

In Figure 6.2, I graphed the difference in the predicted probability for the first comparison group just identified—that is, Figure 6.2 shows the difference in the predicted probability of dispute initiation for democratic challengers facing a potential defender with strong versus weak interests at stake. In this case, the difference in

predicted probability was calculated as the difference $Pr(\text{Initiation} \mid \text{Defender's strong interests}) - Pr(\text{Initiation} \mid \text{Defender's weak interests})$. Hence, negative values along the y-axis would indicate that there is a higher probability of initiation when the defender has weak interests than when the defender has strong interests. A positive value would indicate the opposite (i.e., a higher probability of initiation when the defender has strong rather than weak interests).

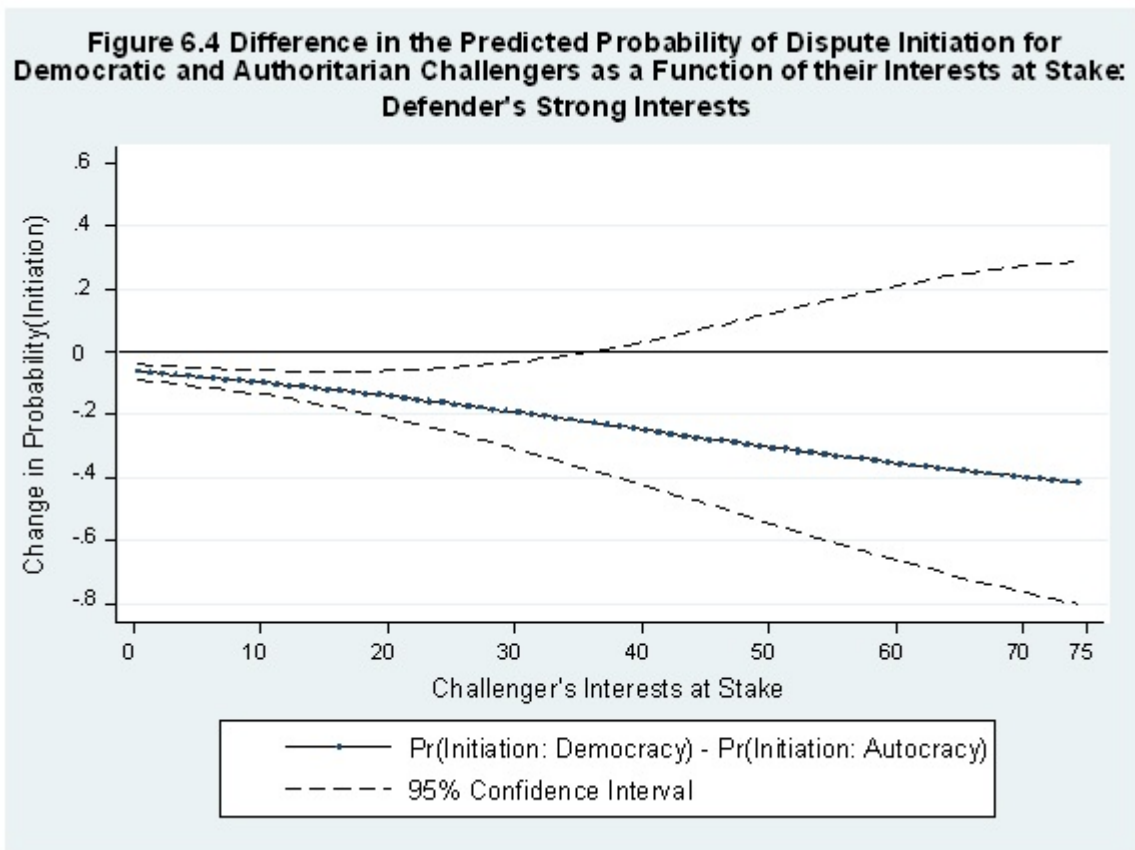
Note first of all in Figure 6.2 the general downward slope of the line, indicating that democratic states are, in general, more likely to initiate a dispute (at all levels of their interests at stake) when the defender has weak interests. This should be relatively intuitively as expected since a potential defender is less likely to resist when it has weak interests at stake, and therefore, challengers have more leeway to initiate disputes in anticipation that they are unlikely to face resistance. Note also, however, that the difference in the predicted probability is only statistically significant at the lower range of the interests at stake, and as the democratic challenger's interests increase, there is no statistically significant difference in the willingness of democratic challengers to initiate a dispute depending on the defender's level of interests. This, in turn, implies that democratic leaders are perhaps more selective in issuing their low salience threats, depending on the likelihood that the defender will resist. In this case, we find that they are more likely to initiate disputes at the lower range of their interests only when they believe, based on the defender's observable interests, that resistance is unlikely. At the same time, as their interests at stake increase, there is no difference in the initiatory

Figure 6.3 Difference in the Predicted Probability of Dispute Initiation for Democratic and Authoritarian Challengers as a Function of their Interests at Stake: Defender's Weak Interests



behavior of democratic challengers, which indicates that the defender's interests at stake is a less relevant factor for a democratic challenger's willingness to initiate a dispute when he has relatively strong interests at stake. Hence, it would appear that if democratic challengers do consider the defender's interests as a relevant factor when deciding to initiate a dispute, it is only in the case of their relatively low interests.

Moving to the differences between democracies and autocracies, Figures 6.3 and 6.4 illustrate the importance of their interests at stake under the conditions of the



defender's weak interests (Figure 6.3) and the defender's strong interests (Figure 6.4). In both cases, I graph the difference in the predicted probability of dispute initiation as the difference [$Pr(\text{Democratic initiation}) - Pr(\text{Authoritarian initiation})$]. Thus, positive values on the y-axis would indicate that democratic challengers are more likely to initiate than authoritarian challengers (at that particular level of interests and given the defender's weak or strong interests), and a negative value would indicate the opposite.

If we compare Figures 6.3 and 6.4 we can gain some interesting insights into the differences between democracies and autocracies in terms of their dispute initiatory

behavior. In particular, if we compare the difference in the probability of dispute initiation at the low end of the challenger's interests at stake in both figures, we find that democratic challengers are more likely than authoritarian ones to initiate disputes when the defender has weak interests (Figure 6.3), but less likely than autocratic challengers to do so when the defender has strong interests at stake (Figure 6.4). At the same time, however, as their interests at stake increase, there is little difference between democratic and authoritarian challengers in their willingness to initiate a dispute (note in both Figures 6.3 and 6.4 that the difference in the predicted probability of initiation is not statistically significant as the challenger's interests increase). Hence, at the higher end of their interests at stake, democratic and authoritarian challengers are essentially indistinguishable in terms of their willingness to initiate a dispute.

All in all, the analyses of dispute initiation highlight some quite interesting pattern about the dynamics of dispute initiation for both democratic and authoritarian states. Specifically, two main patterns emerged that were consistent across the different models of dispute initiation. Firstly, I find that democratic leader do take advantage of their low level of audience costs and initiate disputes at the (relatively) lower range of their observable interests. This is consistent with the implications deduced from the formal model, which shows that democratic leaders have more leeway in their ability to bluff (especially at the lower range of their interests at stake) than was predicted by previous scholars. Yet it is also contrary to the 'selection effects' arguments, which predict that democratic leaders are more likely to issue only those threats that are likely to be considered credible. Rather, these results show that there are conditions under

which democracies will choose to initiate disputes when their threats would otherwise appear incredible based on the level of observable interests alone.

Yet I also find that there are limits to a democratic leader's willingness to initiate low salience disputes, and it would appear that democratic leaders are selective in determining when they will take advantage of their greater leeway and initiate low salience disputes. It would appear that democratic leaders are only more likely to take advantage of their low audience costs (and thus initiate low salience disputes) when they believe it is unlikely they will face resistance based on the defender's low interests. Alternatively, when a democratic leader considers resistance to be likely, based on the defender's strong interests, he is more cautious in his initiatory behavior. This limiting condition aside, however, I do find democratic leaders to be more willing to initiate low salience disputes, and I now turn to an analysis of how this influences the credibility of a democratic challenger's threat and the likelihood of the potential defender's resistance.

Dispute Reciprocation

As pointed out in Chapter II, while previous scholars in the audience cost tradition have derived some expectations concerning dispute initiation, the main thrust of their predictions concern the likelihood of threat reciprocation. In this respect, they all have similarly predicted a lower rate of resistance for democratic than authoritarian challengers (Fearon 1994a; Schultz 1999, 2001). Moreover, quantitative tests of the audience cost approach have ignored the implications for dispute initiation and rather only test the predictions concerning dispute reciprocation, though the results typically support of these predictions (see e.g., Schultz 1999, 2001; Partell and Palmer 1999).

Ultimately, therefore, any comparison of the empirical validity of my predictions vis-a-vis those of the audience costs approach must take place in the realm of threat reciprocation. The below analysis of threat reciprocation thus serves as a critical test of my theoretical modification to the traditional audience cost approach and the related Hypotheses 2, 6-7.

In Table 6.6, I report the results of the probit models of dispute reciprocation, where the unit of analysis is the dyadic dispute region-year. Consistent with the models of dispute initiation presented in Table 6.5, I first estimate an independent model of threat reciprocation without the interaction terms (Model 1), followed by a model that includes the two-way interaction variable *Democratic challenger * Challenger's interests* (Model 2), as well as a fully interactive model that includes the three-way interaction with the defender's strong versus weak interests (Model 3). Again, this last model includes all the lower-order variables used to create the three-way interaction, as well as every pair-wise interaction between these variables.

Considering first Model 1 in Table 6.6, I immediately find supporting evidence for Hypotheses 2 and 6 about the independent influences of democracy and strategic interests on the likelihood of dispute reciprocation. That is, the statistically significant and negative coefficient for the variable *Challenger's interests* indicates that both democratic and authoritarian challengers are less likely to have their threats resisted as their interests at stake increase. This is as expected in Hypothesis 2. I also find a strong independent influence of regime type, as the coefficient for the variable *Democratic*

TABLE 6.6 Dyadic Models of Dispute Reciprocation, Probit Estimates

	Dispute Reciprocation		
	Model 1	Model 2	Model 3
Democratic challenger	-.654*** (.236)	-.276 (.238)	-.155 (.302)
Challenger's interests	-.008** (.005)	-.008** (.004)	-.004 (.010)
Defender's strong interests	—	.296* (.201)	.514* (.333)
Democratic challenger * Challenger's interests	—	-.058*** (.024)	-.050* (.034)
Democratic challenger * Defender's strong interests	—	—	.324 (.582)
Challenger's interests * Defender's strong interests	—	—	-.008 (.018)
Democratic challenger * Challenger's interests * Defender's strong interests	—	—	-.330* (.241)
Alliance ties (defender-protége)	.910*** (.289)	.780*** (.316)	.805*** (.314)
Relative capabilities (challenger-defender)	-.922** (.487)	-.917** (.499)	-.928** (.512)
Relative capabilities (challenger-protége)	.512* (.399)	.396 (.456)	.436 (.448)
Constant	-1.206*** (.189)	-1.250*** (.160)	-1.382*** (.254)
N	722	722	722
Log-likelihood	-169.126	-167.436	-164.297
Wald χ^2	28.08***	50.04***	

Note: Numbers in parentheses are robust standard errors.

* $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed)

challenger is also negative and statistically significant. This, in turn, shows that when compared to authoritarian challengers (the excluded category), democratic challengers are less likely to have their threats resisted, which is consistent with Hypothesis 6 and also with the general predictions of the audience cost approach.

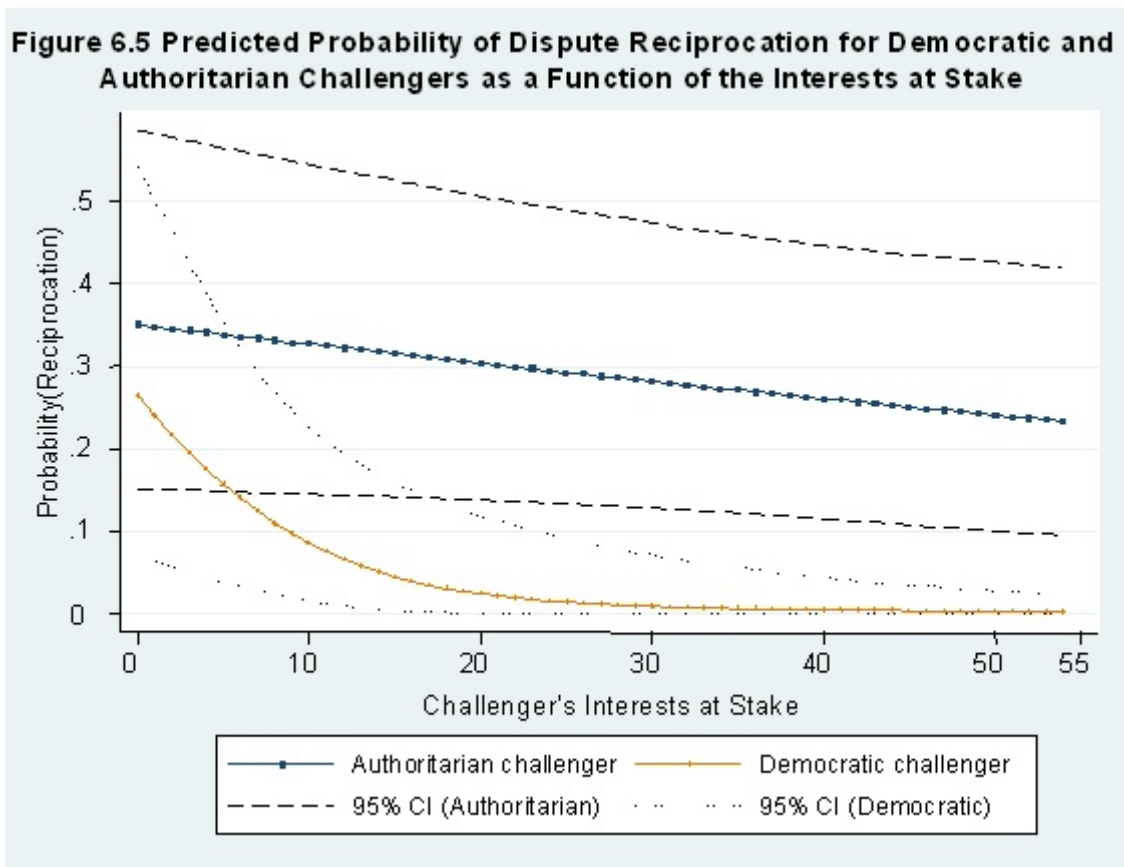
Still, the main focus of my theoretical argument is not about the independent influence of these two factors, but rather their interactive influence. Once we move to the analysis that includes their interaction term (Model 2), we can right away find support the validity of my theoretical argument that links the credibility of democratic threats to their interests at stake. In this respect, note first of all the statistical insignificance of the coefficient for the lower-order variable *Democratic challenger*, which, due to the inclusion of the interaction terms in this model, needs to be interpreted as the conditional impact of democracy on reciprocation when the initiator is (1) democratic *and* (2) has no strategic interests at stake in the crisis. As discussed, these are the conditions under which democratic challengers threats are unlikely to be believed as credible, and the insignificant coefficient indicates that under the conditions of the democratic challengers extreme low interests at stake in the crisis, their threats are not more credible than those sent by autocracies. This is, in turn, consistent with Hypothesis 8 which predicts that, at the low range of the challenger's interests, there should be little difference in the rate of resistance for democratic challengers as compared to authoritarian ones.

Hence, contrary to the audience costs argument, threats made by democratic leaders are not necessarily more credible. Instead, and as expected in Hypotheses 7 and 9, I find that the credibility of a democratic leader's threat is strongly tied to the level of

strategic interests at stake. To see that this is the case, we can compare the coefficient for the interaction term *Democratic challenger* * *Challenger's interests* to the coefficient for the lower-order variable *Challenger's interests*, with the latter being interpreted as the effect of the interests at stake on threat credibility for nondemocratic challengers. In this case, both coefficients are negative and statistically significant, indicating that both democratic and authoritarian challengers are less likely to have their threats resisted as their interests increase, which is again supportive of Hypothesis 2.

Note also, however, the negative and statistically significant coefficient for the two-way interaction term, which indicates that democratic challengers are even less likely than autocracies to have their threats reciprocated as their observable interests increase. Thus, when combined with the above finding about the lack of credibility when democratic states have no interests at stake (as shown by the statistically insignificant coefficient for the lower-order variable *Democratic challenger*), the finding of a lower rate of resistance for democratic challengers as their interests increase supports Hypothesis 7 about the differences *among* democratic states in terms of the credibility of their threats. Alternatively, when compared to the finding about the influence of the interests at stake for autocracies, the greater influence of these interests in reducing the likelihood of threat reciprocation for democracies validates Hypothesis 9. That is, it provides strong support for my prediction about the differences *between* democracies and autocracies in terms of how the interests at stake influence the credibility of their threats.

I further illustrate these results in Figure 6.5, where I graph the individual predicted probabilities for democratic and authoritarian challengers as a function of their

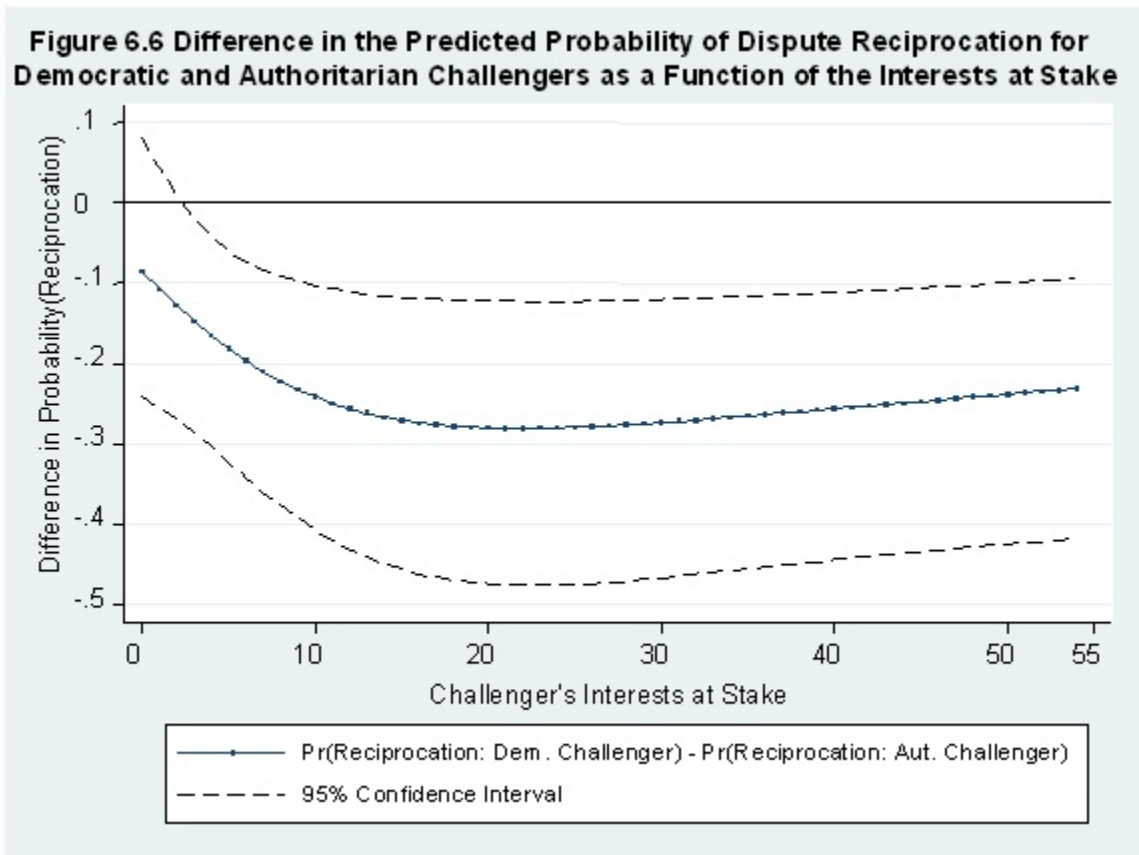


interests at stake as estimated in the model in Column 2 in Table 6. 6. As can be seen in Figure 6.5, there is essentially no difference between democratic and authoritarian states in terms of the predicted probability of threat reciprocation at the lower end of their strategic interests at stake, as indicated by the overlapping 95% confidence intervals at the low end of interests. Thus, while the results in Table 6.6 showed that there was no statistically distinguishable difference between democracies and autocracies at the extreme low end of their interests (i.e., when interests = 0, as shown by the insignificant

coefficient for the lower-order variable *Democratic challenger*), the graphical representation of the effect of the challenger's interests on threat reciprocation show that this credibility problem is not limited to the extreme low end of interests. Rather, even as we move away from the extreme low range of interests, democratic challengers do not always send more credible threats. This also confirms Hypothesis 8, which stated that at the lower range of the challenger's interests, there should be little difference in the rate of resistance for democratic and authoritarian challengers.

As the stakes in the crisis increase, however, we can begin to see the emergence of a different pattern, as the probability of reciprocation begins to decrease substantially for democratic challenger's and less so for authoritarian ones. In this respect, note especially in Figure 6.5 the much steeper decrease in the rate of resistance for democratic challenger's as they approach the upper end of their strategic interests. At the highest level of their interests at stake, the predicted probability of dispute reciprocation for a democratic challenger is essentially zero, whereas for an authoritarian challenger, there is still a moderately high probability of having its threat reciprocated. Note also that, for every increase in the interests at stake, the difference in the predicted probability of threat reciprocation (as indicated by the distance between the two graphs) is becoming larger. This latter point is further illustrated in Figure 6.6.

In Figure 6.6, I plot the difference in the predicted probability of reciprocation for democratic and authoritarian challengers as their interests at stake increase. Similar to the above illustrations of the difference in predicted probability for democratic and authoritarian states (though this time in terms of the probability of threat reciprocation), I



subtract the predicted probability of reciprocation against an authoritarian challenger from that of a democratic challenger. That is, the difference in the predicted probability of reciprocation is calculated as $[Pr(\text{Reciprocation} \mid \text{Democratic challenger}) - Pr(\text{Reciprocation} \mid \text{Authoritarian challenger})]$. As was the case with the above figures, a negative value on the y-axis indicates a higher probability of resistance against an authoritarian challenger whereas a positive value would indicate a higher probability of resistance against a democratic challenger.

Ultimately, Figure 6.6 confirms the relationship illustrated in Figure 6.5 about the decreasing probability of resistance for democratic challengers relative to authoritarian ones as the interests at stake in the crisis increase. That is, similar to Figure 6.5, we also see that there is no real difference in the credibility of democratic and autocratic threats at the low range of interests, whereas the most important difference between these two regime types begins to occur as the interests at stake increase. It is interesting to note, however, that while the difference between the probability of resistance for democratic and authoritarian states is sloping downward and becoming more negative (indicative of the greater credibility of democratic threats as the interests at stake increase), it begins to level off and even slightly increases once the interests at stake reach the intermediate range. Hence, authoritarian threats do begin to gain credibility relative to democratic ones as the interests at stake increase, but we still see that overall, democratic threats are much more credible than authoritarian ones once the democratic challenger moves away from the low range of strategic interests.

To briefly summarize these findings, then, I find support for all of my monadic hypotheses about the probability of threat reciprocation. Specifically, I find a strong independent influence of democracy and strategic interests for reducing the rate of threat reciprocation (Model 1 in Table 6.6), which supports of Hypotheses 2 and 6 about the independent influence of democracy and interests. At the same time, I also find solid support for my hypotheses about the interactive relationship between these two factors. Perhaps most importantly, I find that democratic threats are not always considered credible, as is predicted by the audience cost or informational approaches (Fearon 1994a;

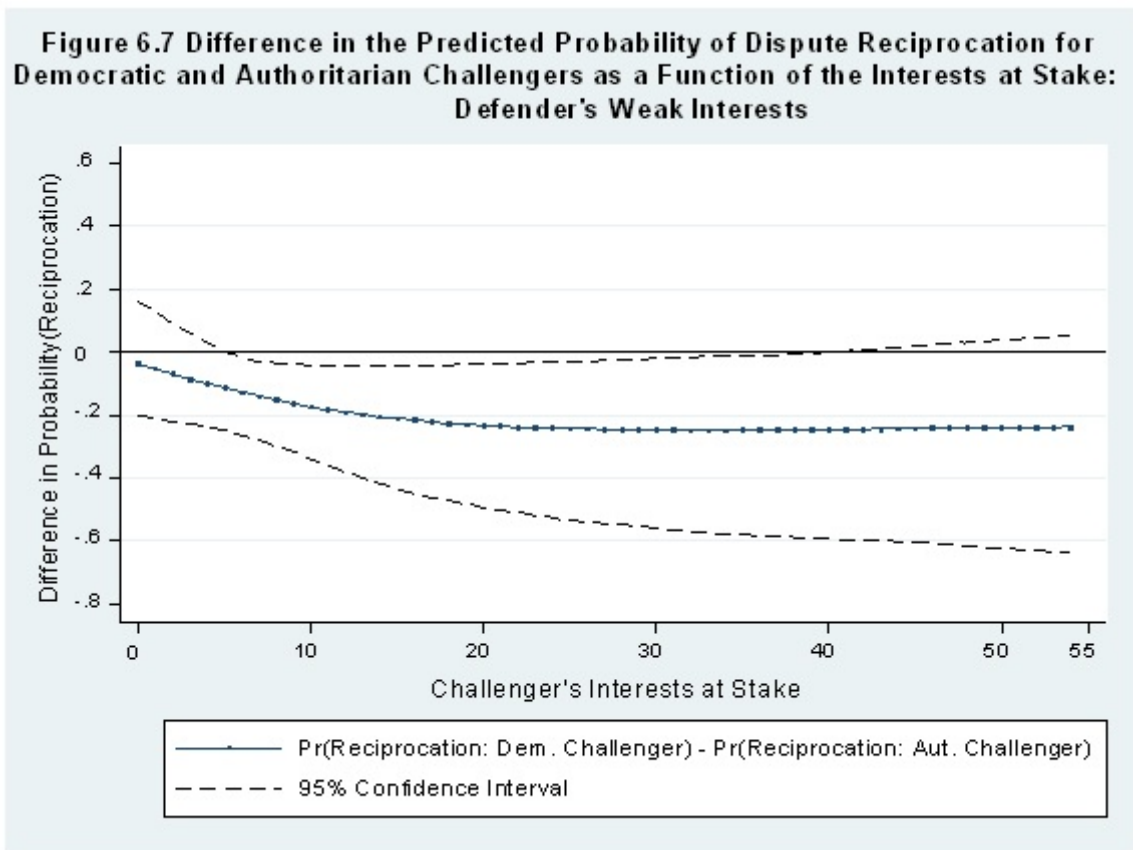
Schultz 2001). Indeed, at the low range of their interests, democratic challengers are quite similar to authoritarian ones in terms of the probability that they will have their threats reciprocated (Hypothesis 8). As we move away from the low range of strategic interests, however, we find that democratic threats become more credible than those of autocracies, resulting in a lower rate of resistance (Hypotheses 7 and 9). Finally, I also find support for Hypothesis 10 about the greater likelihood of reciprocation when the defender has strong as opposed to weak interests, as the coefficient for the variable *Defender's strong interests* is positive and statistically significant.

Moving now to Model 3 in Table 6.6, I can begin to evaluate some of the dyadic hypotheses about the relationship between democracy and the challenger's and defender's interests at stake as they jointly influence the probability of reciprocation. Consistent with the monadic results discussed above, I once again find that there is no statistically distinguishable difference between democracies and autocracies in terms of the likelihood of threat reciprocation when the challenger has no interests at stake. This is the case regardless of whether the defender has strong or weak interests at stake. To see that this is the case, note the statistically insignificant coefficients for the lower-order variables *Democratic challenger* and *Democratic challenger * Defender's strong interests*, which represent the differences between democratic and authoritarian challengers with no interests at stake when they are facing a defender with either weak or strong interests, respectively.

Further consistent with the results from model 2, I find that, regardless of the defender's interests, democratic challengers are less likely than authoritarian ones to

have their threats reciprocated as their interests increase. In this respect, note the negative and statistically significant coefficients for the interaction terms *Democratic challenger * Challengers interests* and *Democratic challenger * Challenger's interests * Defender's strong interests*, which represent the influence of the effect of the interests at stake for a democratic challenger against a defender with weak (as indicated by the two-way interaction) or strong (as reflected in the three-way interaction) interests relative to the similar effect of the interests at stake for an authoritarian challenger. Alternatively, the interests at stake seem to have little influence on the likelihood of reciprocation for an authoritarian challenger, as the coefficients for the lower-order variable *Challenger's interests* as well as the interaction *Challenger's interests * Defender's strong interests* are statistically insignificant.

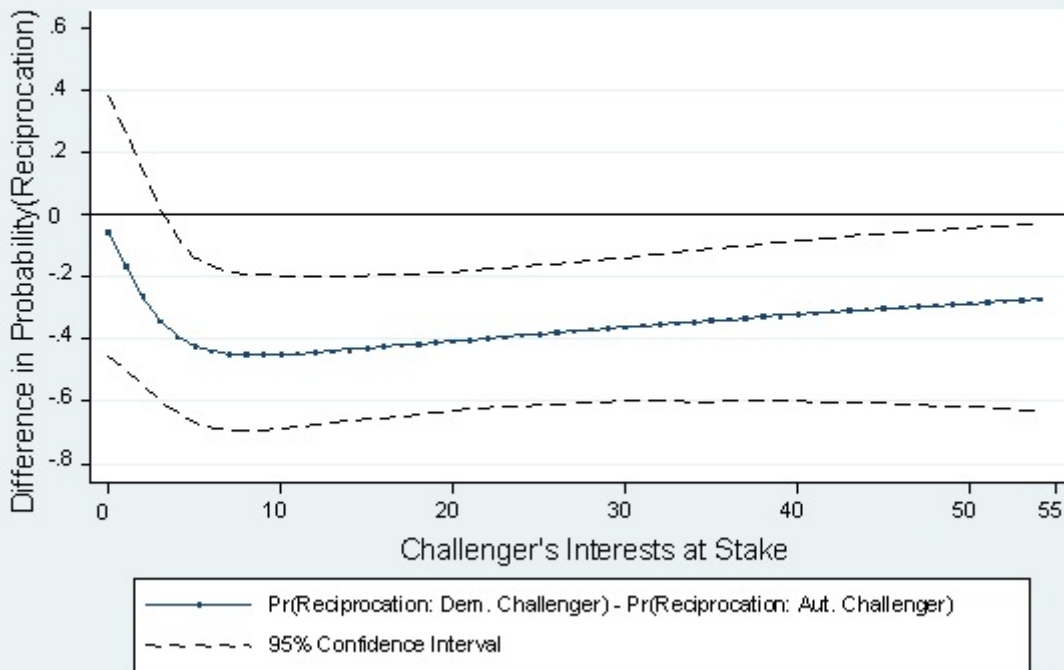
Ultimately, however (and as was the case with the analysis of the three-way interaction terms for the model of dispute initiation), we can gain a better understanding of the effects of the interests at stake under the different conditions of the challenger's regime type and the defender's weak versus strong interests through the use of predicted probabilities. With this in mind, in Figures 6.7 and 6.8 I graph the difference in the probability of dispute reciprocation for democratic and autocratic challengers under conditions of (1) the defender's weak interests (Figure 6.7) and (2) the defender's strong interests (Figure 6.8). In both figures, the difference in predicted probability is calculated as $[Pr(\text{Reciprocation: Democratic challenger}) - Pr(\text{Reciprocation: Authoritarian challenger})]$, and thus, negative values on the y-axis (difference in predicted probability



of reciprocation) indicate that authoritarian challenger's have a higher probability of having their threats reciprocated whereas a positive value indicates that democratic challenger's are more likely to have their threats resisted.

If we consider Figures 6.7 and 6.8 at the same time, a comparison of the two graphs leads to some interesting insights into precisely when the interests at stake have an effect in reducing the probability of resistance to a democratic challenger's threat. As was also the case in Figure 6.6, we again find no difference in the probability of resistance to democratic or authoritarian threats when either challenger has relatively

Figure 6.8 Difference in the Predicted Probability of Dispute Reciprocation for Democratic and Authoritarian Challengers as a Function of the Interests at Stake: Defender's Strong Interests



insignificant interests at stake in the crisis. In Figures 6.7 and 6.8, the difference between democratic and authoritarian states in terms of the probability of having their threats resisted is statistically insignificant at the lower end of their interests at stake (in both cases, the 95% confidence interval includes the value of zero, which means that we cannot reject the null hypothesis that there is no difference in the predicted probability of threat reciprocation). This also lends further validity to Hypothesis 8 about the absence of any differences in threat credibility between democratic and authoritarian challengers at the lower end of their interests at stake.

Yet note also in both figures that democratic challengers are significantly less likely to have their threats resisted than authoritarian ones as their interests increase, which is indicated by the downward (and negative) slope of the graph. Since this is the case in both Figures 6.7 and 6.8 (i.e., in the case of both the defender's weak and strong interests), this is further supportive Hypothesis 9 about the enhanced credibility of democratic threats relative to authoritarian ones as their interests at stake increase. Furthermore, if we consider Figure 6.8 alone, then I also find some partial support for Hypothesis 11, which stated that *given* the defender's strong interests, a democratic challenger is (increasingly) less likely than an authoritarian one to have its threat resisted as its interests at stake increase. Indeed, we do find that democratic challengers have a lower overall probability of threat reciprocation when the defender itself has strong interests at stake. At the same time, as the challenger's interests increase, then the difference in the probability of resistance begins to get smaller (note that the graph is beginning to approach zero, indicating that the difference in the predicted probability of reciprocation is becoming smaller).

However, an important difference in the effect of the interests at stake for threat credibility under conditions of the defender's weak versus strong interests is also highlighted once we examine both of these figures simultaneously. In this respect, note that the greatest difference in the probability of threat reciprocation of democratic versus authoritarian threats occurs when the defender has strong, not weak, interests in the region of the dispute. In the former case (i.e., the defender's strong interests), the difference in the predicted probability of reciprocation is greater than what we find in the

latter case (i.e., the defender's weak interests), and this finding is indeed consistent with Hypothesis 10. (To see that this is the case, note that the difference in the predicted probability of reciprocation is more negative in Figure 6.8 than it is in 6.7, which indicates a higher rate of reciprocation against an authoritarian challenger than against a democratic one). Moreover, recall that this is also the situation in which a defender is more likely to resist in general (see the coefficient for the variable *Defender's strong interests* in Model 2 of Table 6.6). The implication, therefore, is clear—the interests at stake have the strongest effect on reducing the probability of reciprocation against a democratic challenger relative to an authoritarian one when the defender itself has strong interests at stake. This, in turn, leads to the further interesting implication that the interests at stake enhance the credibility of a democratic challenger's threat the most precisely when this enhanced credibility is needed—i.e., when resistance is most likely.

If we consider these dyadic results about threat reciprocation in combination with the above discussed monadic findings, then the presented empirical analysis shows strong support for Hypotheses 6-11. I also find strongly supporting evidence for the validity of my theoretical argument about how the magnitude of a democratic leader's audience costs are tied to the strategic interests at stake in the crisis, as well as how this influences the relative credibility of a democratic challenger's threats. At the extreme low end of a democratic challenger's interests, their opponents are unlikely to believe that the democrat's threat is credible due to the marginal level of audience costs the democratic incumbent will pay for backing down. The defender is thus likely to reciprocate with higher probability than when the democratic challenger has strong

interests at stake. In the latter case, the higher level of audience costs the democratic leader will pay for issuing a threat and subsequently backing down is more likely to ensure that the threat is credible.

The results presented here also depart significantly from the expectations of previous audience cost theories (see e.g., Fearon 1994a; Schultz 1999, 2001), that do not consider the interests at stake to influence the credibility of a democratic challenger's threat. Most importantly in this respect, I find that a democratic leaders threats are not always considered more credible than those of authoritarian leaders. Indeed, in situations of the challenger's low interests at stake, there is essentially no difference in the credibility of a democratic threat relative to an authoritarian one. Rather, they are both equally likely to be reciprocated. Instead, I find strong support for my theoretical modification of the audience cost argument and, in particular, my argument that the credibility of a democratic leader's threats need be considered in light of the interests at stake in the crisis.

Crisis Outcomes

I begin the analysis of crisis outcomes, predicted in Hypotheses 12-15, with some simple descriptive statistics. In Table 6.7, I present the frequency distribution of the four different crisis outcomes for authoritarian (row 1) and democratic (row 2) challengers. A brief examination of Table 6.7 points to some interesting patterns that are not easily explainable by any of the previous audience cost formulations. In particular, note the (relatively) high percentage of cases in which the crisis outcome is the democratic challenger's acquiescence. In nearly 15% of crises they initiate, a democratic

TABLE 6.7 Frequency Distribution of Crisis Outcomes for Democratic and Nondemocratic Major Power Challengers

	<i>ChAcq</i>	<i>DefAcq</i>	<i>Compromise</i>	<i>War</i>	Total
Nondemocratic Challenger	36 (34.95)	36 (34.95)	12 (11.65)	19 (18.45)	103 (100.00)
Democratic Challenger	11 (14.17)	48 (63.16)	8 (10.53)	9 (11.84)	76 (100.00)
Total	47 (26.26)	84 (46.93)	20 (11.17)	28 (15.64)	179 (100.00)

Note: *ChAcq* = Challenger's Acquiescence; *DefAcq* = Defender's Acquiescence. Cell figures represent crisis-dyads. Numbers in parentheses are row percentages.

challenger acquiesces to its opponent. While this percentage is still small as compared to the percentage of cases that end in a nondemocratic challenger's capitulation (nearly 35% of all crises initiated by a nondemocracy end in their capitulation), it is still higher than would be anticipated by the audience cost approach, which predicts that democratic challengers only issue those threats they are willing to carry out. Moreover, if we can consider backing down to be an observable indication of a bluff (or at least getting caught in a bluff), then these results would seem to indicate that democratic challengers do indeed have a tendency to bluff with a relatively high frequency.

On the other hand, the high observed frequency of the number of crises ending in acquiescence by a democratic challenger's opponent is consistent with the predictions of the audience cost approach, as well as with my theoretical argument. Nearly 64% of all

crises initiated by a democratic challenger end in their adversary's acquiescence, which is considerable higher than the same outcome in a crisis initiated by an autocratic challenger (nearly 35% of crises initiated by a nondemocracy end in their opponent's acquiescence). Hence, it does appear that democratic challengers are better able than authoritarian ones to force their opponent into capitulating.

Note also the relatively higher percentage of crises that end in war for nondemocratic challengers than for democratic ones. Whereas nearly 19% of all crises initiated by an authoritarian challenger resulted in war, only about 12% resulted in the similar outcome when the challenger is a democracy. When compared to the much lower percentage of cases in which a nondemocratic challenger's opponent acquiesced relative to the percentage of cases in which a democratic challenger's opponent acquiesces, then this would also lend some validity to my argument that the probability of war relative to the opponent's acquiescence should be higher for nondemocratic challengers than for democratic ones (see Hypothesis 13).

Some even more interesting patterns emerge once we consider crisis outcomes in terms of the defender's weak versus strong interests as well. In Table 6.8, I report the similar frequency distributions of crisis outcomes, but this time, I examine them under the conditions of either the defender's weak (top portion of Table 6.8) or strong (bottom portion of Table 6.8) interests. Considering first the top portion of Table 6.8 (crisis outcomes under conditions of the defender's weak interests), notice first of all the relatively high percentage of cases that result in the (democratic or authoritarian)

TABLE 6.8 Frequency Distribution of Crisis Outcomes for Democratic and Nondemocratic Challengers and the Defender's Weak or Strong Interests

<i>Outcome: Defender's Weak Interests</i>					
	<i>ChAcq</i>	<i>DefAcq</i>	<i>Compromis e</i>	<i>War</i>	<i>Total</i>
Nondemocratic Challenger	14 (70.00)	3 (15.00)	2 (10.00)	1 (5.00)	20 (100.00)
Democratic Challenger	4 (50.00)	2 (25.00)	2 (25.00)	0 (0.00)	8 (100.00)
Total	18 (64.29)	5 (17.86)	4 (14.29)	1 (3.57)	28 (100.00)
<i>Outcome: Defender's Strong Interests</i>					
	<i>ChAcq</i>	<i>DefAcq</i>	<i>Compromis e</i>	<i>War</i>	<i>Total</i>
Nondemocratic Challenger	22 (26.51)	33 (39.76)	10 (12.05)	18 (21.69)	83 (100.00)
Democratic Challenger	7 (10.29)	46 (67.65)	6 (8.82)	9 (13.24)	68 (100.00)
Total	29 (19.21)	79 (52.32)	16 (10.60)	27 (17.88)	151 (100.00)

Note: *ChAcq* = Challenger's Acquiescence; *DefAcq* = Defender's Acquiescence. Cell numbers represent crisis dyads. Numbers in parentheses are row percentages.

challenger's acquiescence. Indeed, the challenger's acquiescence is the most common outcome of the defender's weak interests, as 18 out of the 28 crises (64.29%) ended with the challenger's acquiescence. Moreover, there is little difference between democratic

and authoritarian challengers in this respect, as this is the most frequent crisis outcome under the defender's weak interests for both types of challenger.

At the same time, note the overall low frequency of crises that end in war, which occurs with the lowest frequency out of all possible crisis outcomes when the defender has weak interests at stake. In fact, of the eight crises initiated by a democratic challenger, none resulted in war (I return to this below) whereas only one crisis initiated by an autocratic state resulted in war. In a sense, then, this would seem to support my intuition that war should be unlikely under the conditions of the defender's weak interests (Hypothesis 12). Yet when considered in light of the overall high rate of the challenger's acquiescence, it would appear that it is the challenger, not the defender, that is more likely to acquiesce in these situations. Again, if we can consider the challenger's acquiescence as an observable indicator of a bluff, then finding a higher percentage of crises resulting in the challenger backing down relative to fighting a war would further support the intuition from the formal model that challengers (including democratic ones) are more likely to bluff under conditions of the defender's weak interests.

Moving to the bottom portion of Table 6.8 (the defender's strong interests), it appears that many of the results just discussed are reversed. More specifically, under the conditions of the defender's strong interests, we find that the defender's acquiescence is the most frequent outcome, as 79 of the 151 (52.32%) resulted in the defender backing down. This is the case regardless of whether the challenger is democratic or autocratic, as the defender's acquiescence occurs with the highest frequency for both types of challenger. While, in one sense, this would appear to be contradictory to Hypothesis 12,

it may in fact reveal a selection effect dynamic that is consistent with my argument, wherein challengers only issue threats against highly resolved opponents when they are themselves highly resolved to carry out their threats. Hence, faced with the prospect of either backing down or fighting a war, even the highly resolved defender may be likely to back down. This indeed appears plausible, though only for democratic challengers. Note here that, if the defender does not acquiesce, then war becomes the most likely outcome under conditions of a democratic challenger and the defender's strong interests. Still, the difference in the percentage of crises that end in war relative to a democratic challenger's acquiescence (13.24% and 10.29%, respectively) is not large, which certainly does not support previous predictions that democratic challengers select themselves into disputes by issuing only those threats they intend to carry out (Fearon 1994a; Schultz 1999, 2001). Instead, while it is not possible to rule out such a self-selection effect, it also does not appear that it is generalizable to many crises involving a democratic challenger.

The frequency distributions presented in Tables 6.7 and 6.8 thus highlight some interesting patterns and lend some validity to my hypotheses of crisis outcomes. Ultimately, however, they do not allow me to draw any inferences into how these different crisis outcomes are influenced by the interests at stake in the crisis or about the interaction between democracy and strategic interests. To better understand the influence of these factors, I now turn to a multinomial logit model of crisis outcomes as presented in Table 6.9. The four different coefficients for each variable in Table 6.9 represent the effect of that variable for the first listed outcome in each column relative to the second

TABLE 6.9 Crisis Outcomes, Multinomial Logit Model

	<i>ChAcq</i> versus <i>DefAcq</i>	<i>Compromise</i> versus <i>DefAcq</i>	<i>War</i> versus <i>DefAcq</i>	<i>ChAcq</i> versus <i>War</i>
Democratic challenger	-.108 (.667)	.467 (.776)	2.348*** (.978)	-2.456*** (.816)
Challenger's interests	-.041** (.023)	-.044** (.023)	.024* (.016)	-.064*** (.021)
Democratic challenger * Challenger's interests	-.087** (.054)	-.104** (.059)	-.549*** (.184)	.461*** (.183)
Alliance ties (defender-protége)	.452 (.372)	1.004** (.556)	.149 (.588)	.303 (.481)
Relative capabilities (challenger-defender)	-5.188*** (1.022)	-2.638** (1.275)	-1.824* (1.263)	-3.364*** (1.176)
Constant	3.952*** (.793)	1.221 (1.088)	.007 (.930)	3.945*** (.916)
N		160		
Log-likelihood		-160.396		
Wald χ^2		87.32***		

Note: Note: *ChAcq* = Challenger's Acquiescence; *DefAcq* = Defender's Acquiescence. Numbers in parentheses are robust standard errors.

* $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed)

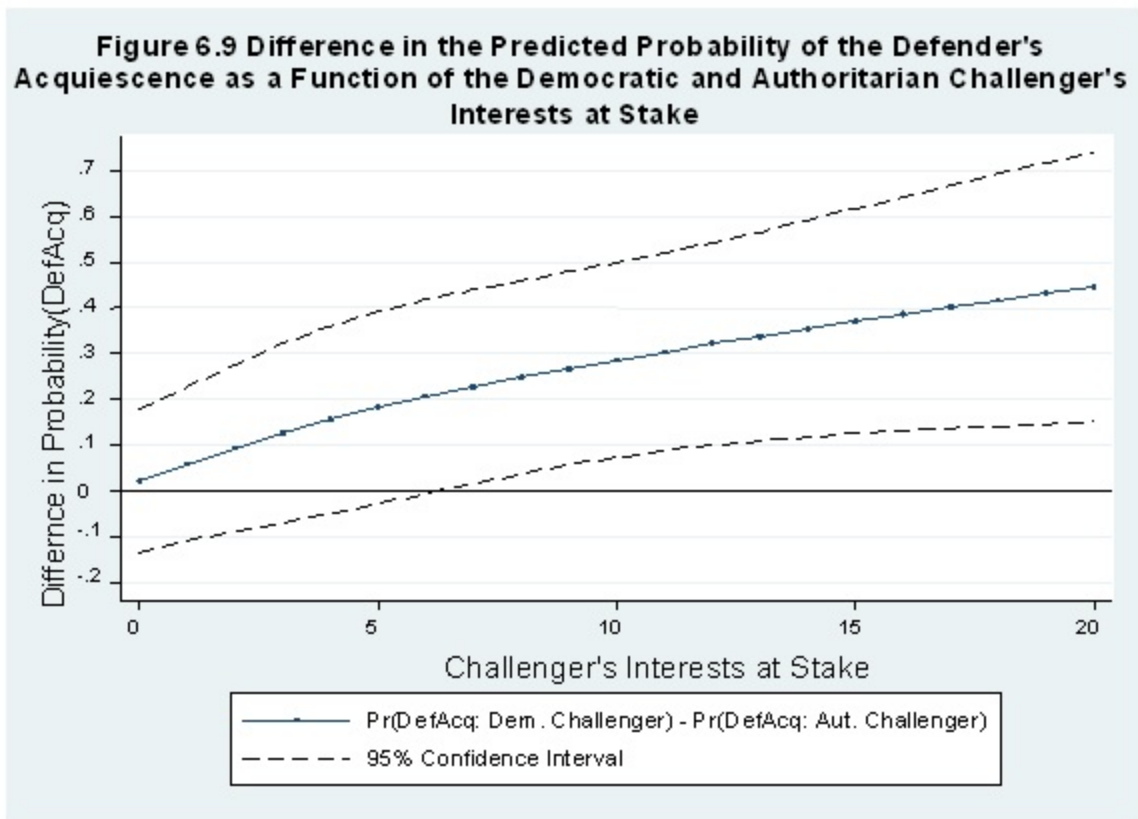
listed outcome. For example, the coefficient in column 1 for the variable *Democratic challenger* represents the difference between democratic and authoritarian challengers (when both types of challengers have no interests at stake) in terms of whether the crisis will end in the challenger's acquiescence relative to the defender's acquiescence. In the third column, the coefficient represents the difference between democratic and authoritarian challengers in terms of the effect it has on observing war relative to the defender's acquiescence.

Before discussing the results, note that Table 6.9 does not include the three-way interaction term as the above models of dispute initiation and reciprocation do. This is because, as noted above, there are no occurrences of war for democratic challengers facing a defender with weak interests at stake. Hence, the variable *Democratic challenger* which, in the model with the three-way interaction is interpreted as the difference between democratic and authoritarian challengers *when the defender's interests are weak*, would perfectly predict the absence of war. This, in turn, also has implications for the variable *Democratic challenger * Challenger's interests*, which is also interpreted conditional on the defender's weak interests. Because including these variables can make it difficult to derive correct estimates, I only analyze the model of crisis outcomes with the two-way interaction terms.

Moreover, given the relatively large number of crises in which the defender has strong (151 crises) relative to weak (28 crises) interests at stake, it is reasonable to anticipate that the results will primarily apply the former condition of the defender's strong interests as opposed to the latter one. This is especially the case with the outcome representing war between the challenger and the defender since, as just mentioned, there are no observations of war under conditions of a democratic challenger and the defender's weak interests, and only one case of war for authoritarian challengers facing a defender with weak interests. However, while this, in a sense, limits my ability to generalize to situations of the defender's weak interests, it is still possible to evaluate hypotheses 12 and 13, which are postulated in terms of the conditions of a defender with strong interests.

If we consider first the variables representing the effects of an authoritarian and democratic challenger's interests at stake as they influence crisis outcomes, we can immediately find some solid support for my theoretical argument about the probability of the challenger's acquiescence relative to the defender's acquiescence. In this respect, consider the outcome category "*ChAcq* versus *DefAcq*" (column 1) paying special attention to the coefficients for the same two variables just discussed. More specifically, the negative and statistically significant coefficients for the variables *Challenger's interests* and *Democratic challenger * Challenger's interests* show, respectively, that (1) the probability of the challenger's acquiescence relative to the defender's acquiescence is decreasing in the authoritarian challenger's interests at stake, and (2) a democratic challenger's acquiescence (relative to the defender's acquiescence) is even less likely than an authoritarian challenger's acquiescence as its interests at stake increase. I further illustrate this result in Figure 6.9.

In Figure 6.9, I plot the difference in the predicted probability of the defender's acquiescence for democratic and authoritarian challengers. Similar to the above figures, I graph this difference as [$Pr(\text{DefAcq: Democratic challenger}) - Pr(\text{DefAcq: Authoritarian challenger})$]. Therefore, a positive value on the y-axis would indicate a higher probability of the defender's acquiescence when the challenger is democratic as compared to when the challenger is autocratic, and a negative value would indicate the opposite (that is, a higher probability of the defender's acquiescence against a nondemocratic challenger). As can be seen in Figure 6.9, at the lower end of the challenger's interests at stake, there is not a statistically significant difference between democratic and authoritarian



challengers in terms of the probability that the defender will acquiesce, which is consistent with the thrust of my theoretical claim that there little difference in the credibility of democratic and authoritarian threats at the lower end of their strategic interests. Yet as the challenger's interests at stake increase, there is a statistically significant difference in the probability of the defender's acquiescence for democratic and authoritarian challengers. In this case, an increase in the challenger's interests increases the probability of the defender's acquiescence more for democratic challengers than it does for nondemocratic ones. The implication is therefore clear, and is quite supportive of my theoretical argument: an increase in the interests at stake has a stronger

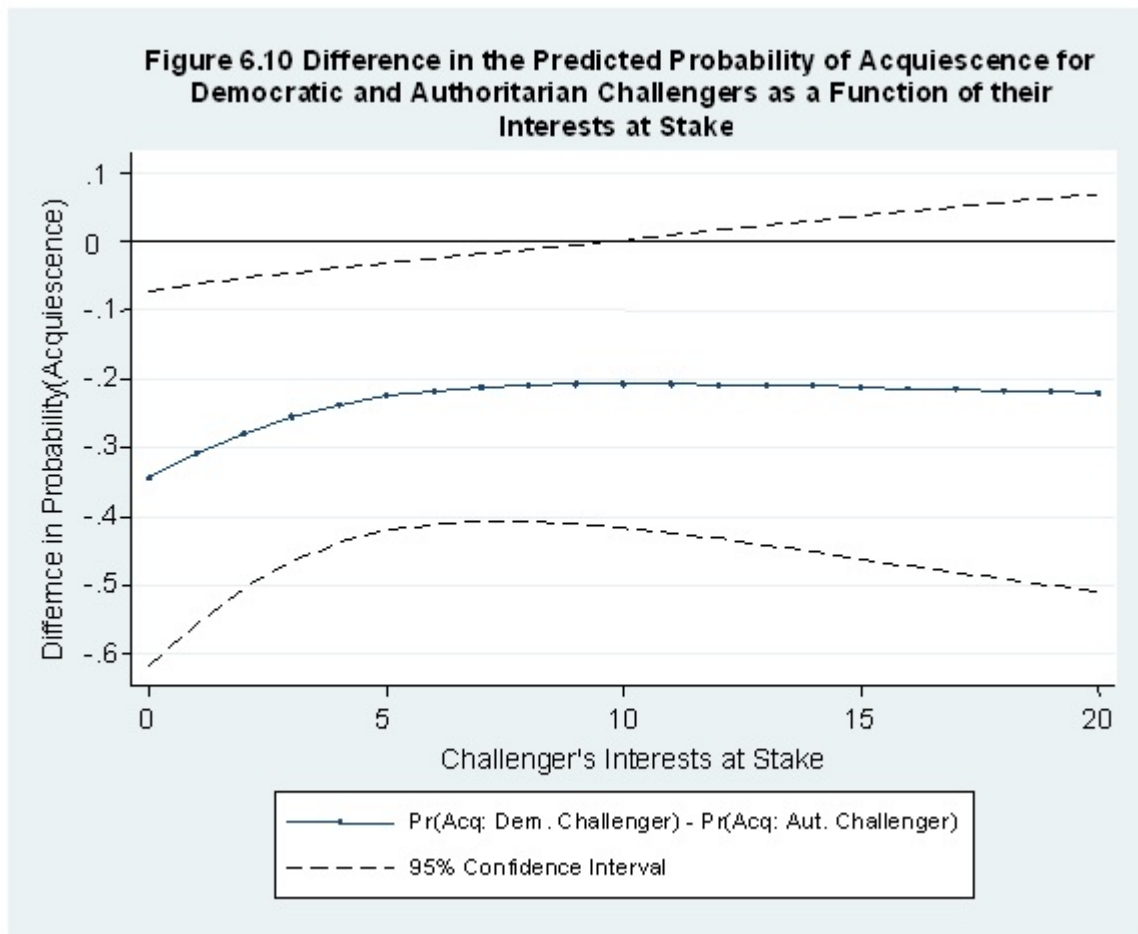
effect on increasing the probability of the defender's acquiescence when the challenger is democratic than it does when the challenger is authoritarian.

Moving back to Table 6.9, Hypothesis 13 is also confirmed, as this table shows a decreased probability of war relative to the challenger's acquiescence as the democratic challenger's interests at stake increase. In this respect, note first of all that for the outcome "*War versus DefAcq*" (column 3) the coefficient for the variable *Challenger's interests* is positive and statistically significant, indicating that for authoritarian challengers, an increase in the interests at stake increase the probability of war. Note also, however, that the coefficient for the interaction term *Democratic challenger * Challenger's interests* is negative and statistically significant, which means that, as a democratic challenger's interests increase, the probability of war relative to the defender's acquiescence is lower for democratic challengers than it is for nondemocratic ones. Given that there is only one case of war under the condition of the defender's weak interests (see again Table 6.8), it is quite intuitive to believe that this result is driven by the condition of the defender's strong interests. Therefore, Hypothesis 13 is generally supported, predicting that as the challenger's interests increase and *given* the defender's strong interests, the probability that the crisis will end in war relative to the defender's acquiescence is higher for nondemocratic challengers than it is for democratic ones.

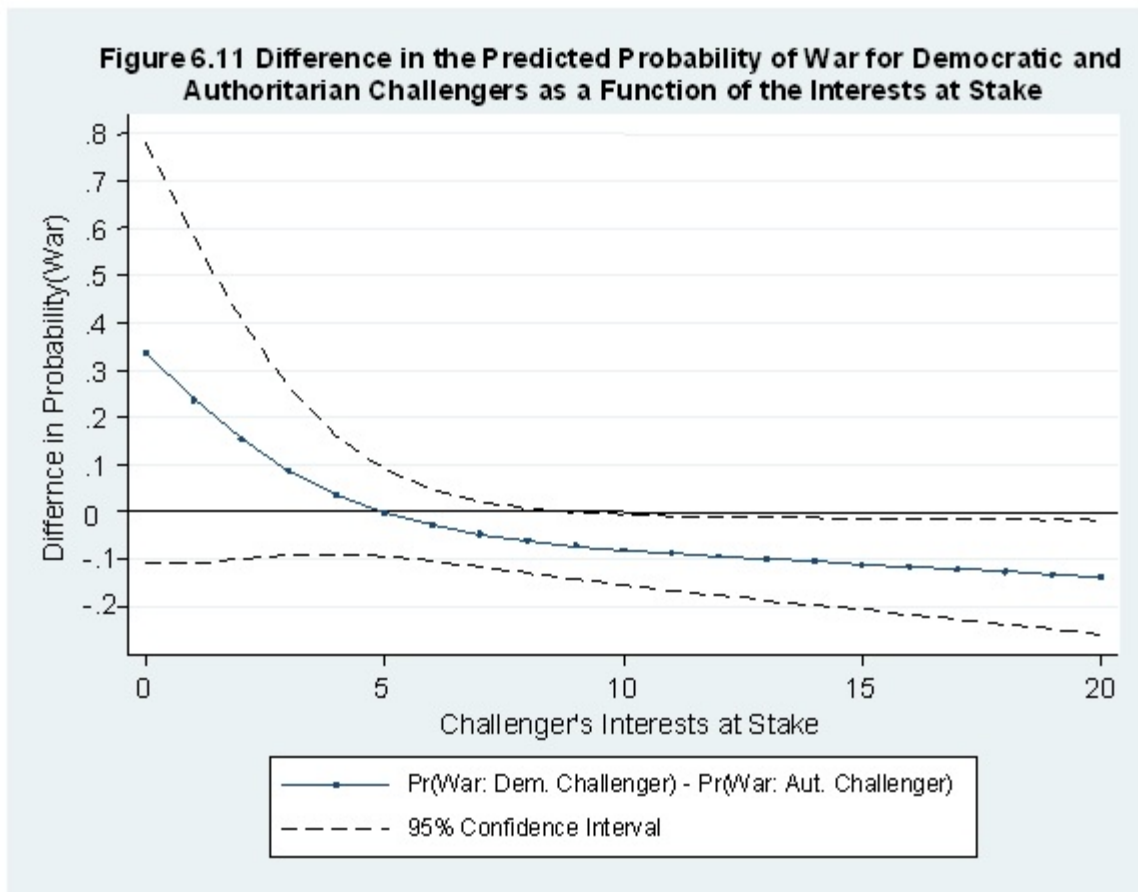
I also find that when the challenger has no interests at stake, war is *more* likely than the defender's acquiescence, though this is only the case when the challenger is democratic. To see this, note the positive and statistically significant coefficient for the variable *Democratic challenger*, which represents the difference in the probability of war

relative to the defender's acquiescence for democratic and authoritarian challengers, given that the challenger has no interests at stake. Hence, when a democratic challenger has no interests at stake, the defender's acquiescence is unlikely, which is ultimately consistent with my contention about the lack of credibility of democratic threats under the conditions of their weak interests at stake.

Yet I also find that war is *more* likely than the democratic challenger's acquiescence, given that the democratic challenger has *no* interests at stake, as reflected by the negative and statistically significant coefficient for the variable *Democratic challenger* under the outcome category "*ChAcq* versus *War*" (column 4). Moreover, the positive and statistically significant coefficient for the interaction variable *Democratic challenger * Challenger's interests* would seem to indicate that democratic challenger's are even more likely than autocratic challengers to acquiesce rather than fight a war as their strategic interests increase. These are, in turn, two puzzling results, as it is precisely under the conditions of the democratic challenger's weak interests that I predict finding them backing down rather than fighting a war, whereas when their interests increase, I anticipate finding them more likely to fight than acquiesce. Once we examine the effect of the challenge's interests graphically, a different relationship emerges that is quite consistent with my expectations. In Figures 6.10 and 6.11, I plot the difference in the predicted probability of the defender's acquiescence and war, respectively, for democratic and authoritarian challengers as a function of their interests at stake, and an examination of these two figures reveals a dynamic that is actually quite different than what is found by interpreting the coefficients alone.



Consider first Figure 6.10, which graphs the difference in the probability of acquiescence for democratic and authoritarian challengers as calculated by the difference $[Pr(\text{“DefAcq”}: \text{Democratic challenger}) - Pr(\text{“DefAcq”}: \text{Authoritarian challenger})]$. Thus, a positive value on the y-axis indicates a higher probability of a democratic challenger backing down, whereas a negative value would reflect the opposite (i.e., a higher probability that a nondemocracy backs down). As can be seen in Figure 6.10, the overall difference in the predicted probability of the challenger’s acquiescence is negative, which



means that crises initiated by democratic challengers are actually less likely than those initiated by autocracies to end in the challenger's acquiescence. This is contrary to the conclusion that results based on an examination of the coefficients alone, and is actually quite consistent with my theoretical argument. Note also, however, that once the challenger's interests move beyond a certain point, the difference between democratic and authoritarian challengers in terms of the probability of acquiescence is not statistically significant. Thus would, in turn, seem to suggest that as the challenger's interests at stake increase, they are more likely to be resolved and consequently less likely

to back down, regardless of whether they are democratic or nondemocratic. This is also consistent with my theoretical argument, as well as with previous results examining the relationship between the interests at stake and a challenger's resolve (see e.g., Danilovic 2002; Huth and Russett 1988; Huth 1988).

In terms of war as a crisis outcome, in Figure 6.11 I graph the difference in the predicted probability of war for democratic and authoritarian challengers. Again, a positive value on the y-axis would indicate a higher probability of war when the crisis is initiated by a democratic challenger and a negative value would indicate that crises initiated by nondemocracies are more likely to result in war. Perhaps the first thing to note in Figure 6.11 is that, at the low end of the challenger's interests at stake, there is a higher probability of war for democratic challengers than there is for nondemocratic ones. This is perhaps driving the positive coefficient for the variable *Democratic challenger* which, as you will recall, reflects the difference in the probability between democratic and authoritarian challengers that have no interests at stake. Still, note also that this difference at the lower level of the challenger's interests is not statistically significant, as the upper and lower bound of the 95% confidence interval encompass zero. As the challenger's interests increase, however, a different dynamic emerges. In this case, an increase in the challenger's interests actually increases the predicted probability of war for nondemocratic challengers more than it does when the crisis is initiated by a democratic challenger. And unlike at the lower end of the challenger's interests, the difference at the higher level of interests is statistically significant. This, in turn, confirms

Hypothesis 13 which predicts precisely a higher increase in the probability of war for nondemocracies than for democracies.

Overall, therefore, the above analysis lends validity to Hypotheses 12-15 concerning crisis outcomes. In particular, I found strong support for my expectations that democratic challengers are less likely to acquiesce than authoritarian ones as their interests at stake increase. Instead, under the conditions of the challenger's strong interests, defender's are more likely to acquiesce to a democratic challenger than they are against an autocratic one. I also found that increasing the challenger's interests produces a larger increase in the probability of war for nondemocratic challengers than it does for democratic ones. Given that these wars occur primarily under the conditions of the defender's strong interests (see Table 6.8), then this last finding means that *even when the defender has strong interests* (and war is more likely *ceteris paribus*), democratic challengers are better able than authoritarian ones to force their opponent into conceding, though only at the higher end of their interests at stake. Consistent with the analyses of dispute initiation and reciprocation, the analyses of crisis outcomes highlight the major theme of this dissertation about the necessity of considering the differences between democracies and autocracies in terms of their variable levels of interests at stake.

Control Variables

Before concluding, it is first necessary to consider how the control variables performed in each of the models of dispute initiation, reciprocation, and crisis outcomes. Recall that there were two main control variables specified in this analysis, both of which are important components of previous theories of international relations in general and

deterrence in particular. *Relative capabilities*, as a measure of the distribution of power in a dyad, is included as a control variable to test the realist notion that power considerations are of predominant importance in international relations (Morgenthau 1967; Waltz 1979). As a continuous variable with higher values indicating a relative capabilities advantage in favor of the challenger, we should intuitively expect a relative capabilities advantage in favor of the challenger to increase the likelihood of dispute initiation and decrease the likelihood of dispute reciprocation. This is indeed the case, as the positive and statistically significant coefficient in the models of initiation (Table 6.5) shows that challengers are more likely to initiate disputes as the dyadic distribution of capabilities shifts toward their advantage. Moreover, the negative and statistically significant coefficient for all models of dispute reciprocation (Table 6.6) indicate that potential defenders are less likely to reciprocate a stronger challenger's threats.

In terms of crisis outcomes, it is interesting to see how a relative balance or imbalance of capabilities influences the probability of war. This is, of course, a central component to the debate between power transition theorists (Organski 1958; Organski and Kugler 1980), on the one hand, who predict balances of power to be especially war prone, and (neo)realists or balance of power theorists (Morgenthau 1967; Waltz 1979), who consider imbalances of power to be the most conducive to war. In the context of this debate, the results reported in Table 6.9 would seem to provide more support for the former group of scholars (Power Transition Theory) than the latter group, as increases in the distribution of power in favor of the challenger decrease the probability of war relative to the defender's acquiescence. That is, war is less likely under a dyadic

imbalance of power, which is also consistent with the results of a number of previous studies (see for example, Organski and Kugler 1980; Bueno de Mesquita and Lalman 1992; Kim and Morrow 1992; Lemke and Werner 1996).

At the same time, it is important to note that the substantive importance of relative capabilities as a predictor of war is not very strong. When set at the value of .5 (exact power parity), the predicted probability of war is roughly .08. When set at .9 (indicating almost complete disparity in favor of the challenger), the probability of war is roughly .06. Hence, the net reduction in the probability of war is only .02 (or 2%) as we move from complete parity to complete disparity in favor of the challenger. Compared to the variable *Democratic challenger * Challenger's interest*, which produces a 21.7% reduction in the probability of war moving from $\frac{1}{2}$ standard deviations below to $\frac{1}{2}$ standard deviations above the mean, the substantive impact of relative capabilities on reducing the probability of war is indeed quite small.

Finally, consider the relative effect of *alliance ties* between the defender and protege which intuitively would be anticipated to (1) increase the likelihood that a defender will reciprocate a challenger's threat and (2) increase the probability of war relative to the defender's acquiescence if the threat is resisted. Ultimately, I only find partial support for these expectations, as a formal alliance commitment between a potential defender and protege increases the likelihood that the defender will step-in to resist the challengers threat. At the same time, these same alliance ties have no impact on the relative likelihood of war and the defender's acquiescence, as the coefficient for this variable is insignificant in predicting the probability of war relative to the defender's

acquiescence (see the insignificant coefficient for the variable *Alliance ties* column 3 in Table 6.9). Overall, then, it does not appear that alliance ties are as robust of a predictor of crisis behavior as are the theoretical variables of interest in this study.

Conclusion

In the end, the quantitative results presented in this chapter lend strong validity to the link I develop in this dissertation between domestic audience costs and strategic interests in order to predict a state's crisis behavior. More precisely, I find strong support for the interactive effect of these two factors as they influence dispute initiation, threat reciprocation, and crisis outcomes. In terms of dispute initiation, the presented empirical analysis shows that, contrary to some previous theories on domestic political costs (Fearon 1994), democratic leaders are not necessarily more likely than autocracies to select themselves into disputes based on their strong observable interests. Nor are they necessarily more likely to issue only those threats that they intend to carry out. Indeed, one of the main points of this dissertation is to show that democratic states are not necessarily substantively different from autocracies in terms of their willingness to initiate threats merely as "limited probes" or bluffs. As a result, democratic threats, as signals of resolve, should not always be considered more credible than those of autocratic leaders, and should be reciprocated at a similar rate. The quantitative analyses in this chapter provide strong support for these predictions.

At the same time, I also specify the conditions under which democratic threats should be considered more credible than those issued by autocracies—that is, as their interests at stake in the crisis increase. The theoretical explanation for this prediction

provided here is based on the heightened willingness of the democratic audience to punish a leader politically for failing to follow through on his threats over issues of high strategic salience. If a democratic leader issues a threat over a strategically important issue, then he is more likely to be punished for failing to carry it out. This, in turn, leads us to expect that such democratic threats should be more credible than (1) other democratic threats issued over strategically irrelevant issues, and (2) authoritarian threats, even in regions of the authoritarian leader's strong interests. Again, the results presented above lend significant support to these predictions as there is a strong substantive difference *among* democratic threats over low and high salience issues, as well as *between* democratic and authoritarian challengers issuing threats in the areas of strong interests. In both cases, democratic challengers with strong strategic interests are much less likely to have their threats reciprocated and less likely to have to fight a war to secure the strategically important good. In sum, there is solid support for my overall argument and specific theoretical and the empirical expectations derived from it.

CHAPTER VII

CONCLUSION

In this dissertation, I set out to develop a theoretical model that links domestic politics and strategic interests in order to explain the crisis behavior of states, and particularly democratic states. Specifically, I argue that domestic politics matters, but that we need to relax the critical assumption in the audience cost literature that the public will always punish a leader for backing down in a crisis. My contention is that, depending on their evaluation of the involved stakes, the domestic audience can have variable preferences for a leader's actions. In fact, the same action, such as backing down after having been called on a bluff, may or may not be domestically costly—it depends on how much the crisis is salient. One major implication of this assumption is that backing down after having issued a threat can have different implications for a leader's tenure, depending on the associated interests. Ultimately, if democratic leaders are not routinely punished for failing to carry out their threats, then they can and do bluff during international crises. While this allows them to initiate limited probes, it also means that their threats alone as signals of resolve are not informative.

This theoretical argument generated a number of modified predictions about the crisis behavior of democratic states. While Chapter II outlined my basic theoretic premises and intuitively discussed their implications, these were further subject to logical scrutiny through a formal stylization. Following the theoretical argument laid out in Chapter II, in chapters III and IV I developed a formal model linking endogenous

(domestic audience costs) and exogenous (strategic interests) factors under conditions of complete and incomplete information, respectively. The game theoretic analysis further generated the predictions that now incorporate a strategic interactive aspect as well.

One interesting prediction was that democratic threats are not always considered credible and unlikely to be resisted, both of which are expected by the audience cost approach (Fearon 1994a; Smith 1998; Schultz 2001). Rather, the credibility of their threats is tied to their strategic interests at stake. When the strategic interests are low, then democratic challengers are likely to have their threats resisted. In fact, at this low range of interests, there is little difference between democratic and authoritarian states in terms of the credibility of their threats. As the interests at stake increase, however, democratic challengers are less likely to have their threats resisted, and it is only under these conditions that we find a considerable difference in the credibility of democratic and authoritarian threats.

Moreover, due to private information about the challenger's resolve, adversaries will use the observable indicators of the interests at stake as a substitute for this information. When the observable interests for a democratic challenger are strong, their adversary is likely to believe that the incumbent would be punished for failing to carry out the threat, and therefore that the threat is indeed credible. It is only under this condition of the democracy's vital interests that the conventional audience cost conclusion holds. At the intermediate range of observable interests, however, an adversary has an incentive to question a democratic leader's resolve, and I show that

bluffs as well as wars can result in these conditions. In neither case should we expect a democratic leader to face high domestic costs.

A further important theoretical expectation derived from my model is, therefore, that we can indeed expect to find democratic leaders bluffing, and even backing down from their threats if their bluff has been called. Again, this is not consistent with the prior expectations of the audience costs approach, but it is consistent with my contention that the magnitude of an incumbent's audience costs need be theoretically tied to the interests at stake in the dispute. At the same time, when democratic leaders issue threats in areas of their strong vital interests, they are much more likely to stand firm and even fight a war if their opponent does not acquiesce.

After generating these, and several other, predictions from my theoretical premises and the formal model, I specified them as testable hypotheses in Chapter V. This chapter also outlined all elements of the research design. The empirical analysis in Chapter VI shows that the quantitative results support these theoretical claims. Overall, this analysis shows how the interactive effects of domestic audience costs and strategic interests produce more robust predictions about the conflict behavior. It also reveals patterns of behavior that are obscured when either is considered alone.

Theoretical Contributions

My research adds to the previous research on strategic bargaining in several ways. Fundamentally, my argument can be seen as bridging the gap between two research traditions in the coercive bargaining literature—the audience cost (or informational) approach and the deterrence research focusing on the interests at stake. While both

attempt to address the issues of threat credibility and the prevention of war, they do so from different theoretical angles. The audience cost approach implies, or directly states, that a leader's goal to maintain office and the effect of audience costs on his office retention overarch other concerns and are the main factor influencing crisis behavior and threat credibility. The deterrence research on the strategic interests is premised on the maximization of national interest as the ultimate motivation behind a state's behavior during an international crisis.

In terms of the former research, the main theoretical premises and predictions of the audience cost approach were laid out in Chapter II, and I do not revisit them here. Instead, I focus on one main and common premise in this approach—that is, an invariant willingness of the domestic audience to punish their leader for backing down in a crisis (Fearon 1994a; Smith 1998; Schultz 2001). As discussed, this premise leads to the expectation that democratic threats are more credible than authoritarian ones since the leader's domestic political consideration of office retention prevents him (i.e., the democratic leader) from bluffing. Instead, when they do issue threats, democratic leaders are likely to be resolved, and their opponents are more likely to back down.

While I also assume that audience costs have a critical impact on a leader's decision to initiate and carry out threats, my theoretical claims differ from those of the audience cost literature and thus contributes toward further refinement of it. The main problem with the audience cost argument is that it does not take into account how exogenous factors such as the interests at stake can influence the magnitude of a leader's audience costs. Once this is taken into account, we can identify several new expectations

about precisely when the domestic audience would have an incentive to punish a leader, their willingness to issue threats (including bluffs) and the credibility of their threats.

One major implication of my theoretical argument is that the domestic audience does not always have an incentive to punish a leader for backing down in a crisis. Instead, their incentives to do so are critically shaped and influenced by how much they care about the issue at stake. Hence, from the point of view of a democratic leader, reneging on a threat does not always jeopardize his tenure. Rather, this is only the case when important interests are on the line. A second implication, which follows logically from the first, is that democratic leaders do not always have to carry out their threats, and consequently, are not driven toward escalation once they have initiated a dispute. Rather, they can bluff and issue limited probes under certain conditions. Moreover, if these bluffs are “called” by an international opponent, democratic leaders can and do back down in the crisis with relatively little domestic political ramifications.

A third major implication of this study is that democratic threats cannot always be considered credible, which directly contradicts one of the main expectations of the audience cost approach, and I identify precisely when democratic leaders send more credible signals than authoritarian ones. Specifically, I argue that at the lower range of the interests at stake, there is little difference in the credibility of democratic and authoritarian threats, as both are likely to be resisted. As the interests at stake increase, however, democratic threats are increasingly more credible than authoritarian ones. This is strongly supported in the quantitative analysis.

With respect to the deterrence literature on the interests at stake, I also make some different predictions that, altogether, add to this body of research. Specifically, to the extent that these scholars have not attempted to incorporate domestic political factors into their theoretical arguments, they predict no difference between democracies and autocracies in terms of the credibility of their threats. Rather, they anticipate that, regardless of regime type, challengers with strong interests are less likely to have their threats resisted and that, when both the challenger and defender have equally strong and competing interests, war is likely to occur. I discuss each of these predictions in turn.

First, with respect to the former prediction (that all high stakes threats are credible), I do anticipate a difference between democratic and authoritarian threats at the upper end of the strategic interests at stake. That is, while there is little difference in the credibility of democratic and authoritarian threats at the lower range of interests, I do anticipate that as these interests increase, democratic threats are more credible than authoritarian ones. Again, the results strongly support this expectation.

Second, in terms of the latter prediction—that war is more likely to occur when both sides have mutually strong interests at stake—I predict a similar result. At the same time, the results of my game theoretical analysis also point to the fact that this is not as straightforward as previously expected. That is, even though war is more likely when both sides have mutually strong interests at stake, the probability of war is not the same for democratic and authoritarian challengers. Rather, if a democratic challenger has strong interests at stake, the probability of war is lower than for an authoritarian challenger that also has strong interests. Hence, even when the defender is predisposed to

fight, given its strong interests, the enhanced credibility of democratic threats over authoritarian ones at the upper range of interests can help states to avoid a potentially costly war. Again, this result found strong support in the quantitative analysis.

In the end, my theoretical argument that combines domestic audience costs and strategic interests contributes to the literature on coercive bargaining by modifying some of its central premises and generating theoretically novel predictions. These predictions are strongly supported in the empirical analysis, and lend validity to the theoretical and empirical claims in my dissertation.

REFERENCES

- Art, Robert J. 1998/99. "Geopolitics Updated: The Strategy of Selective Engagement." *International Security* 23(3): 79-113.
- Auerswald, David. 1999. "Inward Bound: Domestic Institutions and Military Conflict." *International Organization* 53(3): 469-504.
- Bennett, D. Scott, and Allan C. Stam. 2000. "Research Design and Estimator Choices in the Analysis of Interstate Dyads." *Journal of Conflict Resolution* 44(5): 653-85.
- Brambor, Thomas, William Roberts Clark and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analysis." *Political Analysis* 14(1): 63-82.
- Braumoeller, Bear F. 2004. "Hypothesis Testing and Multiplicative Interaction Terms." *International Organization* 58(4): 807-20.
- Brecher, Michael and Jonathan Wilkenfeld. 1997. *A Study of Crisis*. Ann Arbor, MI: The University of Michigan Press.
- Brown, Roger Glenn. 1970. *Fashoda Reconsidered*. Baltimore, MA: The Johns Hopkins University Press.
- Bueno de Mesquita, Bruce. 1981. *The War Trap*. New Haven, CT: Yale University Press.
- Bueno de Mesquita, Bruce and David Lalman. 1992. *War and Reason: Domestic and International Imperatives*. New Haven, CT: Yale University Press.
- Bueno de Mesquita, Bruce and Randolph M. Siverson. 1995. "War and the Survival of Political Leaders: A Comparative Study of Regime Type and Political Accountability." *American Political Science Review* 89(4): 841-855.
- Bueno de Mesquita, Bruce, James D. Morrow, Randolph M. Siverson, and Alastair Smith. 1999. "An Institutional Explanation of the Democratic Peace." *American Political Science Review* 93(4): 791-808.
- Bueno de Mesquita, Bruce, Michael T. Koch, and Randolph M. Siverson. 2004. "Testing Competing Explanations of the Democratic Peace: The Case of Dispute Duration." *Conflict Management and Peace Science* 21(4): 255-67.

- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson and James D. Morrow. 2005. *The Logic of Political Survival*. Cambridge, MA: MIT Press.
- Chan, Steve. 1997. "In Search of Democratic Peace: Problems and Promise." *Mershon International Studies Review* 41(1): 59-91.
- Chiozza, Giacomo and Hein Goemans. 2004. "International Conflict and the Tenure of Leaders: Is War Still Ex Post Inefficient." *American Journal of Political Science* 48(3): 604-619.
- Danilovic, Vesna. 2002. *When the Stakes are High: Deterrence and Conflict Among Major Powers*. Ann Arbor, MI: University of Michigan Press.
- Danilovic, Vesna and Joe Clare. 2004. "Authoritarian Regimes and International Conflict: An Institutionalist Account." Presented at the 38th North American Meeting of the Peace Science Society (International), Houston, November 12-14, 2004.
- Diehl, Paul F. 1992. "What are they Fighting For? The Importance of Issues in International Conflict Research." *Journal of Peace Research* 29(3): 333-344.
- Ellsberg, Daniel. 1959. "The Theory and Practice of Blackmail." In *Bargaining: Formal Theories of Negotiation*, ed. Oran Young, Urbana, IL: University of Illinois Press.
- Elman, Miriam Fendius. 2000. "Unpacking Democracy: Presidentialism, Parliamentarism, and Theories of Democratic Peace." *Security Studies* 9(4): 91-126.
- Farber, Henry S. and Joanne Gowa. 1997. "Politics and Peace." *International Security* 20(2): 123-146.
- Fearon, James D. 1994a. "Domestic Political Audiences and the Escalation of International Disputes." *American Political Science Review* 88(3): 577-92.
- Fearon, James D. 1994b. "Signaling versus the Balance of Power and Interests: An Empirical Test of a Crisis Bargaining Model." *Journal of Conflict Resolution* 38(2): 236-69.
- Fearon, James D. 1995. "Rationalist Explanations for War." *International Organization* 49(3): 379-414.

- Friedrich, Robert J. 1982. "In Defense of Multiplicative Terms in Multiple Regression Equations." *American Journal of Political Science* 26(4): 797-833.
- Gartzke, Erik. 1999. "War is in the Error Term." *International Organization* 53(3): 567-587.
- Gartzke, Erik. 2000. "Preferences and the Democratic Peace." *International Studies Quarterly* 44(2): 191-212.
- Gastil, Raymond Duncan. 1990. "The Comparative Survey of Freedom: Experiences and Suggestions." *Studies in Comparative International Development* 25(1): 25-50.
- Gelpi, Christopher F. and Michael Griesdorf. 2001. "Winners or Losers? Democracies in International Crisis, 1918-1994." *American Political Science Review* 95(3): 633-647.
- George, Alexander, and Richard Smoke. 1974. *Deterrence in American Foreign Policy: Theory and Practice*. New York, NY: Columbia University Press.
- Goemans, Hein. 2000. *War and Punishment*. Princeton, NJ: Princeton University Press.
- Gooch, G.P. 1936-38. *Before the War: Studies in Diplomacy*. 2 vols. London: Longmans Publishers.
- Guisinger, Alexandra, and Alastair Smith. 2002. "Honest Threats: The Interaction of Reputation and Political Institutions in International Crises." *Journal of Conflict Resolution* 46(2): 175-200.
- Hensel, Paul. 2001. "Contentious Issues and World Politics: The Management of Territorial Claims in the Americas, 1816-1992." *International Studies Quarterly* 45(1): 81-109.
- Huth, Paul. 1988. *Extended Deterrence and the Prevention of War*. New Haven, CT: Yale University Press.
- Huth, Paul. 1999. "Deterrence and International Conflict: Empirical Findings and Theoretical Debates." *Annual Review of Political Science* 2: 25-48.
- Huth, Paul, and Bruce Russett. 1984. "What Makes Deterrence Work? Cases from 1900 to 1980." *World Politics* 36(4): 496-526.
- Huth, Paul and Bruce Russett. 1988. "Deterrence Failure and Crisis Escalation." *International Studies Quarterly* 32(1): 29-45.

- Huth, Paul, Christopher Gelpi, and D. Scott Bennett. 1993. "The Escalation of Great Power Militarized Disputes: Testing Rational Deterrence Theory and Structural Realism." *American Political Science Review* 87(3): 609-23.
- Huth, Paul K. and Todd L. Allee. 2002. *The Democratic Peace and Territorial Conflict in the Twentieth Century*. Cambridge: Cambridge University Press.
- Ireland, Michael J. and Scott Sigmund Gartner. 2001. "Time to Fight: Government Type and Conflict Initiation in Parliamentary Systems." *Journal of Conflict Resolution* 45(5): 547-568.
- Jacobs, Lawrence R. and Benjamin I. Page. 2005. "Who Influences U.S. Foreign Policy?" *American Political Science Review* 99(1): 1-17.
- Jagers, Keith, and Ted Robert Gurr. 1995. "Tracking Democracy's Third Wave with the Polity III Data." *Journal of Peace Research* 32(4): 468-82.
- Jentleson, Bruce W. 1992. "The Pretty Prudent Public: Post Post-Vietnam American Opinion on the Use of Force." *International Studies Quarterly* 36(1): 49-74.
- Jones, Daniel M., Stuart A. Bremer, and J. David Singer. 1996. "Militarized Interstate Disputes, 1816-1992: Rationale, Coding Rules, and Empirical Patterns." *Conflict Management and Peace Science* 15(2): 163-213.
- Kam, Cindy D. And Robert J. Franzese Jr. 2006. *Modeling and Interpreting Interactive Hypotheses in Regression Analysis: A Refresher and Some Practical Advice*. Typescript: University of Michigan.
- Kim, Woosang and James D. Morrow. 1992. "When Do Power Transitions Lead to War?" *American Journal of Political Science* 36(4): 896-922.
- Lake, David A. 1992. "Powerful Pacifists: Democratic States and War." *American Political Science Review* 86(1): 24-37.
- Lake, David A. 2003. "Fair Fights? Evaluating Theories of Democracy and Victory." *International Security* 28(1): 154-167.
- Langer, William. 1951. *The Diplomacy of Imperialism, 1890-1902*. 2nd ed. New York, NY: Knopf Publishers.
- Lemke, Douglas and Suzanne Werner. 1996. "Power Parity, Commitment to Change, and War." *International Studies Quarterly* 40(2): 235-60.

- Lijphart, Arend. 1984. *Democracies: Patterns of Majoritarian and Consensus Government in Twenty-One Countries*. New Haven, CT: Yale University Press.
- Maoz, Zeev and Bruce Russett. 1993. "Normative and Structural Explanations for the Democratic Peace, 1946-1986." *American Political Science Review* 87(3): 624-638.
- Marshall, Monty G. and Keith Jaggers. 2002. Polity IV Dataset. College Park, MD: Center for International Development and Conflict Management, University of Maryland.
- Maxwell, Stephen. 1968. "Rationality in Deterrence." Adelphi Paper no. 50. London: Institute for Strategic Studies.
- Mitchell, Sara McLaughlin and Brandon Prins. 1999. "Beyond Territorial Contiguity: Issues at Stake in Militarized Interstate Disputes." *International Studies Quarterly* 43(1): 169-83.
- Morgan, T. Clifton and Sally Howard Campbell. 1991. "Domestic Structure, Decisional Constraint, and War: So Why Kant Democracies Fight?" *Journal of Conflict Resolution* 35(2): 187-211.
- Morgan, Patrick M. 1977. *Deterrence: A Conceptual Analysis*. London: Sage Publications.
- Morgenthau, Hans Joachim. 1967. *Politics Among Nations: The Struggle for Power and Peace*. 4th ed. New York, NY: Alfred A. Knopf.
- Mueller, John. 1973. *War, Presidents, and Public Opinion*. New York, NY: Wiley Publishers.
- Organski, A.F.K. and Jacek Kugler. 1980. *The War Ledger*. Chicago, IL: University of Chicago Press.
- Page, Benjamin I., and Robert Y. Shapiro. 1992. *The Rational Public: Fifty Years in Trends in Americans' Policy Preferences*. Chicago, IL: University of Chicago Press.
- Partell, Peter J. and Glenn Palmer. 1999. "Audience Costs and Interstate Crises: An Empirical Assessment of Fearon's Model of Dispute Outcomes." *International Studies Quarterly* 43(2): 389-405.

- Peceny, Mark, Caroline C. Beer, and Shannon Sanchez-Terry. 2002. "Dictatorial Peace?" *American Political Science Review* 96(1): 15-26.
- Peceny, Mark and Caroline C. Beer. 2003. "Peaceful Parties and Puzzling Personalists." *American Political Science Review* 97(2): 339-342.
- Powell, G. Bingham and Guy D. Whitten. 1993. "A Cross-National Analysis of Retrospective Voting: Integrating Economic and Political Variables." *American Journal of Political Science* 37(2): 391-414.
- Powell, Robert. 2002. "Bargaining Theory and International Conflict." *Annual Review of Political Science* 5: 1-30.
- Przeworski, Adam, Mike Alvarez, Jose Cheibub, and Fernando Limongi. 2000. *Democracy and Development: Political Institutions and Material Well-Being in the World, 1950-1990*. Cambridge, MA: Cambridge University Press.
- Ray, James Lee. 1998. "Does Democracy Cause Peace?" *Annual Review of Political Science* 1: 27-46.
- Reiter, Dan and Erik R. Tillman. 2002. "Public, Legislative, and Executive Constraints on the Democratic Initiation of Conflict." *Journal of Politics* 64(3): 810-26.
- Reiter, Dan and Allan C. Stam. 2003. "Identifying the Culprit: Democracy, Dictatorship, and Dispute Initiation." *American Political Science Review* 97(2): 333-338.
- Roberts, Stephen H. 1929. *History of French Colonial Policy, 1870-1925*. 2 vols. London: P.S. King and Son.
- Rousseau, David L. 2005. *Democracy and War: Institutions, Norms, and the Evolution of International Conflict*. Stanford, CA: Stanford University Press.
- Rousseau, David L., Christopher Gelpi, Dan Reiter and Paul K. Huth. 1996. "Assessing the Dyadic Nature of the Democratic Peace, 1918-88." *American Political Science Review* 90(3): 512-533.
- Russett, Bruce. 1996b. "Why Democratic Peace?" In *Debating the Democratic Peace*, eds. M. E. Brown, S. M. Lynn-Jones, and S. E. Miller. Cambridge, MA: The MIT Press.
- Russett, Bruce, and John Oneal. 2001. *Triangulating Peace: Democracy, Interdependence, and International Organizations*. New York, NY: W.W. Norton.

- Schelling, Thomas C. 1960. *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.
- Schelling, Thomas C. 1966. *Arms and Influence*. New Haven, CT: Yale University Press.
- Schultz, Kenneth A. 1999. "Do Democratic Institutions Constrain or Inform?: Contrasting Two Institutional Perspectives on Democracy and War." *International Organization* 53(2): 233-66
- Schultz, Kenneth A. 2001. *Democracy and Coercive Diplomacy*. Cambridge, MA: Cambridge University Press.
- Signorino, Curtis S. and Jeffrey M. Ritter. 1999. "Tau-b or Not Tau-b: Measuring the Similarity of Foreign Policy Positions." *International Studies Quarterly* 43(1): 115-144.
- Signorino, Curtis S. and Ahmer Tarar. 2006. "A Unified Theory and Test of Extended Immediate Deterrence." *American Journal of Political Science* 50(3): 586-605.
- Smith, Alastair. 1998. "International Crises and Domestic Politics." *American Political Science Review* 92(3): 623-38.
- Snyder, Glenn H. and Paul Diesing. 1977. *Conflict Among Nations: Bargaining, Decision Making, and System Structure in International Crises*. Princeton, NJ: Princeton University Press.
- Taylor, A.J.P. 1954. *The Struggle for Mastery in Europe, 1848-1918*. Oxford: Clarendon Press.
- Townsend, Mary Evelyn. 1941. *European Colonial Expansion since 1871*. Chicago, IL: J.B. Lippincott.
- Tsebelis, George. 2002. *Veto Players: How Political Institutions Work*. Princeton, NJ: Princeton University Press.
- Vasquez, John A. 1993. *The War Puzzle*. Cambridge, MA: Cambridge University Press.
- Vasquez, John A. 1996. "Distinguishing Rivals That Go to War From Those That Do Not: A Quantitative Comparative Case Study of the Two Paths to War." *International Studies Quarterly* 40(4): 531-58.

Waltz, Kenneth. 1979. *Theory of International Politics*. New York, NY: McGraw-Hill.

Waltz, Kenneth N. 2003. "Fair Fights or Pointless Wars?" *International Security* 28(3): 181.

Zagare, Frank C., and D. Marc Kilgour. 2000. *Perfect Deterrence*. Cambridge, MA: Cambridge University Press.

VITA

Name: Joseph Daniel Clare

Address: Texas A&M University, Department of Political Science, 4348 TAMU,
College Station, TX 77843-4348

Email Address: joeclare@polisci.tamu.edu

Education: B.S., Political Science, Central Michigan University, 2000
Ph.D, Political Science, Texas A&M University, 2006