Abstract

How do states manage ongoing territorial disputes that are not yet on their way to resolution? In three article-length chapters, this dissertation looks at how states choose border policies and jostle for positioning, given a strategic environment that is alternately ambiguous, confusing, and unpredictable.

The first paper, “Testing the Territorial Waters: Experimentation and Learning in Policy Choices,” explores how the policymaking process happens in the face of uncertainty over policy outcomes. Because states lack complete information about how to best advance their territorial claims, they accept extra risk to implement and learn from policies that offer clear feedback about outcomes.

The second paper, “Legal Ambiguity in Territorial Disputes,” focuses on a particular kind of border policy, namely faits accomplis. It hypothesizes that when international law fails to provide a basis for shared perceptions between disputing states, either due to the complexity of a dispute or due to competing, equally legally valid claims, dissatisfied states are more likely to attempt to encroach on disputed regions.

Finally, the third paper, “The Strategy of Faits Accomplis in Territorial Disputes,” narrows the focus further by asking how dissatisfied states choose the scale of a fait accompli, and what other states can do to prevent border activity. It finds that states can deter dissatisfied opponents from large-scale border activity through better border monitoring, since states attempting faits accomplis prefer not to get caught before they can consolidate newly held territory.
I would like to thank my advisor Kris Ramsay for being an exceptionally observant and supportive person. Not only is his advice always invaluable, and well worth following, but I always felt much better about whatever I had been worried about upon leaving his office than I had upon entering it. One of the papers in this dissertation also makes much more sense as a result of his suggestions, and his financial support of me over the course of the last semester really got me over the hump on this whole “graduate school” thing.

I would like to thank my other committee members, David Carter and Tom Christensen, for their expertise and aid in generating ideas, which has guided me throughout the writing process. David has been a huge intellectual help for years, ever since he took on the role of advising me for my second-year paper. Without him, I would not be half as knowledgeable about the study of territorial disputes. Tom, meanwhile, has helped me keep my work grounded in real events and real history ever since he first taught me in my first semester of graduate school. Half the paper ideas I have had within the last several years stemmed in one way or another from conversations I had with him in his office.

Tons of people have contributed to this work, including Matias Iaryczower who joined Kris and David in a brainstorming session that kicked the entire project off; Jaroslav Tir and Mark Souva who gave me excellent paper framing advice at an MPSA Junior Scholars Symposium; Paul Huth who collected a ton of data on border disputes that made half of my work even possible to do; and everyone at Princeton, MPSA, and wherever else I presented who gave me excellent feedback. I particularly wish to thank the Bradley Fellowship (and therefore Tom again) for funding field work and international travel, as well as Q-APS and various other Princeton programs for financial support.

Outside of strictly academic inspiration, I have all sorts of people to whom I am grateful. There’s everyone in my grad cohort, including but absolutely not limited to the IR folks, Nhung Bui, James Lee, Saurabh Pant, and Tyler Pratt. There’s Riva Riley, who has been one of my best friends practically since our first two-hour phone conversation in
July (I think?) 2008, and who has been commiserating with me about grad school for the last three and a half years straight. There’s Ariel Diertani, whose delightful conversation and familiarity with the Ph.D. process carried me through many an otherwise irritating day wrangling with R. There’s Yvonne Kao; she is never going to see this, but I’m pretty sure I would never have come to study war if it weren’t for all those epic fantasy novels she introduced to me in seventh grade. There’s Carlanna Hendrick, who first introduced the novel idea to me, back in AP U.S. History, that wars might have causes and historical figures might be interesting people. And there’s Kathy Zhang for getting me into powerlifting, which has been hugely beneficial to my mental health.

Lastly, there is my family. My parents, Shi Yuling and Wang Jianshe, have given me every opportunity in life, not to mention more life advice than they realize I successfully absorbed. Charles Wang has been an excellent brother since he was born, and I wish him luck in his own graduate studies. Sage Engle-Laird was an excellent roommate and continues to be an excellent sister-in-law. And, above all, Carl Engle-Laird has been a stand-up husband, roommate, cook, RPG GM, co-conspirator, gym buddy, and co-pizza orderer for many years. He has tolerated all my harebrained schemes, played all of the boring dungeon crawling bits in our year-long marathon of the Persona games, and been a comforting presence throughout our relationship. I wouldn’t be the same without him.
To Carl. Or, as I like to call him, Caaaaarrrrlllll.
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Chapter 1

Introduction

A complete analysis of interstate territorial disputes must answer the following three questions: first, why do territorial disputes arise; second, how do states manage ongoing disputes that are not yet on their way to resolution; and third, when and how do states resolve their disputes? In this dissertation, I expand on the middle question, which has been understudied in the international relations literature relative to the other two. How are states able to construct coherent foreign policy strategies when territorial disputes place states in confusing and unpredictable strategic environments? How do states respond to the behaviors of other actors, when they are not sure about the legitimacy of their claims, or about their opponents’ intentions?

People can be very creative when it comes to formulating policy, which complicates efforts to answer these questions. States have tried every trick in the book of ways to protect and expand their territorial claims, and are still regularly coming up with innovative new ideas about how to assert their sovereignty. This creativity reflects the fact that states are usually in it for the long haul. Border disputes can last a very long time, especially when states cannot decisively win a war to settle the question [Walter 2003]. It also means that any analysis of territorial policy must, to some extent, abstract away from specific actions like dredging up sand to increase the size of islands, the obstruction of road construction,
or publishing old maps, and towards the overall strategic thinking that lies behind a given
category of maneuver.

From the widest angle, I conceptualize policymaking as an iterative process, in which
actors anticipate and respond to each other’s moves in order to achieve better long-term
outcomes. This lens can be focused by considering how actors’ responses take into account
the uncertainty and risk that typify international security (Rathbun 2007). States and their
foreign policy leaders are uncertain about all kinds of things. They want to know if others
will notice their actions and how quickly, how likely it is that they will face a severe backlash,
how to characterize the intentions of other neighboring states, and whether or not they would
win an outright confrontation, among many other factors.

This wide-angle analysis adds a layer of nuance to existing research on border disputes,
by showing how informational considerations cause states to manage their territorial claims in
ways not purely predicted by considerations of material capabilities. States seek to improve
their claims and resolve the claims at advantageous moments but must learn about their
policies and strategic situations to do so. Furthermore, they take advantage of what other
states do not know about their own intentions, realizing that others must expend considerable
resources to identify and counter all potential tactics. These types of considerations apply
not only to moments of major territorial crisis or resolution, but also to the many years of
political maneuvering that occur in between these moments, as states try to navigate their
disputes and put themselves in advantageous positions.

Zooming in, the dissertation also looks at the phenomenon of faits accomplis, which
are a specific, if still broad, category of territorial action in which a dissatisfied state unilat-
erally engages in actions with the hope of either escaping notice or escaping a response from
other relevant actors. In other words, faits accomplis are activities in which the state, leader,
or other foreign policy actor tries to get away with something without inviting the input of
others and without fully provoking them, whatever that something may be. Faits accomplis,
as a conceptual category of territorial policy, encompass many distinct behaviors—again, pol-
icymakers are a creative bunch—but they can be studied as a group because they share the same strategic considerations. The planning of a fait accompli must answer the following questions: how limited should the scope of my action be? What do I gain if I succeed? How can I avoid either detection or retaliation? How resolved, observant, or capable is the actor that I am trying to work around? What is the worst that could happen in response to what I do? Even though the analysis of individual incidents may vary in the details, they all have balancing risk and reward in common.

Each chapter of the dissertation will go into more detail on specific aspects of territorial claim management, including faits accomplis, but in this introduction, I situate my work as a whole in the broader context of the international relations literature. First, I consider the literature on border disputes. This literature has extensively discussed the origins and endings of territorial disputes, as well as the relevance of territory to militarized conflict and prolonged geopolitical tension. By contrast, it has only begun to consider states’ interstitial management of their claims in between big conflagrations or moments of resolution. Second, I take a stab at condensing the vast political science literature on information, uncertainty, and risk, in order to show why these concepts deserve special consideration when we study territorial disputes, and why we must bring our informational theories to scenarios other than dispute resolution. Third, I discuss how informational concerns drive the policy creation process with respect to claim management. Lastly, I provide a short overview of the three main parts of the dissertation.

1.1 Territorial Claims in the Interstitial Moments

Managing territorial disputes is a year-round job. In time when borders lie relatively quiescent, states may still be actively trying to manipulate international perceptions, the legal status of their claim, or their physical presence in the unsettled region in order to make optimal settlements more likely in the long run. These periods usually constitute the bulk
of the life span of a dispute. However, except in studies of individual, particularly volatile conflicts, the literature has focused on how states begin these disputes, avoid escalation in key moments, or eventually resolve their differences. More work must be done to characterize how states maneuver around each other when a major event is not on the horizon, as well as how this maneuvering can lead to flare-ups of tension between opposing countries.

The scholarship on territorial conflict *per se*, rather than as a causal driver for conflict (Gibler 2007; Kocs 1995; Levy and Thompson 2010; Rasler and Thompson 2006), primarily focuses on the beginnings and ends of disputes. When it comes to origins, we know that territorial disputes often arise from competing historical borders (Abramson and Carter 2016; Carter Forthcoming) or ethnic settlement patterns (Goemans and Schultz 2017), and that states often refer to history when justifying their claims (Murphy 1990). We know that conflicts have arisen when new laws like the U.N. Convention on the Law of the Sea have come into conflict with states’ existing perceptions of the extent of their territory (Beckman 2013). These conflicts reflect differences in perception that reverberate through future interactions between border states.

By far the most thoroughly studied aspect of territorial disputes is their prospects for resolution, and the form that resolutions can take. Naturally, territorial conflict sometimes ends in war (Hensel 1996; Senese and Vasquez 2003; Vasquez and Henehan 2001). However, a central question in the literature is how and in which forums states decide to come to peaceful agreements, which requires the good-faith effort of both sides. Many factors affect whether or not states use judicial or quasi-judicial methods like adjudication and arbitration for dispute settlement, including the strength of the states’ legal claims (Huth, Croco and Appel 2011, 2013) and the material balance of power (Gent and Shannon 2011, 2014). States may be more likely to choose adjudication when appealing to a higher, geopolitically neutral power would play more favorably in domestic politics (Allee and Huth 2006; Simmons 1998, 2002). Most of the time, however, states prefer to settle through bilateral bargaining, which can be affected by domestic political accountability (Huth and Allee 2002), domestic political
systems (Powell and Wiegand 2010), or a willingness to use territory as a chip for other bargaining concessions (Fravel 2008; Wiegand 2011).

Because of the emphasis on endings and outbreaks of conflict, an analytical gap remains when it comes to state behavior during the middles of these disputes. Theories about the management of ongoing disputes are common in studies of regions that contain particularly intractable and potentially violent disputes, but they generally emphasize the avoidance or mediation of conflict rather than other aspects of territorial claim development (Beardsley and Lo 2014; Savun 2008; Shannon 2009). As an example, scholars of East and Southeast Asia have ceaselessly discussed conflict management, informally defined in these cases as strategies that may prevent conflicts from turning into militarized disputes. The ASEAN “security community” plays an important yet limited role in socializing states into norms and semi-formal dialogue processes that promote peaceful interaction (Acharya 2001; Jones and Smith 2007; Kuik 2005), while some geopolitical circumstances make conflict management pacts, like the 2002 Declaration on the Conduct of Parties in the South China Sea, more likely (Buszynski 2003). More broadly, scholars have considered the role of peace-promoting institutions on territorial conflict (Hansen, Mitchell and Nemeth 2008; Hensel, Mitchell and Sowers 2006; Wiegand and Powell 2011).

Of those scholars that study aspects of dispute management outside of conflict prevention and mediation, relatively few consider what states are doing to advance their interests in disputed territory other than avoiding war and promoting peaceful resolution. Instead, scholars discuss why disputes are hard to resolve or become more intractable (Dreyer 2012; Goddard, Pressman and Hassner 2007/2008; Toft 2002), or when political leaders are more amenable to bringing disputes to resolution (Chiozza and Choi 2003). These theories assume that the legal and physical aspects of the disputes themselves are relatively static, except insofar as they become easier or harder to resolve.

By contrast, I propose to look more closely at how states manipulate their policy with respect to the disputed territories themselves in order to jostle for a better position.
in a dispute, which they may not wish to resolve in the near future. Hassner (2006/2007) touches on some of these tactics in his explanation of how states become entrenched in disputes. “Material entrenchment” entails the extending of infrastructure, as well as legal and administrative frameworks, into disputed territory; “functional entrenchment” entails the use of maps to remove ambiguity that might have made settlement easier; and “symbolic entrenchment” entails the building of nationalist identity over territory. In discussing the Golan Heights dispute, for example, Hassner considers political leaders to have played some role in dispute entrenchment, but also sees the entrenchment as the result of other social processes. States intentionally undertake these types of actions to fortify their own position, should resolution become a possibility.

Within the last few years, scholars have turned to the phenomenon of the fait accompli, which in its broadest sense refers to all activities that are unilateral, limited, and expected by policymakers not to provoke a direct response from other disputants. Altman (Forthcoming) looks at territorial land grabs, which are far more common than exchanges of territory resulting from successful coercive diplomacy, and Tarar (2016) identifies the commitment problems that arise from states’ ability to engage in military faits accomplis. The literature could go further by including analyses of unilateral border activity that are not strictly military in nature, including diplomatic faits accomplis like China’s announcement of an Air Identification Defense Zone over the East China Sea in 2013, or administrative faits accomplis like its establishment of Sansha as a prefecture-level city to administer the South China Sea. It could also include actions that are not strictly faits accomplis but are one-sided in nature, such as the Philippines’ use of a judicial maneuver under Annex VII of the Law of the Sea to cause an arbitral tribunal to declare legal limits on China’s maritime claims.

The key takeaway is that states are not merely waiting for the opportunity to achieve an optimal settlement, but actively manipulating events related to their borders in order

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1 In this case, China was invited to participate and declined, but also did not apparently escalate. The effect therefore in some respects resembled that of a successful fait accompli on the part of the Philippines.
to gain strategic advantages. Moreover, states react to each other. When one side of a dispute tries a particular gambit, the other side can respond immediately in a variety of ways, not all of which are military or diplomatic in nature, and not all of which constitute direct resistance to the gambit. States may then try to take back lost territory through force or submit official diplomatic complaints; this is often how dormant disputes suddenly awaken and turn into full-on conflicts. They can also speed up the development of existing policy proposals, as opponents scramble to brainstorm and regain the initiative, or provoke copycatting behavior, as one side’s actions to capture or strengthen its claims in unsettled territory encourages its opponent to do the same. The sheer multiplicity of options suggests that future border dispute research could benefit richly from studying policymaking in the interstices between major dispute moments.

1.2 Risk, Uncertainty, and Learning

Uncertainty is ever-present in international relations (Rathbun 2007), particularly when interstate conflict is involved. States are unsure about all manner of factors in the environment, including but not limited to the resolve of other actors to fight and their ability to commit to not fighting a war (Fearon 1995; Wolford, Reiter and Carrubba 2011). Territorial disputes add an extra element of uncertainty to standard war bargaining theories because they arise in the first place from disagreements about where sovereign boundaries should be, in terms of either normative or legal legitimacy. Understanding how states deal with multiple levels of uncertainty, not only while bargaining but between attempts at negotiation, should therefore enrich our understanding of the life span of territorial disputes.

In information-based theories of war, war solves a political problem whereby diplomacy breaks down because states disagree or lack knowledge about their relative capabilities. War arises from the inability to commit credibly to a peaceful bargain (Leventoglu and Slantchev 2007; Powell 1999), and it informs states about the true state of affairs (Powell
Increased uncertainty prior to war therefore makes the outbreak of conflict more likely (Reed 2003). Whereas bargaining is “strategically manipulable,” battles are not manipulable and therefore provide a different kind of information that allows states to allocate resources in a way that reflects reality (Slantchev 2003b).

Because of the legal element of territory, border conflicts may arise from information problems along multiple dimensions. The international community has implemented a number of judicial or quasi-judicial processes that have jurisdiction over territorial sovereignty, including the International Court of Justice and the Permanent Court of Arbitration. Consequently, theories of legal bargaining also apply to such disputes, and in many cases, the legal bargaining literature parallels the war bargaining literature quite closely. Imperfect information induces a failure to settle without paying the cost of taking the outside option (in this case, courts) and discovering something approximating the “truth” (Bebchuk 1984; Cooter, Marks and Mnookin 1982; Daughety and Reinganum 2005). The main difference is that instead of being uncertain about the balance of power, states are uncertain about whose claim is better supported by the law.

Most attention has been paid to information problems during bargaining, and the literature has come up with a number of mechanisms whereby disputing parties can avoid costly outside options through diplomacy. For instance, “cheap talk” models suggest that states can circumvent informational issues during bargaining by using diplomacy to clarify and improve their strategic position, even without proof or evidence of their diplomatic claims (Farrell and Gibbons 1989; Farrell and Rabin 1996; Ramsay 2011). However, given that war does not occur particularly frequently in comparison to other political activities (Gartzke 1999), it makes sense to consider how asymmetric information changes policy outcomes at times when negotiations are not occurring. States can strategically manipulate information and outcomes at any time in a dispute, not just during diplomacy.

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2Third-party arbitration predates either of these organs; the United States settled multiple border or fishery disputes around the turn of the century through arbitration agreements.
In order to think about how uncertainty interacts with non-bargaining behavior, it is useful to remember that states may not be all that interested in learning the “truth” per se. States do want to know the truth about some things, such as the intentions of other actors, or their resolve to respond in a costly manner to their chosen policies. However, they also want to manipulate the information environment. They want to persuade others of the strength of their legal case, and in some cases they want to change facts on the ground or the legal regime to create new, more favorable truths. States are particularly able to do this in territorial disputes because the legal regime is weak and often purposefully left ambiguous. They can also take actions that will further decrease their opponents’ access to complete information by altering the status quo, even as the resource-intensive process of keeping tabs on the dispute creates opportunities for further disparities in mutual knowledge.

For states to fill in their knowledge gaps and keep up with new facts that are being created, they have to implement processes for learning and risk evaluation. States learn through policy failures (Hall 1993), crises (Stern 1997), past historical experiences (Levy 1994), and analogous situations in other times and places (Stone 1999). As Reiter (1994) puts it, “continuity of policy follows success, while innovation follows failure.” In other words, states have to learn by doing, and sometimes, they have to make their best guess based on available information about the present and their knowledge of the past.

Given incomplete information about the state of the world, states must decide how to act both at and away from the bargaining table, as well as how much risk they’re willing to take on. Accordingly, IR scholars have written extensively about the relationship between risk and policy. Prospect theory suggests that states are relatively risk-acceptant when it comes to preventing losses and relatively risk-averse when it comes to making new gains (Jervis 1994; Levy 1996, 1997). O’Neill (2001) suggests that disputes involving symbols or religious significance are linked to risk-seeking behavior. By this logic, states would accept more risk if they are embroiled in territorial disputes, which tend to gain more symbolic
significance over time Hassner (2006/2007). Conversely, states can strategically mitigate risk by testing out and learning from new policies.

States seeking to deter border activity by their opponents also face informational problems. Deterrence may be less successful if the state that wishes to challenge the status quo is uncertain about the other disputant’s preferences and willingness to retaliate (Kilgour and Zagare 1991). Conversely, the deterring state may have trouble preventing the dissatisfied state from acting if it is unsure about the latter’s intentions, or how to interpret the latter’s policy choices. It may also be unsure about whether the dissatisfied state’s actions would be considered legally acceptable, or about the extent to which third-party actors would support its deterrence efforts. Given these challenges, states may alter their deterrence strategies according to their level of risk acceptance and their ability to learn about their opponent’s intentions and plans. Changes in the information environment thus affect the behavior of all parties in a dispute, even outside of negotiations and moments of conflict.

1.3 Information and the Policy Process

States’ informational environments and handling of risk help to explain how they evolve their approach to dispute management during the interstices between flare-ups and major moments. Policymaking is an ongoing, iterative process that continually takes new information into account. Trial and error, as well as the incorporation of new information, determines how leaders choose between alternatives that could all, to a greater or lesser extent, improve their country’s position within a dispute. Thinking about policy in this manner should provide a more complete picture of the life span of an active, unresolved border.

Because uncertainty is ever-present, the state of the world is ever-changing, and states are always learning more information that will help them determine which policies are best,
the policy creation process is not necessarily linear. In a linear process, a state would propose
a new policy, consider its risk and rewards, and then choose whether to implement the policy.
Instead, the process is cyclic, where a state comes up with many policy options, takes into
account new information learned from past choices, adopts a policy, and then iteratively
develops new policies until it finds one that works and improves upon the existing state of
affairs (see Figure 1.1). Then, a while after the state finds and implements a successful policy,
it iterates the cycle if it finds that circumstances have changed and call for a new policy.
This model of policymaking is compatible with the historical institutionalist literature, which
suggests that past decisions are sticky and influence what happens in the future (Capoccia

Information and risk affect path dependence in states’ policies, whether they are the
proactive or the reactive party in a dispute. The chapters of this dissertation that deal with
faits accomplis illustrate both sides of this framing neatly. The proactive party must evaluate
whether it will benefit from a high-risk, high-reward strategy in which it attempts large-scale
faits accomplis that would risk war if the reactive party gets the chance to respond. In
addition, if the legal aspects of the dispute are ambiguous, changes in the status quo are less
likely to be noticed or effectively countered; in this case, ambiguity would widen the options
available to the proactive state when it comes to capturing new territory. Conversely, the
reactive party has to find out what its counterpart has up its sleeve; it must identify when
its opponent has made a move, figure out what the move is, and correctly evaluate the
opponent’s intentions. These moves and counter-moves then change the circumstances of
the dispute, which in turn affect future actions and reactions by the states in question.

States use information about each other’s payoffs, credibility, resolve, intent, and ac-
tions to choose between different policies that have been proposed as alternative solutions
to a given problem. The foreign policy substitutability literature (Bennett and Nordstrom
2000; Clark 2001; Morgan and Palmer 2000; Most and Starr 1989; Palmer and Morgan 2006;
Regan 2000) has long pointed out that similar foreign policy circumstances could lead to
multiple distinct outcomes precisely because states have so many policy options. For any given problem, political leaders have multiple policy tools between which they can “substitute” according to what they think will produce the best outcomes. [Clark and Reed (2005)]
explicitly identifies the informational environment as a key differentiator that determines the strategic interactions that influence policy choices.

This framing of policy as flexible, iterative, ongoing, and continually recalculated according to information and risk allows us to fill in the gaps in the literature on territorial dispute management. As discussed previously, dispute management consists of actions beyond the provocation of and resolution to crises. Rather, it is a continual process that may periodically erupt into a crisis when a state miscalculates, or alternatively takes a calculated risk and fails. This does not mean that dispute and claim management have ceased during quiescent periods on the border, but rather that the current informational environment is discouraging either side from taking big risks. States may be playing it safe, taking all kinds of small risks that are quietly paying off, or engaging in bureaucratic and administrative shenanigans that might strengthen their hand in the long term but will not immediately cause tensions to arise.

If scholars take the time to analyze dispute management policies in this light, as a continuous process that occurs between spikes in conflict, key attempts at settlement, and other noteworthy moments, then they may be able to show how uncertainty and ongoing policy creation lead to those important events. Relatively minor border activity that was originally deemed to be low-risk can provoke an outsize reaction if the reactive party discovers the activity and learns, or imagines it learns, that the original actor’s intent is to seriously change the status quo. This could then lead to a crisis if it causes latent diplomatic tension to reach activation energy, at which point other IR theories about conflict management or conflict resolution come into play and explain how the crisis resolves. In this manner, the territorial dispute literature could use informational theories to connect pivotal events within a given dispute and show how the dispute evolves over time.
1.4 Outline of the Dissertation

I present three papers in this dissertation, each of which deals with a different aspect of information, risk, or learning as it relates to territorial disputes. The first paper provides a general framework of policy creation, testing, and learning, in the context of the foreign policy substitutability literature. The second and third papers drill down on a specific category of policy, faits accomplis and unilateral border activity. They show how states’ decisions are affected by, respectively, uncertainty from the overall strategic environmental, and specific uncertainty about opponents’ capacity to learn and respond. As a whole, these analyses barely scratch the surface when it comes to border management activities undertaken by states, but hopefully they provide insights about that will be helpful to future research about how states respond to their changing environments.

In the first essay, I argue that because states can generate many policy solutions to attack any given foreign policy problem, they cannot always make a straightforward risk-reward calculation about which option to choose. To show this, I present a formal model of foreign policy substitutability and reactive policymaking, in which strategic information gathering and learning-by-doing are primary drivers of outcomes. Because states lack complete information about how best to advance their territorial claims, they are willing to take on extra risk in order to implement informative policies that offer clear feedback about their strategic environment.

As a concrete example, the first essay digs into the Philippines’ use of a previously untested judicial strategy to advance its interests in the South China Sea dispute. After tumult over the Scarborough Shoal caused Philippine leaders to reevaluate their current policy trajectory, the Philippines Department of Foreign Affairs tried to take a specific aspect of China’s claim to court—namely, the legal extent of its maritime claims—without directly challenging China for sovereignty of any waters within the legal limits. Because no state had previously tried such tactics, it was possible that the Philippines would risk antagonize China
for no benefit, but undergoing the arbitration process allowed the Philippines to gather and newly introduce information about its legal standing.

In the second essay, I focus on when territorial faits accomplis and other unilateral border activity occur, given the broader legal environment and the level of ambiguity in the status quo. Legal ambiguity creates favorable circumstances for dissatisfied states to challenge the status quo because it creates uncertainty for both sides of the dispute, as well as third-party actors. Ambiguity arising from dispute complexity or from competing, equally valid territorial claims can lead to diverging perceptions between disputing states and among third parties. Dissatisfied states also will tend to overestimate the solidity of their claims, due to asymmetric information about each side’s claim strength and psychological overconfidence. Meanwhile, the international community is less likely to push back in response to aggressive behavior on the border. As a result, dissatisfied states are more likely to attempt to engage in a specific type of border policy, in which they encroach on disputed regions, when legal ambiguity is high. Lack of clarity in the informational environment produces different policy outcomes and emboldens dissatisfied states to take more risks. I test these claims with a data set on attempted faits accomplis in Asia.

In the third essay, I consider how states planning faits accomplis choose the scale and risk level of their activities, and how their opponents can deter them through better monitoring of the border. States have the option to either make a series of minor changes to the status quo in the hopes of avoiding discovery and retaliation by their opponent, or to drastically shift the status quo to their advantage, at much higher risk. These so-called “challenger” states know that their targeted opponents are trying to learn about their intentions through border surveillance, so higher levels of monitoring by the target state deter them from large-scale land grabs. Furthermore, uncertainty resulting from the target state’s inability to interpret border activity increases the likelihood of war, while strategic boundaries like forts and observation points may decrease the scope of faits accomplis by
making would-be challengers realize that they will definitely be caught beyond a certain point. I also test these claims with the fait accompli data.

Each successive section of the dissertation slightly narrows the scope from the previous section. I begin with a widely applicable formal model that broadly describes how to weigh risks, payoffs, and learning for the future in decision-making. I then focus on how states decide to consider a particular category of strategies, faits accomplis, for gaining territorial advantages. Finally, I investigate how states choose a strategy along one dimension, that of scale, from the options in that category. Thus, each level of analysis tells us something about state management of border claims, and about how informational issues continually affect the policy process over time.
Chapter 2

Testing the Territorial Waters: Experimentation and Learning in Policy Choices

To the consternation of China and the skepticism of neighboring states, the Philippines opened 2013 with a unilateral appeal to an arbitral tribunal over the limits of Chinese territorial claims in the South China Sea. As a foreign policy decision, it was bold but hazardous. The Philippines had already departed from its previous strategy of tabling questions of sovereignty in favor of joint exploration with China, and had strengthened relations with the United States. By trying out a legal strategy so untested that no other country had ever before used it, the Philippines risked a Chinese backlash without a guarantee that the tribunal would even have jurisdiction over the case. This case is puzzling because the existing literature focuses primarily on the effect of international law on dispute resolution, rather than dispute management. (Gent and Shannon 2010, Huth, Croco and Appel 2011, 2012, 2013, Powell 1999, Smith and Stam 2004, Wagner 2000). Even other countries in the region were surprised by the Philippines’ unconventional approach to international law.¹

¹An anonymous ASEAN diplomat said, “To be honest, overall expectations of the Philippine diplomatic service are low. But what they did do is to listen to good legal advice. The submission was written by some-

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How do states like the Philippines construct long-term foreign policy strategies when in murky, unpredictable strategic environments? On the one hand, leaders make decisions partially based on knowns such as material capabilities, costs, and domestic political conditions (Bennett and Nordstrom 2000; Clark 2001; Morgan and Palmer 2000; Regan 2000). On the other hand, leaders must deal with big gaps in knowledge. War bargaining scholars emphasize the many ways in which information asymmetries lead to or are resolved by war (Fearon 1995; Powell 2004; Reed 2003; Slantchev 2003). Similarly, Callander (2011) asserts that states cannot know with perfect certainty how well different proposed policies will work, so they try out promising policies, and stay the course or change directions depending on what they learn.

I introduce an “armed-bandit” model from the statistics and economics literature to characterize how leaders use risk and informational assessments to choose between foreign policies. As suggested by the literature on foreign policy substitutability, leaders have multiple policy options that they may mix and match to pursue a goal and build a “foreign policy portfolio” (Clark, Nordstrom and Reed 2008; Most and Starr 1989; Palmer and Morgan 2006). The model holds that policymakers value information in addition to the success of their current policy portfolio. They want to know if they can accurately assess new information about an active policy, and they prioritize policies that clearly indicate whether or not they are working. Once they select a policy, they observe the response to learn about the policy’s riskiness, and decide whether to stick with that policy or try a different policy. Over time, iterative policy evolution occurs in response to successes and failures.

Although the model applies to decision-making for many situations in which a policymaker has multiple options to solve a problem, territorial disputes are a foreign-policy issue area to which this type of model is particularly applicable. Overlapping territorial claims periodically turn into dangerous disputes, in which opposing states, domestic audiences, and one who really knew his job. They have stunned us by being so together on this case.” William Choong, “Manila Deals a Clever Hand with Knock-on Effects on Asean,” The Straits Times, January 28, 2013, accessed November 6, 2017, http://straitstimes.com/the-big-story/asia-report/south-china-sea/story/manila-deals-clever-hand-knock-effects-asean-2013012.
foreign allies have major stakes, and the threat of war encourages secrecy and miscommunication between countries (Senese and Vasquez 2003; Vasquez and Barrett 2015; Vasquez and Henehan 2001). Scholars suggest that states are willing to spend major time and energy on territorial claim management, from Israeli settlement policy in the Golan Heights to Chinese land reclamation projects in the South China Sea (Goddard, Pressman and Hassner 2007/2008; Hassner 2006/2007; Toft 2002). States engage in this behavior even when they are in a diplomatic stalemate, no resolution is in sight, and incomplete information about how to interpret states’ capabilities and intentions based on their actions risks intensifying diplomatic frictions.

Adding to the need for experimentation and frequent policy adjustments is the wide variety of options that states have for resolving disputes. War, third-party adjudication or arbitration, and negotiated diplomatic settlement all allocate territory according to different, if overlapping, rules. Stronger legal claims strengthen a state’s legal case and its ability to appeal normatively to international audiences. Military or economic power and alliances give a state advantages in a warlike environment. Although states typically bolster both types of advantages if possible given time and budget constraints, they are not completely complementary—for instance, a state that trumpets its adherence to international legal norms to appeal to global opinion has likely reduced its ability to deploy troops into disputed territory without risking global opinion. Thus, states are presented with policy options that cannot be coherently combined into a single policy portfolio.

I theorize that flexible, evolutionary policymaking causes states to prefer strategies that are informative and offer clear feedback, sometimes even over uninformative policies that are less risky or more lucrative. States have more unstable policy trajectories when information feedback about failure is easily interpreted and when states expect that alternatives will be more informative. They deviate from the status quo to learn about risky yet

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potentially high-payoff policies, especially if feedback is unambiguous, and they will accept lower potential payoffs and higher risk in exchange for more information. I illustrate my theory in a case study of the South China Sea dispute between the Philippines and China over the South China Sea, but one can identify leaders valuing information-rich tactics in other disputes as well.

In this paper, I posit that states use information and risk to weigh substitutable policy alternatives that could accomplish the same goal. I use a formal model to show that states will take on extra risk in order to gain information about new policies. Furthermore, states will be more likely to stick with their current policies, even if the policies have not yet succeeded, if they believe that they are more likely to learn from the current policies than from alternative ones. I demonstrate this logic through a case study of the Philippine-China South China Sea dispute between 2000 and 2015, from the perspective of Philippine elites. The increasing opaqueness of Philippine-China diplomatic communications encouraged the Philippines to move to a previously untested policy in the hopes of concrete, interpretable feedback, since it preferred the clarity of tribunal decisions and reactions by international friends and allies to the ambiguity of canned, vague, and sometimes menacing Chinese responses.

2.1 Substitutability in Territorial Disputes

Foreign policy substitutability theory holds that in situations where policymakers have multiple ways to achieve goals, “similar factors could lead to distinct concrete or empirical foreign policy responses” (Most and Starr 1984). Rather than maintaining a laser focus on bargaining and militarized incidents (Bebchuk 1984; Cooter, Marks and Mnookin 1982; Cooter and Rubinfeld 1989; Daughety and Reinganum 2005; Kocs 1995; Powell 2006),

3Regionally, the 2013 Chinese extension of its Air Defense Identification Zone in disputed areas of the East China Sea was publicly announced in such a way as to cause immediate reactions among both domestic and international audiences. Elsewhere, Kydd (2003) and Savun (2008) suggest that states are more likely to opt for mediation when they believe that the mediator will offer them good information, as when Serbia accepted Russia mediation during the 1999 Kosovo conflict.
it is useful to think about interstate conflict management as a process in which states weigh alternative policies and construct policy portfolios to solidify their position. Territorial dispute management particularly requires such portfolios because the international territorial legal regime offers states alternative methods of resolution beyond geopolitics and force.

In territorial disputes, states manipulate their environment so that their claims seem both more normatively lawful and better defended. State behavior is not a function of exogenous values of geopolitical power or of legal and normative convincingness. Rather, states actively work to appeal to legal institutions and international norms, to win over public opinion, to improve their military position, and in general to better their bargaining position. The legitimacy of law among domestic audiences allows states to find compromises that would otherwise be politically difficult, while state power and military considerations play a major role in determining international relations outcomes, especially in potential flash points like territorial disputes.

States embroiled in conflicts over territory build up a foreign policy portfolio through the alternate means of building a legal case for their claims and of more coercion-conscious methods of diplomacy. The choices are to some extent substitutable, i.e., viable alternatives, and to some extent complementary, i.e., co-existing and mutually reinforcing, in the same sense that portrays arms buildups and alliances as sometime-substitutes and sometime-complements in major power rivalries.

Resource limits and policy incoherence mean that states must sometimes choose between substitutable policies. A policy designed to bolster legal strength may be incompatible with another policy designed to bolster geopolitical power. In some cases, resources are simply limited. It takes some resources to build a strong legal case, whether in building legal expertise or in passing legislative policies intended to show “effective control” over territory, and it takes many resources to build a military or change a
strategic troop posture. In other cases, legalized measures directly contravene militarized measures. For instance, states selling international and domestic audiences a message of peaceful legitimacy would undermine their message by undertaking military measures \cite{Prorok2015}. States are also less likely to lean on legal methods if they do not feel that the result would reflect the distribution of power \cite{Gent2014}.

Policies intended to strengthen legal claims and power politics may also be complementary, suggesting the need for a measure to capture the correlation between substitutable policy portfolios with complementary or incompatible elements. The legal principle of “effective control,” which attributes ownership to the disputant that most prominently displays \textit{de facto} control over a region, indicates how a military move primarily intended to capture a strategic location might necessarily lead to administration over the captured territory, thus demonstrating effective control. Not all instances of effective control involve military occupation, and not all cases of military occupation are valid in international law. Nevertheless, in some cases, what a state learns from attempting a given policy has bearing on what it learns about alternative policies.

2.2 Information and Risk in Territorial Disputes

To show that territorial disputes are not static, but instead evolve over time, requires consideration of the role of strategic uncertainty and learning in disputes. Risk is often inherent to disputes, including the risk of the dispute erupting into conflict and the risk of angering domestic publics by giving away territory \cite{Huth2002}. However, not all policies follow some kind of “grand strategy,” in which states plan ahead \cite{Goldstein2001}. Rather, adjusting policy by learning from experience is a key part of the foreign policy process \cite{Levy1994,Stern1997,Stone1999}. States have different, substitutable policy options all intended to solve the same foreign policy problem, but do not know which of these options is best. To resolve their uncertainty, states try out new policies and learn about them.
The state prefers policies that are likelier to be efficacious, but implementing new policies can be risky. A proposed policy might work as intended and gain the desired payoff, but with some probability, the policy might backfire and leave the state in a worse position than before. The likelihood of policy efficacy affects the state’s estimation of its expected utilities from a policy.

The quality of information feedback encapsulates the likelihood that, once a policy is deployed, the state can accurately assess whether it worked. Feedback may include militarized responses from the opponent state (very unambiguous), official statements from the opponent’s foreign ministry (sometimes ambiguous), personal government-to-government communications, responses from allies, and responses from domestic audiences. If clear feedback is likely, then given the possibility of learning and changing policy course, states should be willing to take on riskier policies.

Lastly, correlation reflects the amount that a state learns about a policy while in the course of trying out other policies, and which encapsulates the idea that substitutable policies can be complementary or incompatible. When a state tries a policy, other actors’ responses provide hints not only about the current policy’s efficacy, but also about related policies. For instance, if a state moves towards arbitration in a dispute, and allies respond with supportive statements, the state might take this as a signal that those allies will have its back in a military conflict and that they think its actions are legitimate, and that arbitration and alliance-building are compatible. By contrast, if the opponent responds with aggressive troop positioning, the state might take this as a signal that although arbitration and military conflict are substitutable, they are not complementary; success or failure in one policy suggests the opposite result in the alternative policy.
2.2.1 Applying the Multi-Armed Bandit Problem to Policy

I use the multi-armed bandit model from the experimentation and learning literature to show how risk and uncertainty matter when choosing between substitutable policies. A state has \( N \) choices, or “opportunities” as defined by Most and Starr (1989), for how to pursue a foreign policy goal, and an educated guess about each choice’s medium-term payoff distribution. The state engages in experimentation, trying different policies to confirm or dis-confirm its guesses.

When a state tests a policy, it observes other actors in the international environment, including the opposing state, to get a sense of the policy’s payoffs. Here, this reaction is represented by “yes/success” and “ambiguous/failure” signals, which allow for Bayesian belief updating. Using a decision-theoretic model to model a multi-player dispute has an advantage over strategic two-player bargaining games, in that two-player models assume that there is only one other player responding to a state’s strategic choices. In contrast, in the decision-theoretic model, the signal response represents the reactions of many actors, including allies, the international community, lawyers, and domestic audiences. The armed-bandit model is useful because it is so flexible; a success signal in the model may be equivalent to any number of positive responses in the real world, as may a failure signal.

In the model, a state in a dispute compares two risky policy adjustments to the status quo policy, with the hopes of bettering its position within the dispute. Policy changes may include a renewed emphasis on scientific exploration with the hope of improving the state’s legal standing, R&D to increase the state’s military power, or the promulgation of new rules governing the disputed territory. In the case of the Philippines in the South China Sea dispute, one of the possible policy adjustments represents a shift towards a more militarized approach to the dispute, while the other possible adjustment represents a shift towards a

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4 In the original problem, a gambler pulls the lever of one of \( N \) slot machines, colloquially known as one-armed bandits, without knowing for sure which slot machine offers the best payout. He may have priors about the distribution of payouts for each machine, but experimentation through lever-pulling is required to find out which machines are “good” (optimal payouts) and which machines are “bad” (low payouts) (Banks and Sundarum 1992; Gittins 1979; Rothschild 1974).
more legalized approach. However, the two risky policies may represent any substitutable policies that the policymaker considers as an alternative to their existing policy. The state may test one of the new policy ideas to obtain information about its payoffs, or it may decide not to rock the boat and stick with its previous policy, which has a known payoff.

The model is a modified, simplified, and discrete version of the exponential distribution bandits game described by Keller, Rady and Cripps (2005). Successful policies are geometrically distributed, such that the time before a “breakthrough” occurs, i.e., the moment when it becomes obvious that a policy works, is random. Klein and Rady (2011) and Klein (2013) extend this analysis of exponential bandits by supposing that risky policies are perfectly negatively correlated. However, whereas these models analyze cooperation between experimenting players, I focus on the specific effect of information on one player’s decision-making.

I parameterize the likelihood of policy efficacy with a variable that indicates the likelihood of a risky policy being “good,” or having the desired payoff, or “bad,” or having no payoff, which is worse than the status quo payoff, and I parameterize the quality of information feedback with a variable indicating how likely it is that a state will receive a clear success signal from the environment. I parameterize the extents to which the two risky policies are complementary or incompatible, and to which signals about one risky policy inform the state about a second risky policy, with a variable measuring correlation.

2.2.2 The Model

A state enters a two-period game, with discount factor $\delta \in (0, 1)$ and three policies. Policy $S$ is known and offers a constant payoff of $s$ each round. The other two policies, $A$ and $B$, are “risky,” and they can be either “bad” or “good.” If a risky policy is bad, then it always gives a bad payoff, normalized to 0, each round of the game, and if it is good, then it randomly gives a lump-sum Bernoulli payoff of $x$ (for policy $A$) and $y$ (for policy $B$). In expectation, this is equivalent to a constant per-round payoff of $g = p_A x$ and
By respectively, with \( g > s > 0 \) and \( b > s > 0 \), where \( p_A, p_B \in (0, 1) \) are the Bernoulli parameters for the respective policies. Figure 2.1 shows the state’s choices in the first round.

![Figure 2.1: The First Round](image)

Because \( p_A \) and \( p_B \) represent the likelihood that the state will receive a clear signal about the goodness of its chosen policy, they may be thought of as parameters capturing the clarity of information feedback. If the policy is good, the average time spent following the policy before the first lump-sum payoff, or “breakthrough” moment, occurs is geometrically distributed with parameters \( p_A \) and \( p_B > 0 \), respectively, with means \( \frac{1}{p_A} \) and \( \frac{1}{p_B} \) respectively. A higher value of \( p \) suggests that every period of experimentation with a policy is more likely to result in concrete feedback about the policy’s goodness, in the form of a success, while a lower value of \( p \) suggests that experimentation is less likely to result in a clear signal.

At \( t = 0 \), the state has beliefs \( \Pr(\omega_A = 1) = a \) and \( \Pr(\omega_B = 1) = b \) respectively about whether policies \( A \) and \( B \) are good, where \( \omega \in \{0, 1\} \) describes whether the given policy is good or bad. \( a \) and \( b \) therefore represent the likelihood of policy efficacy. Assume without loss of generality that \( ag > bh \), so that the state’s immediate payoff from trying policy \( A \) is higher than its immediate payoff from policy \( B \).

The state also knows the value of the correlation between the policies, or

\[
\gamma = \Pr(\omega_A = 1|\omega_B = 1) = \frac{a}{b} \Pr(\omega_B = 1|\omega_A = 1),
\]
with $\gamma \in [0, 1]$. If $\gamma$ is high, policy $B$ being good means that it is more likely that policy $A$ is also good, which indicates some level of policy complementarity. If $\gamma$ is low, then policy $B$ being good indicates that policy $A$ is probably bad, which indicates policy incompatibility. $\gamma = \frac{1}{2}$ indicates that the policies are not significantly related.

If a “breakthrough” happens on the first round, then the state will cease experimenting and choose that successful policy in the second round. Otherwise, the state may continue experimenting or revert back to the status quo policy.

If the state succeeds on policy $A$ in round $t$, then its belief goes from $a_t$ to 1 (and similarly for policy $B$). Because the value of $\gamma$ is known, its belief about policy $B$ goes from $b_t$ to $\frac{\gamma p_A b_t}{p_A a_t} = \frac{\gamma h_t}{a_t}$. If the state fails, then it updates its beliefs about the probability of $A$ being a good policy to $\frac{(1-p_A)a_t}{(1-p_A)a_t + (1-a_t)} = \frac{1-p_A}{1-p_A a_t}$. Also, because $a$ and $b$ are correlated via $\gamma$, the state also updates its beliefs about $B$ to $\frac{1-\gamma p_A b_t}{1-p_A a_t}$. Similarly, if the state fails on policy $B$, it updates its beliefs such that $b_{t+1} = \frac{(1-p_B) b_t}{1-p_B b_t}$ and $a_{t+1} = \frac{(1-(b_t/a_t) \gamma p_B) a_t}{1-p_B b_t} = \frac{a_t - b_t \gamma p_B}{1-p_B b_t}$.

It is myopically optimal for the state to choose the policy that gives the highest expected short-run payoff, which is $s$ for the known policy, $ag$ for $A$, and $bh$ for $B$. However, the state may gain from experimenting on the risky policies for some values of $a_0$, $b_0$, $p_A$, $p_B$, and $\gamma$, just in case it turns out that one of the policies is actually good.

### 2.3 Results

States do not behave myopically because they must deal with uncertainty while crafting their foreign policy portfolios. States use the gathering of information feedback as a cushion against the risk of policy failure, and prefer experimenting on policies that provide accurate feedback quickly. The availability and quality of information provides a foundation “micro-level decisional analysis,” as advocated by Most and Starr (1989) and expands discussions of foreign policy beyond questions of material capability.\footnote{See the appendix for what happens if states do not always stick with successful policies. The trade-off dynamics of risk and information remain similar, although the exact parameter ranges change, and departing from the status quo becomes less likely.}
For ease of exposition, the appendix contains proofs of the propositions. I conclude with a robustness check indicating how the state’s behavior changes if its decision-theoretic environment changes in round 2 in response to its actions in round 1.

### 2.3.1 Policy Instability

In round 1, the state faces three possible expected payoffs, depending on whether it chooses $S$, $A$, or $B$. I temporarily disregard the known policy option and consider the two risky policies to examine the trade-offs between them. Switching and policy instability are more likely when correlation is low, indicating that the complementariness of substitutable policies is low, and when the state gets clear feedback about policy efficacy.

**Proposition 2.1.** If the state does not continue using the known policy, then if it begins with policy $A$, and $A$ is initially unsuccessful, it switches to $B$ only if $\gamma < \frac{bh - (1 - p_A)ag}{p_A bh} \iff p_A > \frac{ag - bh}{ag - \gamma bh} \iff p_B > \frac{(1 - p_A)ag}{(1 - \gamma p_A)bg}$. If it begins with policy $B$, and $B$ is initially unsuccessful, it switches to $A$ only if $\gamma < \frac{a - (1 - p_B)bh}{p_B bg} \iff p_A > \frac{(1 - p_B)bh}{(a - \gamma p_B)x} \iff p_B > \frac{bh - ag}{bh - \gamma bg}$.

Figure 2.2 depicts the relationship between the variables when the state starts with policy $A$ and is considering switching to $B$. Policy instability occurs when the state either is very sure that their current policy does not work, or expects to gain a lot of information about alternative policies. Comparing the expected payoffs of staying versus switching in the second round shows that when $p_A$, the clarity of feedback from the policy chosen in round 1, is very high relative to $p_B$, the clarity of feedback from the unchosen policy, then the state can quickly and efficiently evaluate whether its chosen policy is working and jettison the policy as necessary. At the same time, if $p_A$ is very low relative to $p_B$, then the state will readily switch because its chosen policy is too uninformative to be useful. Sticking with $A$ when it has not yet had a breakthrough is most likely when $p_B$ is low, so there is not much informational advantage to switching, and $p_A$ is in a medium range. A similar argument holds true when the state starts with policy $B$. 

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The higher $\gamma$ is, the less likely it is that switching will occur.

The state is also more likely to switch policies after an ambiguous/failure signal if $\gamma$, if the variable indicating complementariness, is low. This is because a small value of $\gamma$ indicates both that the policies are not complementary, and that the slew of information that arrives after the state tries out policy $A$ includes some information about the efficacy of incompatible alternative policies. For example, suppose a state unsuccessfully tries to take a piece of land with a group of soldiers. Any sufficiently public action taken by the state likely invites a host of responses, so not only does the state learn that it cannot simply seize the territory in question, but it also gets an earful from nervous neighboring countries and disapproving allies about the illegality of their maneuver. In the course of learning something negative about its current policy of forcing its opponent off the disputed land, which is also incompatible with legal elements of the dispute, the state learns that a policy adjustment
towards a more legalized approach might lead to better results. The empirical prediction is as follows:

**Hypothesis 2.1.** *A state’s foreign policy strategy trajectory will be stablest despite setbacks when current policies are medium-informative, alternative policies would be uninformative, and alternative policies are complementary.*

### 2.3.2 Information Feedback

The state considers a slightly different set of conditions when determining whether to begin experimenting with \( A \) or with \( B \) in the first round. When \( p_A \) is high and \( p_B \) is low, then the state receives more new information each turn if it implements policy \( A \) than if it implements policy \( B \). Because of the long-term advantages of clear policy feedback, states prefer informative policies with higher values of \( p \) and are willing to gamble on otherwise-unpromising policies that are nonetheless very informative. In this model, the state usually prefers policy \( A \), since \( ag > bh \), but will sometimes actually prefer policy \( B \), depending on the likelihood of policy efficacy, the correlation, and the clarity of feedback:

**Proposition 2.2.** *If the known policy is not preferred, the state will only choose policy \( B \) in the first round if* 

\[
p_A < \frac{(1-\delta)(bh-ag)+\delta p_B(bh-\gamma bg)}{\delta(bh-\gamma bg)} \iff p_B > \frac{ag(1+\delta p_A-\delta)-bh(1+\delta \gamma p_A-\delta)}{\delta(bh-\gamma bg)} \iff \\
\gamma > \frac{ag(1-\delta+p_A)-bh(1-\delta+p_B)}{\delta(bh-p_Bg)}, \text{ and if } \frac{ag}{bh} < 1 + \delta p_B - \frac{\delta \gamma p_B g}{h} \iff p_B > \frac{ag-bh}{\delta(bh-\gamma bg)} \iff \gamma < \frac{bh(1+\delta p_B)-ag}{\delta p_B g}.
\]

Information matters; the relative values of \( p_A \) and \( p_B \) affect which alternative policy the state prefers. When policy \( B \) is sufficiently informative about its true payoff, and the myopically more lucrative policy \( A \) is sufficiently uninformative, the state finds that, eventually, the value of the information outweighs the initial difference in expected value. Figure [2.3](#) demonstrates the policy space in which a state might prefer \( B \) to \( A \).

The result also places bounds on \( \gamma \), indicating that the state only prefers an informative, less lucrative \( B \) if \( A \) and \( B \) are not exactly complementary or exactly incompatible.
However, as the figure indicates, higher levels of incompatibility (i.e., low $\gamma$) generally make the state more likely to search for informative policies over lucrative ones. A corollary follows from the proposition indicating that a low enough value of $\gamma$, indicating high incompatibility, may guarantee that the state chooses $B$, depending on the values of $g$ and $h$.

**Corollary 2.1.** *The state always begins with policy $B$ if $h > \gamma g$.***

Analyzing variations in information availability has particular value for understanding interstate disputes because, as emphasized by the war literature, a lack of information and communication between countries in conflict is endemic to international relations. Since some methods of dealing with conflict are more informative than others, decision-makers prefer high-feedback policies over low-feedback ones.

When it comes to territorial disputes, different approaches to the same ends of maximizing one’s claim over disputed territory entail varying amounts of feedback. A state might be in an information environment where a military move leads instantaneously to informa-
tion about the policy’s success (e.g., a state knows very soon whether or not it has won a battle), whereas a legal move will not be revealed to be successful or unsuccessful for many years (e.g., as the international community debate over the legitimacy of a legal argument). In other situations, where geopolitical standoffs are particularly slow-moving and confusing, a legalized move might be welcomed as an opportunity to increase transparency in the dispute.

Because it is harder for policymakers to make future decisions if they cannot fully evaluate the results of their current policies, policymakers should prefer new policies that give them more information about the state of the world, even at the cost of giving up on higher-payoff alternatives. This hypothesis is as follows:

**Hypothesis 2.2.** When choosing between alternative policies to reach a foreign policy goal, states prefer to pursue policies where they are likely to receive quick feedback about the success of their policy to policies that are likely to offer ambiguous information.

### 2.3.3 Leaving the Status Quo

The last two results have supposed that the state’s original policy was doing poorly and that keeping to the status quo was out of the question, but suppose instead that the expected-flow payoff provided by $S$ looks better than that of $A$ or $B$, taking the risk of policy failure into account. The state might nevertheless wish to experiment with the risky policies, just in case one of them works. I consider the case where $s > ag > bh$, but $g = px$ and $h = py$ are both greater than $s$. If the new policies involve some risk but could result in a significantly higher payoff, and $p_A$ or $p_B$ is high, reflecting an information-rich environment, then the state will experiment because it knows that it can learn quickly and efficiently about $A$ and $B$. The following result builds off Proposition 2.2, which determined whether the state prefers experimenting with policy $A$ or policy $B$:

**Proposition 2.3.** (1) If the state prefers $A$ to $B$, then it prefers $A$ to $S$ in round 1 if (a) $s > ag > bh$ and $p_A > \frac{s - ag}{\delta(a - s)}$, or if (b) $s < \frac{1 - \gamma p_A}{1 - p_A a}$ and $p_A > \frac{(1 + \delta)s - ag + \delta bh}{\delta(a - \gamma bh)}$. If (a) is true and
a breakthrough does not occur in round 1, the state switches to $S$ in round 2; if (b) is true, it switches to $B$.

(2) If the state prefers $B$ to $A$, then it prefers $B$ to $S$ in round 1 if $s > \frac{(a - \gamma p_B)b}{(1 - p_B)b}$ and $p_B > \frac{s - bh}{\delta(b - s)}$, or if $s < \frac{(a - \gamma p_B)b}{(1 - p_B)b}$ and $p_B > \frac{(1 + \delta)s - bh + \delta a g}{\delta(bh - \gamma bg)}$. If (a) is true and a breakthrough does not occur in round 1, the state switches to $S$ in round 2; if (b) is true, it switches to $A$.

The two main questions to answer are, first, whether the state experiments at all, and, second, whether the state prefers to retreat back to the known policy or to keep experimenting with other alternative policies in round 2, if its initial attempts at experimentation fail. Working backwards from the expected values of implementing $A$, $B$, or $S$ in round 2 and then round 1 respectively, I find that if the $p$ parameter is sufficiently large, then experimentation is possible in round 1, while experimentation is only possible in round 2 if the known payoff $s$ is not too large.

States are more likely to depart from reliable status quo policies to experiment with risky policies if they can expect fast, clearly interpretable signals about the usefulness of the risky policy, even if doing so has a chance of decreasing state welfare. Once the state has departed from the status quo, it may also decide to continue experimenting with new policies rather than revert immediately to the known policy, $S$, if it turns out that experimenting with one new policy has given it useful information about what to expect from alternative new policies. This result is in line with the literature on multi-armed bandits in that it suggests that the myopic decision of always going with the known policy is not necessarily in the state’s best interest (Keller and Rady 1999). Experimentation may be useful to the state even when it seems from an outside perspective to involve unnecessary risk, particularly if there is the option of reverting to the original policy before the new policy gets too entrenched:

**Hypothesis 2.3.** States are willing to take on moderate risk in order to experiment with new policies that are potentially helpful but potentially damaging, rather than stick to status quo policies, if the new policies are sufficiently informative.
2.3.4 The Opponent’s Response

Although this model takes a decision-theoretic approach to state policymaking, it is worth noting that the strategic environment is not static, and that various other actors (allies, opponents, domestic actors, etc.) may take actions that change the medium-term strategic environment in response to the analyzed state’s policy choices. As a robustness check, I briefly model this possibility by supposing that the actions taken by other actors affect some of the parameters of the model in the second round, such as the lump-sum payoffs or the information feedback parameters. These changes do not affect the overall dynamics linking learning and policy choice, but they do make certain policy choices more or less likely.

Suppose that the payoff $x$ of a good $A$ decreases in round 2 to $Kx$, where $K \in (0, 1)$, if the state chooses to implement $A$ in round 1, and the payoff $y$ of a good $B$ decreases to $Ky$ if the state chooses to implement $B$. This parameter change could occur because the opponent made a strategic reaction intended to dull the effectiveness of the state’s originally chosen policy. When comparing policy A’s expected payoff to policy B’s expected payoff, the state now compares

$$E(A) = ag + \delta (p_A aKg + \max \{(1 - p_A)aKg, (1 - \gamma p_A)bh, (1 - p_A)a)s\})$$

to

$$E(B) = bh + \delta (p_B bKb + \max \{(a - \gamma p_B)b, (1 - p_B)bKb, (1 - p_B)b)s\}).$$

Suppose alternatively that the information variable $p_A$ decreases in round 2 to $Kp_A$, $K \in (0, 1)$, if the state implements $A$ in round 1, while $p_B$ decreases to $Kp_B$ if the state implements $B$. The new payoffs are the same as above, meaning that both examples can be analyzed in the same manner.
In general, the likelihood of experimentation shifts somewhat, but the overall dynamic remains the same. The same logic that applies to Proposition 2.1 suggests that the state switches from $A$ to $B$ in round 2 if $p_A > \frac{a K g - b h}{a K g - \gamma b h}$ and from $B$ to $A$ if $p_B > \frac{b K h - a g}{b K h - \gamma b g}$, which differs little from the original result. Following the logic of Proposition 2.2, the state prefers $B$ to $A$ in the first round when $p_A < \frac{(1-\delta)(a g - b h) + \delta p_B (K b h - \gamma b g)}{\delta (K a g - \gamma b h)}$ and $\frac{a g}{b h} < 1 + \delta p_B a g + \frac{\delta K b g}{b h}$. Following Proposition 2.3 also leads to similar results.

The various parameters of the model can vary between rounds 1 and 2 in many other ways, but the above examples altering $x$, $y$, $p_A$, and $p_B$, reflect the general pattern, which is that they affect the state’s choices but in ways similar to those suggested by the previous propositions. In the long term, the environment may shift more significantly, especially if the state’s opponent launches successful policies to counter the state’s chosen policies. One can conceive of this long-term shift as iterations of the medium-term armed-bandit game described above, as opposed states cyclically make policy choices, observe how other actors respond to their new policy choices which eventually come to have known payoffs, and then generate and experiment with new policies that might improve upon that policy in turn.

### 2.4 The Philippines and the South China Sea Disputes

To demonstrate the plausibility of the model, I discuss the policy choices of the Philippines between 2000 and 2015 with respect to their long-standing maritime dispute with China over portions of the South China Sea. This dispute includes the Spratly Islands, otherwise known as the Kalayaan Island Group, and Scarborough Shoal, also known as Bajo de Masinloc. In the early 2000s, the dispute was relatively quiescent, with both China and the Philippines preferring to cooperate and work on issues of joint exploration, while temporarily setting aside questions of sovereignty. By a decade later, the two countries had seen a year-long standoff over Scarborough Shoal, and the Philippines had initiated arbitration over the limits of China’s claim. Using qualitative interviews conducted during
2014 with Philippine foreign policy elites, I show how Philippine leaders responded to the increasing opacity of Chinese diplomatic communications and decided that the political and legal information provided by initiating arbitration would outweigh the risk of antagonizing China.

2.4.1 A Policy Shift

Despite a tense standoff over Mischief Reef in the mid-1990s, the diplomatic relationship between China and the Philippines was relatively pleasant, non-inflammatory, and status-quo-maintaining during the administration of Gloria Macapagal Arroyo from 2001 to 2010. After Arroyo left office, President Benigno Aquino III pursued a less accommodating policy strategy, in which the Philippines ramped up alliance-solidifying diplomacy with the United States while actively seeking an authoritative, arbitration-backed statement about the legal limits of China’s maritime claim.

Under Arroyo, the Philippines stuck to low-key attempts to better bilateral relations without worsening its legal claim. The Philippines made a continental shelf claim on the undisputed Benham Rise region in order to reserve an ambiguous amount of continental shelf in disputed regions, rather than risk making specific claims that China might counter, and in 2004, two years after the signing of the Declaration on the Conduct of Parties in the South China Sea between China and ASEAN, the Philippines and China agreed to a Joint Marine Seismic Undertaking (JMSU) to initiate bilateral, joint research in non-disputed parts of the South China Sea. The Department of Energy (DOE), the Philippine National Oil Company (PNOC), and the Department of Foreign Affairs (DFA) collaborated to make the JMSU as domestically apolitical as possible, with the hope that the JMSU would bolster ties with China without raising sovereignty questions. The JMSU was presented as a “commercial” undertaking for research, and the DOE was careful to issue only “non-exclusive geophysical permits” to PNOC, which authorized the China National Offshore Oil Corporation (CNOOC) and PetroViet to join PNOC in seismic studies. The main idea was
to “make sure the agreement was for mutual cooperation and not to convert the area into a disputed area.”

By the end of Arroyo’s term, domestic tolerance for this strategy had declined as the dispute became increasingly salient. In 2007, Arroyo was accused of corruption and selling out to the Chinese in a deal involving the Chinese telecommunications company ZTE. The political uproar over the ZTE deal expanded to accusations of selling out through the JMSU, with the result that further plans for South China Sea cooperation were scuttled (Batongbacal 2013). A 2009 deadline under the United Nations Convention on the Law of the Sea (UNCLOS) also forced things to a head, as claim submissions by ASEAN countries to the Commission on the Limits of the Continental Shelf (CLCS) caused China to double down on its “nine-dash line” claim over the majority of the South China Sea. The Philippine Congress passed a long-languishing piece of domestic legislation that adjusted the state’s maritime claims to better follow UNCLOS guidelines to further strengthen their legal claim.

Aquino assembled a risky but proactive foreign policy portfolio, pursuing an aggressive legal tactic with alliance diplomacy as a safety net. Although nascent plans for arbitration had existed within the DFA since the 1990s, in January 2013, the Philippines officially turned to the Permanent Court of Arbitration (PCA) to request an arbitral tribunal. Exploiting a potential loophole in the Chinese reservation against arbitration or adjudication under UNCLOS, the Philippines sought to counter the possibility that China’s claim could include all waters within its nine-dash line. The Philippines contended first that UNCLOS allocated maritime territory purely based on proximity to land features, so water further than 200 nautical miles from a feature could not be claimed, and second that many South China Sea features were “uninhabitable rocks” of too small a size to claim a full 200-mile exclusive economic zone (EEZ). By this argument, China could not legally dispute large areas of water within the Philippines’ claimed EEZ.

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6 Interviews with former Arroyo officials, Manila, Philippines.
7 An Act to Amend Certain Provisions of Republic Act No. 3046, As Amended by Republic Act No. 5446, to Define the Archipelagic Baseline of the Philippines and for Other Purposes, Republic Act No. 9522; interviews with former government officials, Manila, Philippines.
In April 2014, the Philippines signed the Enhanced Defense Cooperation Act (EDCA) with the United States, allowing U.S. troops access to Philippine military facilities and marking a major policy reversal from when the U.S. withdrew from its last Philippine military base in 1992. The U.S. remained officially neutral in the dispute, other than expressing disapproval of aggressive or status-quo-altering actions such as Chinese land reclamation near garrisons in disputed maritime territory. The agreement therefore primarily acted as a check on future Chinese actions, whereas the submission to arbitration represented an active attempt to make China reduce its claim.

2.4.2 Substituting Policy in a State of Uncertainty

The Philippines’ policy strategy with respect to the dispute had long been described as reactive rather than pro-active, which means that learning is an important part of the policy process. A former official described the Philippines as relying on “short-term tactical moves” and “improvisation” rather than “long-term strategies.”\(^8\) However, the information environment surrounding the South China Sea dispute changed dramatically during Aquino’s presidency, as Chinese communications with regard to the dispute became increasingly opaque. After a standoff against China at Scarborough Shoal, the Philippines decided that a naval-led strategy was not, in foreign policy substitutability terms, complementary with a legalistic strategy that might be more successful.

For most of Arroyo’s administration, China adopted a policy of charm diplomacy in the Philippines. While the JMSU was in place, in the mid-2000s, the Department of Energy and the Office of the President frequently received Chinese officials as visitors, including the later-disgraced Bo Xilai, then the Minister of Commerce. National Security Council researchers, who by the mid-2010s were preoccupied with questions about China’s inner workings, used to spend very little of their time analyzing China’s behavior, even after the

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\(^9\) Interview with former National Mapping and Resource Information Authority official, Manila, Philippines.
tense Mischief Reef standoff in the mid-1990s. Consultations on the South China Sea also tended to be technical and commercial rather than diplomatic and political, which likely facilitated communications.\textsuperscript{10}

During Aquino’s administration, diplomacy trended toward a troubled relationship filled with guesswork, in both diplomatic and military arenas. A government researcher described Chinese officials as always using “the same cue cards,” with the result that “it’s getting harder to understand China...You can’t get any signals from them...How then do you respond if you always get the same answers?”\textsuperscript{11} During the Scarborough Shoal standoff, the Secretary of National Defense Voltaire Gazmin reportedly tried to explain the Philippines’ actions in terms of domestic legal requirements to the Chinese Minister of National Defense, Liang Guanglie, only to have Liang immediately change the subject. Queries to China for clarification on how the two countries might monitor the dispute usually resulted in either a canned response about the waters belonging to China, or no response at all. One defense official commented that it “takes a while before you can get a reaction from China...It would have been very helpful if we had had a more immediate reaction.”\textsuperscript{12}

The 2012 standoff at Scarborough Shoal taught the Philippines that naval confrontation would consistently work to China’s advantage, so it was better off finding alternative policies to maximize the strength of its territorial claim. When the Philippine Navy attempted to arrest Chinese fishing vessels, China responded by sending its own ships. Scarborough Shoal had previously been under Philippine control, but Chinese intrusions into the area raised fears that China would, as Aquino stated, claim “effective control over Bajo de Masinloc by ordering [Philippine] vessels out.”\textsuperscript{13} Indeed, by the end of the year, the Chinese had gained a military foothold and blocked Philippine access to the shoal. Offi-

\textsuperscript{10}Interviews with current and former Philippine officials, Manila, Philippines.
\textsuperscript{11}Interview with Philippine government researcher, Manila, Philippines.
\textsuperscript{12}Interview with Philippine defense official, Manila, Philippines.
cials repeatedly cited Scarborough Shoal as a reason why the Philippines had resorted to arbitration.[14]

The Philippines decided that Scarborough-Shoal-style incidents were ultimately undermining its attempts to demonstrate effective control. It switched to a policy of arbitration, a bold move that was somewhat incompatible with military-driven policies because it relied on the Philippines appealing to international audiences as a peaceful and law-abiding country, backed to some extent by alliance-building. Although the EDCA allowed the Philippines to hedge against China, the U.S. desire to remain neutral in the dispute meant that the Philippines had to bank on other policies for advancing its specific territorial interests. As Chief of Staff Gregorio Catapang stated, “EDCA will not solve our problem. We understand the treaty, it does not include the West Philippine Sea.”[15]

2.4.3 Arbitration and Policy Feedback

The move to arbitration was risky and invited outside skepticism. Nevertheless, the prospect of gaining clearer policy feedback significantly mitigated the risks in the minds of Philippine officials, who insisted that they had “studied the risks” and deemed them “manageable.”[16] In 2016, the assembled tribunal ruled in favor of the Philippines, declaring that the court had jurisdiction, that the nine-dash line is incompatible with the EEZ rules laid out in UNCLOS, and that some of the features claimed by China are not entitled to a full EEZ due to never having historically sustained a stable population. Although the intermittently pro-China policies of the subsequent President, Rodrigo Duterte, have since muddied the postmortem, this case does illustrate how the Philippines gambled on unknowns with the hopes of learning more about its legal standing and improving its policy position.

Many observers doubted the wisdom of the arbitration, emphasizing the riskiness of the gambit. Some doubted that jurisdiction would be granted, while others expressed

[14]Interviews with DFA officials, Manila, Philippines.
[16]Interview with DFA official, Manila, Philippines.
concern that China would fail to comply with the tribunal or, worse yet, withdraw from UNCLOS completely. A former DFA official also criticized Aquino and key Philippine decision makers in the DFA, including Gilbert Asuque and Henry Bensurto, Jr., for making the decision to use arbitration before consulting with the American lawyers that ultimately took on the case. Meanwhile, ASEAN countries refrained from supporting the decision for fear of political or economic repercussions.

The Philippines powered onward, correctly calculating that the arbitration would at least give it a sense of whether legal forums would be willing to step in if China was an unwilling participant in the proceedings, or if it refused to participate at all. After the tribunal ruled that it did have jurisdiction, Aquino emphasized how much the Philippines preferred risky information gathering over the previous state of uncertainty, stating, “Given the fact that we’re expecting a decision either this year or early next year, and then we go back to a status quo of uncertainty, I think that denigrates the original decision to go into the mode of finally settling this ambiguity.” In accordance with Philippine hopes, the tribunal determined that “the Tribunal was properly constituted in accordance with Annex VII to the Convention” and that “China’s non-appearance in these proceedings does not deprive the Tribunal of jurisdiction.”

The Philippines successfully elicited reactions from international audiences. China rejected the Philippines’ notification of arbitral proceedings via a note verbale in February.

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18 Interview with former DFA official, June 2014, Manila, Philippines.


2013, and some observers attributed China’s later willingness to publicly justify its South China Sea land reclamation activities in detail to the Philippines’ “public relations blitz” strategy.\(^{22}\) Although much of ASEAN maintained a wait-and-see approach to the arbitral move, Vietnam supportively filed a statement in December 2014 that recognized the court’s jurisdiction over the question under arbitration and requested that the PCA take Vietnam’s rights in the dispute into account. Later, when the court ruled in favor of the Philippines, Vietnam’s foreign ministry expressed support for the ruling.\(^{23}\) Finally, the United States government expressed vocal support for a legal resolution to the dispute and later conducted via freedom of navigation operations near areas of Chinese land reclamation in disputed areas, although its response to the final verdict was subdued.\(^{24}\)

The Aquino administration also received positive domestic feedback. The Philippine Congress passed resolutions (unanimously in the case of the House) supporting the arbitration within three days of the case filing announcement, with the Senate resolution being introduced by Majority Leader Vicente Sotto III and the House resolution being co-authored by the House majority and minority leaders. A public opinion poll conducted a year later on the DFA’s request suggested that 81% of Filipinos agreed with the decision to file for arbitration.\(^{25}\) The expectation of immediate, positive domestic feedback likely boosted the confidence of policymakers involved in preparing the arbitration.

The jury is, of course, still out on the long-term effects of the arbitration case on relations between the Philippines and China with respect to their maritime disputes. China


rejected the ruling on the nine-dash line; one observer suggested that “China has succeeded in transforming its legal defeat into a policy victory by maintaining its aggressive South China Sea policies while escaping sanction for its non-compliance." However, the feedback provided by the Philippines’ pursuit of the tribunal ruling will undoubtedly help to inform future policy.

2.5 Conclusion

When presented with an array of substitutable policies designed to achieve the same foreign policy end, states experiment strategically with the policies with the hopes of determining which ones are most successful. An armed-bandit model shows how variations in a decision-maker’s ability to learn about policy consequences intensify or mitigate the risks created by information uncertainty. The experimentation and learning framework in turn offers a micro-level decisional basis for understanding how one international relations circumstance could lead to multiple outcomes, thereby providing one solution to the analytical problem posed in the foreign policy substitutability literature.

The results from the model suggest that decision-makers are willing to take risks in exchange for information. States have unstable policy trajectories when they get quick, clear feedback upon policy failure and have non-complementary policies to which they can turn. They depart from their original, status quo policy to engage in risky but potentially helpful policies if those policies will result in clear policy feedback. The naval-led Scarborough Shoal confrontation led the Philippines to reconsider arbitration as a serious policy possibility. The Philippines chose a highly risky arbitration policy after China became increasingly uncommunicative about its maritime claim, because they hoped to clarify some legal points while eliciting a clear domestic and international reaction.

Although I apply the armed-bandits model specifically to the Philippines’ dispute with China, the model has many potential applications, which might provide multiple avenues for future research. The policy experimentation idea is likely applicable to other territorial disputes in other regions, such as the ongoing conflict over Gaza in the Middle East. This type of formal framework also works very well for thinking about war in general, alliance-building (Levy 1994), and research and development (Cowan 1991), including military R&D. The framework also has broad implications for non-security policy processes such as learning in macroeconomic policymaking (Hall 1993), particularly in areas where elites are able to craft and adjust policy at will.

Since the realm of security policy usually involves many countries and other entities, the experimentation and learning model described in this paper could be expanded to include many actors. The economics literature has explored strategic interactions between players that are experimenting on the same policies to maximize their own profits and learn from the experiences of others (Keller, Rady and Cripps 2005; Klein 2013; Klein and Rady 2011). By comparison, the analysis becomes more complicated in international relations, as multiple states may have opposing goals and different foreign policy toolboxes. The robustness check in the model investigates in a simplified manner what may happen in the medium-term in response to a state’s chosen policy portfolio, but future research could generate insights about how to incorporate a strategic element more directly into learning-based explanations of international relations.
Chapter 3

Legal Ambiguity in Territorial Disputes

During a June 2016 meeting with Chinese officials in Beijing in which the South China Sea territorial disputes were discussed, then Secretary of State John Kerry said, “I reiterated America’s fundamental support for negotiations, and a peaceful resolution based on the rule of law, as well as, obviously, our concern about any unilateral steps by anyone, whichever country, to alter the status quo.”¹ Does the Philippines’ bringing of a case against China to international arbitration in 2013, which resulted in a tribunal’s rejection of a portion of Chinese maritime claims but did not affect land features in the region, count as a change to the status quo? Does China’s dredging up of sand and building of military infrastructure without occupying any new features count as a change to the status quo? Leaders care a great deal about the geopolitical status quo, but this concept can be ill-defined. If the status quo consists of a broadly shared perception of which elements of a situation matter, and of what changes do and do not affect those elements, then status quo ambiguity must be rife among international disputes.

International law provides one basis for shared perceptions between disputing states (McAdams 2000). Sumner (2004) identifies nine normative grounds on which states justify their border claims: treaties, effective control over the territory, past administrative boundaries prior to independence, historical possession, geography, economy, culture, natural rights, and ideology. Of these, legal bodies like the International Court of Justice (ICJ) have emphasized the first three, and historical possession is often linked to effective control. Treaty texts and the concept of effective control respectively give states a sense of previous agreements about the “true” boundary and therefore of who currently can be said to be truly holding disputed areas. Third parties such as allies and international onlookers can in turn observe this information and make a judgment about which changes would constitute a substantive change in the status quo.

When neither side has a clear legal advantage over the other, or when the complexity of claims create uncertainty over how legal principles apply to the dispute, then states will take advantage of the confusion surrounding the status quo. When states engage in unilateral actions in such a dispute, they will be able to justify their actions to both their opponent and to outside parties without provoking unanimous dissent. Such states, which the literature terms “challenger states” (Huth 1996a), will be more likely to choose actions that are individually limited in scope and do not provoke all-out conflict, but that they hope will gradually change the border situation in their favor. States’ perceptions of the status quo will also diverge over time, since each side will be inclined to prioritize their legal arguments while downplaying those of their opponents. This divergence will also increase the likelihood of border incidents, since what one side views as increasing their control over territory they already hold may be be viewed by the other side as active encroachment on previously unheld areas.

An implication of this theory is that the increased border activity that results from ambiguity may protract disputes well beyond the point where bargaining theories might otherwise have predicted a resolution. Scholars have noted that territorial issues seem to be
particularly intractable; they last a long time and regularly cause strife (Dreyer 2012; Goertz and Diehl 1993; Wiegand 2011). States that engage in such activity will entrench disputes over time, as the constant shifting of the status quo erodes legal and physical focal points over which the disputing parties can agree to coordinate in settlement talks.

In the remainder of this paper, I discuss the strategic concerns faced by states seeking to change the status quo of a dispute, and why states prefer to attempt faits accomplis when the legal merits of the dispute are unclear. In the next section, I situate the legal aspects of territorial faits accomplis within the international relations literature on crisis bargaining, and I theorize about the emboldening effects of legal ambiguity on state behavior. In the second section, I suggest hypotheses about the effect of ambiguity in international law on faits accomplis. In the third section, I describe my data set of border activity in Asian territorial disputes from 1945 to 2000, which combines Huth, Croco and Appel (2013)’s data on territorial dispute resolution with original data on attempted territorial encroachments. In the fourth section, I conduct a statistical analysis to demonstrate the relationship between the frequency of unilateral border activity and ambiguity in the legal status quo. I conclude in the fifth section with a brief discussion of the paper’s implications for the study of interstate disputes.

3.1 Faits Accomplis in Territorial Disputes

To better understand how states manage border disputes, international relations scholars must better explain why and when states engage in faits accomplis. Defined by Altman Forthcoming as “limited unilateral gain at an adversary’s expense in an attempt to get away with that gain when the adversary chooses to relent rather than escalate in retaliation,” faits accomplis are more common than either successful attempts at dispute settlement or resolution through adjudicatory means. Border disputes frequently last for decades, and unilateral activity along the border serves as a major flash point that makes peaceful resolution
methods less likely. In this section, I argue that international law can supplement rationalist, war-bargaining-focused explanations of the behavior of so-called “challenger states” that are dissatisfied with the status quo, vis-à-vis “target states” that may have to defend against territorial losses ([Huth 1996a] 2).

Most existing explanations of territorial faits accomplis have focused on military deterrence and credible commitment, which the rational crisis-bargaining literature suggests are the primary obstacles to the resolution of interstate disputes ([Fearon 1995]; [Powell 1999]). [Tarar (2016)] explicitly draws a connection between bargaining problems and military faits accomplis, suggesting that as in bargaining, incomplete information and commitment problems triggers unwanted military action. One can also characterize faits accomplis as a failure of deterrence ([George and Smoke 1974]; [Kilgour and Zagare 1991]; [Snyder and Diesing 1977]), which occur when dissatisfied states believe that their military actions are likely to be ignored, downplayed, or otherwise succeed at a low cost ([Mearsheimer 1983]). Dissatisfied states cannot commit to refraining from making border advances, and they have an incentive to downplay territorial advances in the first place, lest they get caught prior to consolidating control over new territory. Signaling problems may also apply, as governments fear that weakness on something as fundamental as borders will signal weakness in other areas ([Walter 2003]).

Deterrence and credible commitment do not explain everything about why faits accomplis occur because states attach normative values to their border claims, which in turn affect how they behave. On one extreme, states have used territory as bargaining chips for issues considered more important, such as assistance from neighboring states on other issues ([Fravel 2008]). On the other extreme, some disputed territories have achieved extreme symbolic weight. Over time, interested parties in a dispute begin to perceive the disputed area as a cohesive, clearly defined whole, rather than as a geographical area that may be divided up in myriad ways ([Goddard, Pressman and Hassner 2007/2008]; [Hassner 2003, 2006/2007]).

Both disputants can of course be dissatisfied. In many cases, countries take turns being the challenger state, as circumstances change.
Consequently, many disputes become increasingly intractable over time, often lasting far longer than seem justified by the material benefits inherent to the disputed territory.

Because normative attitudes towards claimed territory affect state behavior, international law in turn affects state behavior. The international legal regime for territorial conflict is weakly implemented and weakly enforced, but ever present and deeply entrenched in diplomatic dialogues surrounding any given dispute (Simmons 1998, 2002). Diplomatic statements about border disputes frequently allude to past treaties, legal documents from past arbitrations, legal principles, and historical evidence of ownership (Carter Forthcoming) as a way of indicating their normative claim to the territory. Third parties may also use legal norms as an organizing principle when deciding how to respond to disputes, which can be important in situations where military aggressiveness could antagonize other countries (McAdams and Nadler 2005).

Although the lack of explicit enforcement of legal norms in border disputes leaves dissatisfied states with a lot of leverage for managing, obstructing, and otherwise avoiding successful dispute resolution, states do pay heed to international law. They seek to improve their legal standing so that they can improve their bargaining position in border talks, and their behavior changes depending on how they perceive the legal status quo. In the following sections, I discuss the factors that go into legal claims over territory, how faits accomplis can run aground of these claims, and how international law shapes states’ perceptions of the status quo in disputed territories, thereby altering challenger state behavior.

### 3.1.1 Lack of Clarity in the Status Quo

States engage in faits accomplis for a variety of reasons, including greater bargaining leverage and better consolidation of military control over territory. When legal principles surrounding a dispute create uncertainty in the status quo, then the challenger state can more readily assert that its bargaining position is legitimate during settlement talks. Consequently, leverage resulting from additional territory increases and faits accomplis become
more tempting. The challenger can also expect the target state to be more hesitant to respond militarily to border activity, due to the weakened sense of ownership over the territory. Finally, states will have stronger incentives to consolidate physical control, since doing so may reduce perceptions of the area as being legally in flux.

A primary purpose of attempting a fait accompli in a dispute is to gain bargaining leverage over one’s opponent. A strategy of asking forgiveness rather than asking permission may result in gains for a state seeking to challenge the status quo, since the unilateral action would put the challenger state in a better strategic position, both for bargaining and in case of violence (Leng 1993). If the challenger state can manage to do so without provoking a military conflict, which often is the case when the fait accompli is minor in scope, then it can bank these additional bargaining chips for the future without having to settle the dispute through a costly war.

When ambiguity over the legal status quo exists, a challenger state can more readily use newly captured territory as a bargaining chip. If the target state’s claim is strong, due to other, more substantial legal concerns like the text of past treaties, then international law does not prioritize current possession of a territory over that preceding claim (Sumner 2004). However, if there is no such countervailing text, or if the applicability of the text is unclear, then courts (and by extension the international community) have generally attributed ownership to the disputant that most prominently displays de facto control over a region. This principle is otherwise known as the qualification of “effective control.” Accordingly, the International Court of Justice frequently cites evidence of “effectivités” when making territorial judgments.

Effective control impacts the normative conversation around a dispute, but recently captured territory may not be viewed as legitimate by the international community unless confusion already reigned over which side had controls the area in question. By contrast, if

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neither state has clearly held a territory for a long time, then the target state will have more trouble appealing to other foreign leaders for moral support. The target state will therefore be at a disadvantaged bargaining position, whereas the challenger will have improved its bargaining position by having a stronger foothold in the disputed region. Thus, if the target state does not have a clear legal advantage over the challenger in the area, faits accomplis will be more effective in the eyes of the challenger.

Lack of a clear legal advantage also removes a potential outside option from the target state’s arsenal, since they will be more reluctant to appeal to adjudicatory or arbitrating methods in the face of faits accomplis. A sufficiently strong legal precedent gives states more options to respond to attempted changes to the status quo beyond achieving coordination between the bargaining countries. By contrast, when the target state cannot appeal to a united international opinion, but is also concerned that judicial proceedings would not lead to a desired outcome, it has fewer options for bargaining with its opponent.

The dispute over the Preah Vihear Temple on the border of Thailand and Cambodia demonstrates how the presence of a very strong legal precedent gives states power. In this case, Thailand and Cambodia went to the International Court of Justice over the disputed temple in 1959, and received a judgment in favor of Cambodia in 1962. Thailand then attempted to chip away at the edges of the judgment, claiming a hill in the vicinity in 1986 and engaging in various activities near the temple during the late 2000s. In doing so, Thailand argued that it had withdrawn its troops from the Temple’s “vicinity on Cambodian territory,” as the 1962 judgment had imprecisely ruled, and that Thailand had the right to territory outside of that immediate vicinity. However, because the previous court case existed, Cambodia had the legal standing to ask for an interpretation of the previous judgment, and the ICJ deemed it had jurisdiction to clarify and reject Thailand’s interpretation of the dispute, in spite of actions taken on the border between 1962 and 2011.\footnote{Request for Interpretation of the Judgment of 15 June 1962 in the Case Concerning the Temple of Preah Vihear (Cambodia v. Thailand) (Cambodia v. Thailand), Judgment, ICJ Reports 2013, p. 281.}
would have been in more trouble had it not felt confident that the court would rule in its favor.

Another reason that a strong status quo deters dissatisfied states and a weak one encourages them is informational in nature: the target state, its allies, and domestic audiences can definitively figure out if the challenger is purposefully trying to revise the status quo. As a result, these actors attach a stronger normative value to encroachments across well-defined borders. As an extreme case, consider a hypothetical where a dissatisfied state moves across an established border that is not under dispute, and the status quo is therefore crystal clear. The target state would almost certainly notice, it would be able to verify immediately that this move was intentional, and the international community would likely accept if it declared this act to be a *casus belli*. By contrast, India’s government claimed in 2014 that there had been 411 Chinese troop crossings at the disputed border in 2013 and 426 in 2012, but downplayed the significance of the occurrences. The Indian Ministry of Home Affairs emphasized that the crossings arose from a “difference of perception of the Line of Actual Control,” an explanation that highlights how ill-defined the Line of Actual Control actually is. Because the status quo is uncertain, incidents are open to interpretation, and a dissatisfied state might be inclined to take advantage.

Would-be challenger states may also see more long-term advantages in consolidating control over legally ambiguous territory than doing the same over territory where either side holds a superior normative claim. First of all, the military benefits of territorial consolidation are evident. Doing so improves a state’s ability to hold that territory during a militarized conflict. Building fortifications, roads, and bridges in territory that contains tactically useful locations like mountain passes and waterways increases the state’s ability

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to move troops quickly and defend effectively against its opponent’s military. Some terrain also has features that make defense easier (Glaser and Kaufmann 1998; Van Evera 1998). Dissatisfied states may seek to establish new footholds in regions that have such features and will help them defend their existing holdings more effectively, with the expectation that these actions may eventually shift the status quo in its favor.

Just as the challenger gains more bargaining advantages when the legal status quo is ambiguous, states will find it easier to create physical consolidation over territory when neither side holds a clear advantage. Legal claims are strongest when treaty obligations (or the grandfathering of older colonial boundaries into post-colonial boundaries) and a history of effective control point in the same direction (Hensel, Allison and Khanani 2009). As such, if the target state has a legal advantage over the challenger, this state of affairs generally reflects a history of facts on the ground that favor the target. The challenger will have difficult trying to gain a physical foothold in an area that has long been controlled by the opponent; for instance, China has had to get creative with attempts to change the status quo of the Diaoyu/Senkaku Islands dispute with Japan because physical attempts to alter the territory would have to overcome Japan’s existing mechanisms of physical control, including naval and troop patrols. China has an easier time doing such things as building roads in the mountains on its southwestern borders, because the countries on its border do not have a consistently strong foothold in those regions.

The rationales presented in this section have assumed that dissatisfied states are most active on their borders when the lack of clarity makes it both easier to encroach on disputed regions and easier to gain bargaining power in the process. The next section deals with a second mechanism, whereby not only do challenger states act because the target state’s claim is weak, but in fact come to believe over time that their legal claim is stronger than it actually is.
3.1.2 Overoptimism in the Status Quo

When competing claims to a dispute have approximately equal merit, each side will tend to develop an overoptimistic view of their own legal claims, while underestimating the claims of their opponent. Asymmetric information about territorial holdings, psychological re-framings that overstate the state’s own claims and understate those of its opponent, and lack of clear input from the international community will combine to inflate territorial actors’ beliefs about the weight of their claims. These actors will then in turn act more aggressively along the border.

Because secrecy and asymmetric information are characteristic of border disputes (Rathbun 2007; Rauchhaus 2006), each side knows both more about its own current physical holdings and about its legal and administrative history in the region than it does about those of the other side. Previous border activity exacerbates this problem, particularly if the acting state succeeds in escaping blow-back. As an example, on multiple occasions in multiple decades, the Indian government has discovered roads built by the Chinese government along their border (or, in the latest case, along the China-Bhutan border). In these cases, the lack of a sustained reaction from governments along the border in response to past infrastructural changes boosted Chinese confidence in its road-building activities as legitimate, and even routine (Murphy 1990). Each side of a dispute also has archival access to maps and other historical records that it considers trustworthy and indicative of a strong legal claim. Meanwhile, each side will have limited knowledge of the other side’s activities and come to overestimate the strength of their own claim. The challenger state will then act more boldly within what it considers to be its borders, and the rate of faits accomplis increases.

The problem of asymmetric information worsens when the relative strength of legal claims is murky. The possession of both justifiable legal claims and physical holdings in a region increases target state resolve to control that region, but the challenger state has less information about its opponent’s level of resolve. The legal literature suggests that when
legal principles entail “broad uncertainty,” parties under-comply with legal requirements (Craswell and Calfee 1986) and “discount harm to others of this conduct by the likelihood that they possess a legal entitlement to so act” (Brooks and Schwartz 2005). Thus, when a challenger state attempts a fait accompli, it will underestimate the target state’s perception of harm and therefore its resolve to retaliate.

International observers tend to follow the legal consensus, or lack thereof, when influencing the behavior of states embroiled in a dispute. If a legal consensus exists and favors one side, then the international community will pressure the other side not to fight, thereby reducing its resolve for conflict, and potentially offer mediation services (Beardsley and Lo 2014; Kydd 2003; Savun 2008; Shannon 2009). If a legal consensus does not exist or does not favor either side, the international community will typically describe the conflict in more value-neutral terms that will not necessarily depress either side’s resolve to fight. States will feel less pressure to justify their decisions to third parties, which also reduces the amount of publicly available information about resolve.

When legal scholars and international legal opinion do not provide a clear counterargument to a dissatisfied state’s claims, political actors in that state will develop overconfidence in the legal merits of their own side, while ignoring the legal merits of their opponents’ case. The lack of clear legal guidance creates a coordination problem in which the challenger state and its opponent no longer share a common understanding of the natural dividing line between each side’s holdings withing the disputed area. For instance, Jawaharlal Nehru wrote to Zhou Enlai about the “Line of Actual Control” separating India and China in October 1962: “There is no sense or meaning in the Chinese offer to withdraw twenty kilometers from what they call ‘line of actual control.’ What is this ‘line of control’? Is this the line they have created by aggression since the beginning of September? Advancing forty or sixty kilometers by blatant military aggression and offering to withdraw twenty kilometers provided both sides do this is a deceptive device which can fool nobody.”

Because neither side’s per-

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ception of the dispute’s parameters is anchored to an international consensus about exactly what the Line of Actual Control looks like, they feel free to define the line according to their own preferences.

Where third party observers would normally provide extra information that reduces the contradictions in disputing states’ perceptions of the status quo, their ability and willingness to provide this function decrease when the legal regime is unclear. Outside parties will be more neutral in their descriptions of the merits of each side, sticking instead to factual descriptions of events with little in the way of broader legal interpretation. They will be less inclined to assign causality or blame to border incidents. As a result, if either side is inclined to believe that their own legal position is stronger than it actually is, then it will not receive much in the way of negative international feedback.

Over time, a dissatisfied state will become overoptimistic about the merits of its own claim and begin to think it has the right to build and patrol in certain areas that it considers to be within the status quo for its controlled area. Members of disputing parties will have a psychological tendency towards bias, in which they “conflate what is fair with what benefits oneself” (Babcock and Loewenstein 1997). Prospect theory, meanwhile, suggests that states are more risk-acceptant when it comes to preventing losses of existing territory than when preventing losses of newly gained territory (Jervis 1994; Levy 1996, 1997). Armed with private information about successful legal stakes, actors within challenger states will thereby come believe that a fair distribution of the territory in question will favor them, and moreover that the status quo already favors them.

Any changes on the border, or assertions that the challenger state does not have the advantage in the status quo, will be viewed by challenger state actors as a loss of territory rather than a maintenance in the status quo. Such actors may then act to preserve what they perceive as the status quo through unilateral border activity, which are seen in turn by the target state (whose actors are subject to biases in the opposite direction) as a new
encroachment on their sovereignty. A lack of legal clarity exacerbates this confusion over which actions are maintaining the status quo, and which actions are disturbing it.

### 3.2 Hypotheses

Ambiguity in the legal aspects of territorial disputes encourages dissatisfied states to act assertively on their borders, through a combination of overoptimism and the belief that such actions will gain them bargaining leverage without provoking a major response from their opponents. In this section, I propose a number of testable hypotheses about challenger state behavior in the face of legal uncertainty.

The first hypothesis follows directly from the mechanisms described above. Challenger states are more likely to attempt territorial intrusions when the status quo is weakly defined, due to a combination of increased bargaining leverage, better opportunities for consolidation of physical control, asymmetric information about resolve, and overconfidence about how much the status quo favors them. In addition, challenger states prefer to minimize push back when trying to revise the situation in a dispute, and push back is more likely when both the target state and external observers, such as allies and legal experts, regard the target’s existing control over territory as clear.

**Hypothesis 3.1.** *Attempts at unilateral change in a disputed territory are more likely when neither the target nor the challenger has a clear legal advantage in its territorial claims.*

The same mechanisms should also lead challenger states to attempt larger faits accomplis in situations where the legal status quo is unclear. Since the challenger state will gain more bargaining leverage when the target state cannot effectively use its legal claim to protest border activity, the challenger will feel free to make larger, more permanent changes to the landscape. Infrastructure changes such as the building of roads, military bases, houses, and other permanent structures will maximize the challenger’s bargaining leverage gains be-
cause they demonstrate concrete evidence of effective control by the challenger, even if the land should change hands in the future.

Since unilateral border changes become more costly and risky as the size of the changes increases, states will prefer to invest when push back is unlikely. If the challenger state believes that the international community will not seriously oppose its border activity because the target does not have a superior claim to the territory, it will believe that it can get away with larger projects in the region. Similarly, if it has underestimated the target state’s resolve due to asymmetric information, it will be bolder. It will also expect that, should it choose to use arbitration or adjudication for dispute settlement in the future, future courts will weigh recent border changes more heavily if the legal question is otherwise ambiguous. Conversely, courts like the ICJ have weighed effective control less heavily in situations where the situation is clear, e.g., evidence of control is not sustained over a long period of time and goes against prior treaties and other legal documents.\footnote{Sovereignty over Pulau Ligitan and Pulau Sipadan (Indonesia/Malaysia).}

Overoptimism about the status quo will also lead to larger building projects in a disputed area. If the challenger state believes that it already has effective control over a plot of land, it is more likely to build structures and deploy personnel in that space. Its decision-making process will have less consideration for the potential reactions of neighboring states, and more consideration for other, instrumental goals like improving transportation or shoring up military defenses in the region. As a result, states in a dispute where there is legal ambiguity will tend to plan larger changes along their borders.

Hypothesis 3.2. Attempts at unilateral change in a disputed territory are larger in scope when neither the target nor the challenger has a clear legal advantage in its territorial claims.

A broader implication of the argument is that disruptions to the status quo via territorial intrusions should make reaching acceptable bargains more difficult for disputing countries. Schelling (1960) argues that focal points allow for decision makers to reduce the potentially infinite space of possibilities for agreement on a matter of dispute, by offering a
limited set of likely options around which decision makers can coordinate their bargaining. Schelling defines a focal point as “some clue for coordinating behavior” that is based on “each person’s expectation of what the other expects him to expect to be expected to do.” Huth, Croco and Appel (2011) and Huth, Croco and Appel (2013) apply this reasoning to territorial disputes in particular, asserting that international law can serve as a basis for such focal points. That is, if international law suggests clear legal guidelines with regard to a given dispute, this can help disputing countries or leaders to come to an agreement. According to this argument, states with a strong legal claim will be more likely to stand their ground, while states with weak claims will have difficulty holding out during negotiations, especially in geopolitical situations where military force is not advisable.

Ambiguity means that states cannot coordinate as successfully over focal points. When a challenger in a dispute is discovered trying to unilaterally alter the state of a dispute, the target state usually responds poorly on a diplomatic level, even if it does not opt for a militarized response. States will not be able to reach mutually acceptable bargains because the multiplicity of plausible border focal points makes it harder for leaders of opposing states to converge on a single one. Negotiators from opposite sides of the bargaining table will point to different pieces of evidence, or different historical time periods, and try to push coordination towards their preferred focal point. Dispute resolution should therefore become less likely, and negotiation attempts should be more likely to break down, whether it is negotiation over specific terms of territorial demarcation or over the prospect of using an arbitrator or adjudicatory process.

Faits accomplis erode focal points by creating new, ever-changing legal footholds that diminish any chance of stable, normatively based coordination. In the process of demonstrating effective control, or at least a plausible claim to such control, a challenger state is not only strengthening a legal case for itself, but also making it more difficult for observers to come to a consensus about a territory’s rightful owner. The resulting murkiness affects multiple sources of constraints on dispute negotiations. If domestic audiences see evidence of
effective control, such as maps or other administrative documentation, then they will place pressure on leaders to reject bargains that are seen as giving the country less than its fair share of the territory. Additionally, leaders engaging in negotiations will become warier of dispute resolution through international adjudication or arbitration if they are losing their legal advantage, since they will feel increasingly uncertain about the outcome. Finally, over time, leaders of other countries come to accept that the dispute is an open question and become less inclined to take a position on which disputant possesses sovereignty.

**Hypothesis 3.3.** Recent attempts at unilateral change in a disputed territory decrease the likelihood of successful dispute resolution.

### 3.3 Data on Territorial Incidents

In this section, I first describe the main dependent and independent variables used in my analysis, namely the incidence of attempted faits accomplis in disputed regions of Asia and the relative strength of disputants’ legal claims on the region, respectively. I then go into more detail about how I coded the dependent variables, given that border activity can be hard to observe and identify as being intentionally directed by the dissatisfied state, and I discuss the control variables that I include in the statistical models. Third, I highlight the rarity of Asian disputes that have successfully resolved in the post-World War II period while also having a history of faits accomplis on the border.

#### 3.3.1 Main Variables

As my main variable for testing the relationship of faits accomplis to dispute resolution, I include a year-by-year coding of territorial encroachments in disputed regions of Asia, excluding the Middle East, from 1945 to 2000.\(^9\) Dispute-years in Central, East, and

\(^9\)Data are available upon request. "Asia" does not include disputes in the Middle East, which are coded as belonging to the Middle East and North African region, following Huth and Allee (2002).
Southeast Asia constitute nearly one-third of the 3840 dispute years covered in the Huth data set, and include a variety of dispute types, ranging from active and relatively hostile disputes such as the ones on India’s borders with China and Pakistan, to disputes that were settled quickly and quietly, such the one between China and Kazakhstan. They are therefore a good place to start when analyzing state behavior in territorial disputes.

The years of territorial encroachment are coded using ordered categories from 0 to 3. Dispute-years in which a challenger state attempted unilateral changes in the status quo are coded as 1 if there were minor attempts to change the status quo by making slight or temporary changes to the physical control of territory by either side of a dispute. Dispute-years are coded as 2 if there were attempts to significantly change the status quo of territorial possession through building-level changes in infrastructure across a de facto line of control, or through troop movements intended to take a sizable chunk of territory that nevertheless is not large relative to the total size of the claimed territory. Dispute-years are coded as 3 if there were attempts at unilateral capture of areas of territory that were large relative to the total size of the disputed area. I also create a dummy indicator, Incident, to indicate whether or not there was a border incident instigated by the challenger state in the challenger-dispute-year. I discuss these codings further in a subsequent section of this paper.

Table 3.1 shows the distribution of the codings. Territorial transgressions are relatively rare in border disputes, with the majority of disputes being peaceful and with even non-peaceful disputes sometimes lying dormant for decades at a time. High-intensity years are even rarer, representing less than 1% of the total years.

For measures of legal strength and histories of conflict resolution processes, I piggy-back off Huth, Croco and Appel (2011) and Huth, Croco and Appel (2013)’s data on land disputes between 1945 and 2000. The data set is useful on several dimensions for considering the effect of unilateral faits accomplis and ambiguity in the status quo on dispute resolution processes. The data include various measures of legal strength, which are based on scholarly legal assessments, government documents, and international legal rulings. The data also in-
Table 3.1: Intensity of Territorial Encroachments

<table>
<thead>
<tr>
<th>Intensity</th>
<th>Number of Challenger Dispute-Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1070</td>
</tr>
<tr>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

N = 1175.

clude a measure, *Legal Uncertainty*, to indicate when factors such as the length of the border or uncertainty over key legal principles increase complexity of the dispute. Finally, Huth, Croco, and Appel code decisions by challenger states to engage in settlement negotiations, and decisions by states to end disputes peacefully, either through bilateral negotiations or judicial proceedings.\(^{10}\]

To test my hypothesis that challenger states instigate more border incidents in dispute-years where neither side holds a clear legal advantage, I aggregate the measures used by Huth, Croco, and Appel. *No Advantage* indicates that neither side has a significant legal advantage in the disputed territory. Of the 1175 challenger-dispute-years in the data set, 345 of these take place in disputes where neither side has an advantage. In all these cases, both sides have a set of legal claims that are a mix of strong and tenuous. *Challenger Advantage* indicates that the challenger has a stronger legal claim, which is true in 191 of the dispute-years, and *Target Advantage* indicates that the target has a stronger legal claim, which is true in 639 of the dispute-years. This distribution is summarized in Table 3.2. The hypotheses presented in this paper predict that *No Advantage* best predicts whether or not the challenger state pursues border activity, but *Challenger Advantage* and *Target Advantage* test alternative hypotheses, in which dissatisfied states pursue unilateral border shifts according to how far they believe their legally justified borders to extend.

\(^{10}\)In those cases where both sides of a dispute can be considered challengers, because both sides want to gain more territory than they currently hold, Huth, Croco and Appel (2013) randomly select one state as the challenger in the statistical analysis for each dispute agreement. I follow this method.
Table 3.2: Distribution of Legal Advantages

<table>
<thead>
<tr>
<th>Number of Challenger Dispute-Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Advantage: 639</td>
</tr>
<tr>
<td>Challenger Advantage: 191</td>
</tr>
<tr>
<td>No Advantage: 345</td>
</tr>
</tbody>
</table>

\[ N = 1175. \]

3.3.2 Measurement and Identification

To compile the data set of 189 dispute-years in which a challenger state attempted faits accomplis on disputed borders, I used a variety of sources, including declassified CIA records such as the President’s Daily Briefs, dating through 1977, and the CREST archives, dating through 1992; Foreign Broadcast Information Service news articles; English-language news sources through Lexis; and various books and articles detailing the history of territorial disputes in Asia, including but not limited to Fravel (2008), Fravel (2011), and Wiegand (2011).

Identifying and coding border activity is necessarily difficult, since border incidents range from the very tiny to the very large, and some incidents that are seen by target states as hostile may be accidental, particularly in poorly demarcated areas. As previously mentioned, India’s government that there had been many hundreds of Chinese “transgressions” across the border in 2012, 2013, and 2014. While the frequency of such incidents may have resulted from intentional Chinese border policies, a single hand probably did not personally direct all of these events. Hence, some guidelines are required in order to organize historical events into useful and comprehensible codings.

Since news accounts of border crossings can be contradictory and have reporting gaps, I organize the data into a year-by-year coding for the presence of territorial encroachments. This way, even if the press did not report some border crossings, troop movements, or other possible intrusions, or if the reports were belated and do not refer to specific dates, the data
can give a sense of whether, in a particular year, there was foment along the border and attempts by one or both sides of the dispute to change the status quo. This manner of coding also helps to alleviate the difficulty of determining the intent of challenger states’ leaders for each individual incident, since many small encroachments over the course of a year indicate the presence of some state policy that directly or indirectly encourages border activity.

Of cases that were included, a coding of 1 was given to minor events that maintain expansive pressure on the border but either involve few troops or consist of non-permanent physical changes to the territory. Examples range from the placement of signposts, markers, and other minor infrastructure changes, to brief incursions with intent to cross a de facto line of control. If, as occurred in 1967, Indian troops put up some fencing in the region disputed by China, I coded that as a minor attempt. Most dispute-years recorded in this manner refer to border crossings and incursions that were repeated in a dispute-year but did not lead to major physical consolidation of control in the area. I also coded infrastructure built on land already held by the challenger state as 1 if the infrastructure was perceived as changing the status quo of the dispute.\footnote{A post-2000 example of this would be land reclamation and military construction on maritime features in the South China Sea.}

A coding of 2 was given to changes in troop placement or infrastructure that were intended to last or be used for medium- to long-term military purposes. One example of this would be 1965, when Chinese troops reportedly dug trenches and set up military works in Longju, which were disputed by India. Another example would be the 1980s, in which Vietnam occupied a few maritime features and reefs in the South China Sea each year over several years. Lastly, a coding of 3 was given to significantly sized land grab attempts. This coding was primarily reserved for situations such as 1961, when India annexed Goa which was claimed by Portugal, or 1962, when Indonesian forces attempted to capture the whole of West New Guinea from the Netherlands. Unsurprisingly, faits accomplis of this size frequently led to conflict or, as in the case of Goa, more or less ended the dispute without a settlement.
I only include incident-years in which it seems that the central government at least condoned the actions, the actions appeared to be for the purpose of capturing territory, and the actions were not part of an ongoing war. I exclude any incidents that primarily involved non-governmental groups, or that occurred as the result of spillover from other conflicts or overeager border policing of civilians. For instance, I exclude the many references to unsanctioned border crossings in Cambodia during the Cambodian Civil War, since most militarized border activity was a combination of civil war activity and activity originating out of the Vietnam conflict. Similarly, I exclude all border incidents from years in which Afghanistan could not have been considered to be a country with a centralized state apparatus, since many such incidents seem to have originated from the initiatives of local rather than national leaders.

I also exclude potential cases where the incident was either officially denied by both sides, or explained by the target government as the result of poor border demarcation. Such events frequently occur in the mountainous disputed regions lying between India, Pakistan, and China; news outlets often report incidents that are subsequently explained away, especially by Indian leaders. Although some of these incidents may represent a downplaying of the hostilities rather than the actual absence of intent, I opted to err on the side of caution in identifying potential faits accomplis in such cases.

3.3.3 Controls

Following Huth, Croco and Appel (2011) and Huth, Croco and Appel (2013), I include several control variables that are likely to affect state behavior in territorial disputes. These variables account for alternative explanations for faits accomplis. Challenger states may make moves because they think they have a military advantage and will therefore be able to keep territory gained, because they have some reason to believe that the target state will not react to their maneuvering, or because they have a particular strategic interest in capturing
the territory. These alternative explanations may coexist with the hypothesis that states more frequently engage in unilateral activity in legally ambiguous territory.

Some controls deal with geopolitical factors that could affect the dispute resolution process or the challenger’s management of potential territorial transgressions. No Joint Democracy indicates that at least one of the sides in the dispute is not a democracy, since the democratic peace literature suggests that democratic dyads might be more peaceful than other dyads, including in the case of territorial disputes (Maoz and Russett 1993; Bueno de Mesquita et al. 1999; Gibler and Owsiak Forthcoming). Military Imbalance measures the level of parity between the states’ overall military capabilities, such that a higher value indicates a more lopsided balance of power in either the challenger or target’s favor. This control accounts for an alternative explanation for states’ decisions to challenge their opponents at the border, since a “might makes right” approach to international politics might result in states paying more attention to military advantages than legal advantages in border claims. Lastly, Enduring Rivalry indicates whether the disputing states have had at least 5 militarized conflicts in the 20 years prior to the dispute-year (Huth 1996).  

Also included are controls about the strategic characteristics of the specific disputes. No Ethnic Ties indicates that neither side has co-ethnic ties to people living in the disputed territory, since ethnic ties may increase the salience of the dispute and a challenger state’s interest in capturing new territory (Toft 2002; Hensel and Mitchell 2005). No Joint Strategic Territory indicates that neither side perceives strategic value in the territory, which should decrease the likelihood of attempted faits accomplis. Past Stalemate indicates whether the states have failed at negotiating over the dispute in question in the recent past, which may indicate that the dispute is particularly intractable.

12I also coded a variable, Alliance, that indicates whether the states have an ongoing defense pact or other military alliance, since states in an alliance should be more likely to manage a dispute peacefully and to avoid provoking each other (Leeds 2003). However, this applies to so few of the cases that it does not contribute much to the analysis.
3.3.4 The Rarity of Dispute Settlement after Faits Accomplis

Before statistical tests are considered, I look at the overall record of territorial aggression in post-1945 Asia to demonstrate the plausibility of Hypothesis 3.3. Even minor faits accomplis almost never happen in disputes that have been successfully resolved, to the point where it is difficult to observe the effect of faits accomplis on border settlement directly due to a lack of counterfactuals. Huth, Croco and Appel (2012) identify 369 attempts at peaceful negotiation between territorial disputants in the region between 1945 and 2000. Of those 369, 19 resulted in a major dispute-related agreement or undertaking of a international judicial process. Of the 19 instances that resulted in such an agreement, none of them featured a territorial encroachment within the dispute in the year of agreement. Only the Cambodia-Vietnam border dispute and the India-Pakistan border dispute featured any instances of territorial encroachment in the decades prior to settlement. In addition, the Portugal-Indonesia dispute over East Timor was started by the 1975 invasion of Indonesia into East Timor, but this was not coded as an instance of territorial encroachment, since a dispute had not existed prior to the invasion. Of these three cases, the India-Pakistan dispute was the only one in which the most recent incident had taken place less than five years prior to the agreement; in this case, an agreement followed years of mutual territorial incursions by both sides into disputed territory.

Conversely, of the 156 instances of territorial encroachments recorded between 1945 and 2000, only two of them (both in the India-Pakistan dispute) took place in a dispute that would reach some kind of major settlement or other agreement within five years after a territorial intrusion. The India-Pakistan case is likely an exception to the rule because the Indo-Pakistani War of 1965 had broken out in the prior year, which required some sort of peace agreement. In this specific case, the decade prior to 1966 had featured three years that featured border violations of magnitude 1 in the late 1960s, plus a level 3 fait accompli attempt in Rann of Kutch and Akhnur, which was coded as magnitude 3 and which sparked
the conflict. This agreement also failed to prevent the resumption of tensions on the border in subsequent decades. Table 3.3 lists the 19 instances of major dispute agreements.

Table 3.3: Major Dispute Agreements

<table>
<thead>
<tr>
<th>Year</th>
<th>Challenger</th>
<th>Target</th>
<th>Dispute</th>
<th>Encroachments in Past 5 Years?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>Afghanistan</td>
<td>Soviet Union</td>
<td>Russia-Afghanistan land border</td>
<td>No</td>
</tr>
<tr>
<td>1948</td>
<td>Pakistan</td>
<td>India (C)</td>
<td>Junagadh and Kashmir</td>
<td>No</td>
</tr>
<tr>
<td>1950</td>
<td>China</td>
<td>Soviet Union</td>
<td>Port Arthur and Port Darien (Dalian)</td>
<td>No</td>
</tr>
<tr>
<td>1954</td>
<td>India</td>
<td>France</td>
<td>French colonial enclaves</td>
<td>No</td>
</tr>
<tr>
<td>1960</td>
<td>China</td>
<td>Myanmar</td>
<td>China-Myanmar land border</td>
<td>No</td>
</tr>
<tr>
<td>1961</td>
<td>China</td>
<td>Nepal (C)</td>
<td>China-Nepal land border</td>
<td>No</td>
</tr>
<tr>
<td>1962</td>
<td>China</td>
<td>Mongolia</td>
<td>China-Mongolia land border</td>
<td>No</td>
</tr>
<tr>
<td>1963</td>
<td>China</td>
<td>Afghanistan</td>
<td>Wakhan corridor</td>
<td>No</td>
</tr>
<tr>
<td>1963</td>
<td>China</td>
<td>Pakistan</td>
<td>Kashmir-Xinjiang border</td>
<td>No</td>
</tr>
<tr>
<td>1966</td>
<td>India</td>
<td>Pakistan (C)</td>
<td>India-Pakistan land border</td>
<td>Yes</td>
</tr>
<tr>
<td>1975</td>
<td>China</td>
<td>Portugal</td>
<td>Macao</td>
<td>No</td>
</tr>
<tr>
<td>1978</td>
<td>Papua New Guinea</td>
<td>Australia</td>
<td>Torres Strait islands</td>
<td>No</td>
</tr>
<tr>
<td>1984</td>
<td>China</td>
<td>United Kingdom</td>
<td>Hong Kong</td>
<td>No</td>
</tr>
<tr>
<td>1985</td>
<td>Cambodia</td>
<td>Vietnam (C)</td>
<td>Cambodia-Vietnam land border, offshore islands</td>
<td>No</td>
</tr>
<tr>
<td>1994</td>
<td>China</td>
<td>Kazakhstan</td>
<td>China-Kazakhstan land border</td>
<td>No</td>
</tr>
<tr>
<td>1997</td>
<td>Indonesia</td>
<td>Malaysia</td>
<td>Pulau Ligitan and Pulau Sipadan (islands)</td>
<td>No</td>
</tr>
<tr>
<td>1998</td>
<td>Malaysia</td>
<td>Singapore</td>
<td>Pedra Branca (island)</td>
<td>No</td>
</tr>
<tr>
<td>1999</td>
<td>China</td>
<td>Kyrgyzstan</td>
<td>China-Kyrgyzstan land border</td>
<td>No</td>
</tr>
<tr>
<td>1999</td>
<td>Portugal</td>
<td>Indonesia</td>
<td>East Timor</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: Data taken from Huth, Croco and Appel (2011) and Schultz (2017). Cases in which both disputants could be considered challengers are labeled “(C)” in the target column, although each dispute agreement is only listed once for formatting clarity.

The scarcity of instances in which the independent variable for past encroachments takes a value of 1 in a year when a dispute agreement occurred suggests empirical support...
for Hypothesis 3.3. Those disputes that proved to be the most tractable saw little unilaterally directed border activity, whereas other disputes frequently featured multiple years with attempted faits accomplis in their history. The following section takes a closer look at the proposed mechanism, in which faits accomplis erode target states’ legal position.

3.4 Empirical Tests

In this section, I discuss the statistical analysis of the data and present the results, which indicate that border incidents are most likely when international law either does not favor either side’s claims, or is particularly confusing or complex in such a way that it cannot be clearly interpreted. Although Hypothesis 3.3 cannot be directly tested other than through the observational data described in the previous section, Hypotheses 3.1 and 3.2 may be tested with the territorial activity data.

To test Hypothesis 3.1, I use logistic regression over dispute-years by challenger, where the dependent variable is whether the challenger instigated an incident in that dispute in that year. The explanatory variables are whether the two states in the dispute-year have an equally strong legal claim to the disputed region, as well as whether there is an aspect of legal complexity or uncertainty that extends beyond lack of legal advantage.\footnote{As a robustness check, since events rarely occur, I use a rare events logistic regression model (King and Zeng 2001), with ReLogit calculations made with the statistical package Zelig for R (Imai, King and Lau 2008). The rare events logistic model is recommended for use when the number of observations is under a few thousand, and when the events are relatively rare. However, as the results do not differ from the normal logistic regression, I report the latter here.} I compare these results with logistic regression models for the Target Advantage and Challenger Advantage variables, to confirm whether the proposed mechanism of legal ambiguity truly drives challenger state behavior.

To test Hypothesis 3.2, I use an ordered logistic regression where the size of attempted territorial transgressions in the dispute-year is taken into account. The dependent variable is coded as 0 if there was no recorded attempt, and as 1, 2, and 3 for small, medium, and large attempts, respectively, according to the guidelines detailed in the previous section describing
the data. The independent variables of legal advantage parity and legal uncertainty remain the same, and as with Hypothesis 3.1 I include comparisons to when the target has a legal advantage and when the challenger has a legal advantage.

3.4.1 Results

The results support the hypotheses that both the occurrence and intensity of territorial encroachments by a challenger state increase when neither state in the dispute has a clear legal advantage. By contrast, although a target legal advantage depresses the rate and size of encroachments, the existence of a challenger legal advantage has no clear effect in either direction. Table 3.4 gives the results of this analysis for Hypothesis 3.1 where the explanatory variables are No Advantage, Target Advantage, and Challenger Advantage in columns 1, 2, and 3, respectively.

Table 3.4 indicates that the challenger state is more likely to attempt unilateral border activity when neither side has a stronger legal claim. This result supports Hypothesis 3.1 and provides backing to the claim that ambiguity in the status quo makes unilateral actions along the border more likely. The challenger state is also less likely to attempt such activity when the target state has the stronger legal claim, which could indicate a reluctance by the challenger to move in on territory when it perceives the status quo as clear, yet favoring its opponent. From this, one might conclude that so-called challenger states are not necessarily unusually dissatisfied with the status quo, so much as either uncertain of normatively “rightful” ownership or emboldened by a lack of international consensus about an appropriate division of the disputed region. If the target state is commonly acknowledged to have a stronger claim, then the challenger has fewer normative grounds on which to justify aggressive behavior.

By contrast, the lack of a statistically significant result for the explanatory variable Challenger Advantage suggests that challenger states do not become either more or less likely to engage in border activity if their claim is legally stronger. Interestingly, the only
Table 3.4: Effect of Legal Ambiguity on Territorial Encroachments

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Advantage</td>
<td>0.600*</td>
<td>0.600</td>
<td>0.600</td>
</tr>
<tr>
<td></td>
<td>(0.310)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target Advantage</td>
<td>−0.587*</td>
<td></td>
<td>−0.090</td>
</tr>
<tr>
<td></td>
<td>(0.336)</td>
<td></td>
<td>(0.290)</td>
</tr>
<tr>
<td>Challenger Advantage</td>
<td>0.231</td>
<td>0.298</td>
<td>0.624**</td>
</tr>
<tr>
<td></td>
<td>(0.321)</td>
<td>(0.310)</td>
<td>(0.251)</td>
</tr>
<tr>
<td>Legal Uncertainty</td>
<td>−0.291</td>
<td>−0.094</td>
<td>−0.344</td>
</tr>
<tr>
<td></td>
<td>(0.240)</td>
<td>(0.273)</td>
<td>(0.257)</td>
</tr>
<tr>
<td>No Joint Democracy</td>
<td>−1.972**</td>
<td>−1.788*</td>
<td>−2.165**</td>
</tr>
<tr>
<td></td>
<td>(0.966)</td>
<td>(0.993)</td>
<td>(0.976)</td>
</tr>
<tr>
<td>Military Imbalance</td>
<td>1.347***</td>
<td>1.295***</td>
<td>1.382***</td>
</tr>
<tr>
<td></td>
<td>(0.259)</td>
<td>(0.262)</td>
<td>(0.261)</td>
</tr>
<tr>
<td>Enduring Rivalry</td>
<td>0.389</td>
<td>0.470*</td>
<td>0.452*</td>
</tr>
<tr>
<td></td>
<td>(0.258)</td>
<td>(0.258)</td>
<td>(0.257)</td>
</tr>
<tr>
<td>No Ethnic Ties</td>
<td>0.045</td>
<td>0.018</td>
<td>−0.081</td>
</tr>
<tr>
<td></td>
<td>(0.266)</td>
<td>(0.263)</td>
<td>(0.256)</td>
</tr>
<tr>
<td>No Joint Strategic Territory</td>
<td>0.234***</td>
<td>0.193**</td>
<td>0.234***</td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
<td>(0.083)</td>
<td>(0.083)</td>
</tr>
<tr>
<td>Past Stalemate</td>
<td>−3.277***</td>
<td>−2.890***</td>
<td>−3.071***</td>
</tr>
<tr>
<td></td>
<td>(0.448)</td>
<td>(0.453)</td>
<td>(0.445)</td>
</tr>
<tr>
<td>Observations</td>
<td>1175</td>
<td>1175</td>
<td>1175</td>
</tr>
</tbody>
</table>

Note: *p < 0.1; **p < 0.05; ***p < 0.01

time in which **Legal Uncertainty** is significant is in this model specification. Furthermore, legal uncertainty increases the challenger’s likelihood of attempting territorial encroachments when it has a legal advantage. Combined with the results from columns (1) and (2), I conclude that challenger state behavior is greatly affected by the existence of uncertainty over the status quo, either due to competing claims where neither side is favored, or due to complexity arising from lack of clarity in the legal regime or lengthy borders.

Among the control variables, military imbalance, enduring rivalry, and past stalemates in settlement talks appear most clearly to affect the likelihood of unilateral border encroachments. Unsurprisingly, a history of stalemate and rivalry increases the rate of at-
tempted faits accomplis, most likely due to increased tensions at the border. A more lopsided distribution of military capabilities decreases the rate of attempts, probably due to fear of military retaliation by the target state. The other control variables do not seem to have a consistent effect on the rate of border activity.

Table 3.5 reports the results of the regressions testing Hypothesis 3.2. The results are quite similar to those for Hypothesis 3.1, suggesting that not only does the likelihood of any border activity increase, but the challenger state attempts bolder unilateral actions when neither side has a clear legal advantage, or when substantial uncertainty exists over how the legal regime applies to the dispute. Conversely, the challenger state is less bold if its opponent has a stronger legal claim. The results for the control variables are also similar, with military imbalance, enduring rivalry, and past diplomatic stalemates affecting both likelihood and intensity of challenger-initiated border activity.

Predicted probabilities are shown in Table 3.6 for No Advantage and Target Advantage respectively, while Challenger Advantage is omitted due to lack of significance. The predicted probabilities suggest that although borders are usually quiescent regardless of the circumstances, the lack of a clear legal advantage for either side increases the probability that the challenger state attempts a fait accompli in a given dispute-year from 5% to 9%, and specifically increases the likelihood of larger fait accompli attempts (size 2 or 3) from 3% to 6%. Conversely, when the target state has the legal advantage in the dispute, the challenger state is only likely to make a unilateral attempt in 5% of dispute-years, as opposed to in 9% of cases otherwise. Notably, only incidents of size 1 and 2 are less likely when the target has the advantage, suggesting that the challenger state may be particularly reluctant to salami-slice or engage in minor border activity when the international community will likely not view the challenger’s actions as justified.
Table 3.5: Effect of Legal Ambiguity on the Size of Encroachments

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Advantage</td>
<td>0.534*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.308)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target Advantage</td>
<td></td>
<td>-0.587*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.335)</td>
<td></td>
</tr>
<tr>
<td>Challenger Advantage</td>
<td>-0.037</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.287)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Uncertainty</td>
<td>0.245</td>
<td>0.275</td>
<td>0.597**</td>
</tr>
<tr>
<td></td>
<td>(0.318)</td>
<td>(0.305)</td>
<td>(0.249)</td>
</tr>
<tr>
<td>No Joint Democracy</td>
<td>-0.267</td>
<td>-0.069</td>
<td>-0.301</td>
</tr>
<tr>
<td></td>
<td>(0.239)</td>
<td>(0.272)</td>
<td>(0.257)</td>
</tr>
<tr>
<td>Military Imbalance</td>
<td>-1.895**</td>
<td>-1.709*</td>
<td>-2.077**</td>
</tr>
<tr>
<td></td>
<td>(0.961)</td>
<td>(0.988)</td>
<td>(0.971)</td>
</tr>
<tr>
<td>Enduring Rivalry</td>
<td>1.296***</td>
<td>1.246***</td>
<td>1.326***</td>
</tr>
<tr>
<td></td>
<td>(0.259)</td>
<td>(0.262)</td>
<td>(0.261)</td>
</tr>
<tr>
<td>No Ethnic Ties</td>
<td>0.376</td>
<td>0.456*</td>
<td>0.439*</td>
</tr>
<tr>
<td></td>
<td>(0.256)</td>
<td>(0.255)</td>
<td>(0.255)</td>
</tr>
<tr>
<td>No Joint Strategic Territory</td>
<td>0.031</td>
<td>0.014</td>
<td>-0.085</td>
</tr>
<tr>
<td></td>
<td>(0.267)</td>
<td>(0.263)</td>
<td>(0.256)</td>
</tr>
<tr>
<td>Past Stalemate</td>
<td>0.210***</td>
<td>0.173**</td>
<td>0.209**</td>
</tr>
<tr>
<td></td>
<td>(0.080)</td>
<td>(0.082)</td>
<td>(0.082)</td>
</tr>
<tr>
<td>Constant 0</td>
<td>1</td>
<td>3.221***</td>
<td>2.859***</td>
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<td></td>
<td>(0.448)</td>
<td>(0.450)</td>
<td>(0.445)</td>
</tr>
<tr>
<td>Constant 1</td>
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<td>3.554***</td>
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<tr>
<td></td>
<td>(0.459)</td>
<td>(0.461)</td>
<td>(0.455)</td>
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<tr>
<td>Constant 2</td>
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<td>6.078***</td>
<td>5.717***</td>
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<tr>
<td></td>
<td>(0.580)</td>
<td>(0.582)</td>
<td>(0.578)</td>
</tr>
</tbody>
</table>

Observations 1175 1175 1175

Note: *p< 0.1; **p< 0.05; ***p< 0.01
### Table 3.6: Predicted Probabilities

<table>
<thead>
<tr>
<th></th>
<th>No Advantage</th>
<th>Target Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Likelihood of Incident</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>0.946</td>
<td>0.906</td>
</tr>
<tr>
<td>Yes</td>
<td>0.054</td>
<td>0.094</td>
</tr>
<tr>
<td><strong>Intensity of Incident</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>0.944</td>
<td>0.909</td>
</tr>
<tr>
<td>Size 1</td>
<td>0.027</td>
<td>0.044</td>
</tr>
<tr>
<td>Size 2</td>
<td>0.025</td>
<td>0.042</td>
</tr>
<tr>
<td>Size 3</td>
<td>0.003</td>
<td>0.006</td>
</tr>
</tbody>
</table>

### 3.5 Conclusion

Explaining why and when faits accomplis occur will deepen the literature’s understanding of how states manage their territorial disputes. Much of the scholarship on such disputes has focused on either war or peaceful resolution processes, but studying the events that occur prior to the resolution of a dispute can increase our understanding of what happens prior to successful resolution. Territorial disputes often persist for decades, and clear progress towards resolution is rare. How states handle potential conflicts on their borders in the interim affects when that progress is made, and how satisfied each side is with the ensuing agreement. Therefore, scholars must seek to explain why states vary so greatly in their approach to border management.

This paper has posited that dissatisfied states are more likely to engage in unilateral border activity, such as troop movements and infrastructure construction, when the legal status quo is ambiguous. The legal aspects of territorial disputes are often overlooked by scholars except in specific instances, such as when the states in a dispute invoke the International Court of Justice to settle their claims, and specific areas, such as maritime features covered by the UN Convention on the Law of the Sea. However, the results indicate that international law does affect state behavior through other channels, perhaps because
geopolitical actors use the law as a way of determining the strength of the status quo in a dispute.

When disputes feature competing and equally convincing (or equally unconvincing) legal claims, both the disputants and third parties will perceive the status quo as unsettled and open to interpretation. Under these circumstances, the disputants' views of the legal and normative merits of their claim diverge over time, as each side comes to adopt an over-optimistic interpretation of their own legal claims. In addition, states may view certain subregions along their disputed borders as rightfully belonging to them when in fact the complexity of border claims prevents any such clear understanding. Overoptimistic dissatisfied states will therefore be more likely to make changes to their troops and infrastructure along the border, while their overoptimistic opponents will be more likely to perceive those changes as altering the status quo. In addition, the lack of an international consensus on who “rightfully” has sovereignty over a region will embolden dissatisfied states to act without serious risk of widespread reproach. The resulting lack of clarity then prolongs the dispute well beyond what might otherwise be its natural shelf life.

Faits accomplis may prove to have a long shadow over the territorial disputes in which they occur. The modern shape of border disputes is strongly affected by historical boundaries, events, and precedents, even when those precedents are hundreds of years old (Abramson and Carter 2016). States use documentation from past holdings as a source of legitimacy for their current claims, so new changes to the status quo may become precedents for claims made in subsequent decades, or even centuries. Over time, when a state’s control of boundaries shifts through actions that do not have bilateral legitimacy because they resulted in neither a mutual agreement nor mutual war, there comes to be an accumulation of multiple claimable status quos from multiple times that lack bilateral legitimacy. Future research may look into whether the accumulation of claim evidence increases the complexity of disputes, thereby increasing the amount of border activity and the intractability of the dispute.
Although this paper has focused largely on East and Southeast Asia, the mechanisms described in the theory section should apply just as well to disputes in other parts of the world. For example, the expansion of Israeli settlements in the West Bank and East Jerusalem have frequently been described as an “obstacle to peace,” including by United States officials, because they make bargaining between Israel and Palestine more difficult. In this case, Israel has gone against much of international legal opinion, but its success in consolidating physical control over disputed territory via settlement activity makes the shifts difficult to roll back. Future research should therefore expand this analysis to other regions, including the Americas, Africa, and Europe, as well as the Middle East.

Chapter 4

The Strategy of Faits Accomplis in Territorial Disputes

During the course of the long-standing border dispute between China and India, the two countries attempted to unilaterally seize large amounts of disputed territory five times between 1959 and 1987, with a 1962 land grab attempt by India ending in a shooting war. However, lest one think that the lack of major border movements points to the stability of the border’s status quo, India’s government claimed in 2014 that there had been 411 Chinese “transgressions” across the border in 2013 and 426 in 2012. Indian observers asserted that a site where Chinese troops built a road in 2014 had been within Indian-controlled territory five years prior.\(^1\) The latter tactic has led to tense stand-offs, but not to outright military conflict. In both cases, however, China and India have usually sought to take new territory through fait accompli, with the goal of successfully capturing territory before the other side can respond appropriately.

Patient states may opt to chip away at a dispute slowly, in the hopes that the facts on the ground will gradually come to reflect their sovereign claim. For instance, so-called “salami tactics,” also known as “salami-slicing,” have long been considered an element in the foreign policy toolkit, since they allow states to gain a series of concessions from the other state without ever demanding a large enough concession to provoke a counter-attack (Schelling 1966). Originally employed during the Cold War to characterize the problem of Soviet encroachment on Western interests, the term’s usage has morphed over time, from describing a strategy of escalation (e.g. pre-World War II Germany) to describing limited-scope territorial encroachments that erode the status quo in the acting state’s favor. Observers frequently use “salami-slicing” to describe how China has slowly increased and strengthened its foothold in its various maritime disputes through a series of actions that have provoked occasional standoffs but minimal outright conflict. The analytical claim made in these cases, as well as in the case of the China-India border dispute, is that such limited-scope actions avoid major diplomatic or military confrontations, while still making positive progress towards gaining the desired territory.

Despite the apparent logic of this policy strategy, the long-term advantages of choosing gradual encroachment on new territory as a foreign policy over big and potentially controversial land grabs can be hard to evaluate. The Soviet Union did not make as many successful gains on American interests as initially feared. China has engaged in small encroachments of territory for many years, resulting in small changes in the status quo that

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2 In 1964, Fisher (1964) predicted the USSR’s behavior in such a manner: “The United States can insist that any interference with our right of access to Berlin will be viewed as grounds for war. This may slow down the slice-by-slice ‘salami tactics’ of the Soviet Union, but it can hardly stop them. To insist that a small change would be a justification for war does not by itself make it so. An additional five- or ten-minutes delay on a convoy of trucks to Berlin, or the addition of one more inspector to the routine, does not mean the end of freedom or democracy, whatever we may say. If the slices are thin enough and are taken slowly enough, the prophesied doom does not in fact materialize. The country which defines small issues and presses forward on them is likely to make headway which its adversary, by insisting that large principles are at stake, may delay but is unable to stop.”

have gradually improved the country’s territorial standing in the dispute but often cause its opponent states to push back fiercely against these encroachments. Arguably, its greatest advances in both actual maritime territory and in validating its claims to the South China Sea happened during the 1970s and 1980s, when a series of militarized skirmishes with Vietnam and outright occupation of islands led to China gaining control over a substantial part of the disputed area. One might ask: do small-scale border actions actually work if states’ main policy priorities are gaining land while minimizing conflict, and under what circumstances do states prefer to restrict the scale of their ambitions, rather than risk conflict in the pursuit of territory?

In this paper, I argue that when states seeking to prevent encroachment are able to monitor their borders closely and use strategic boundaries as information-gathering points, then they can deter dissatisfied challenger states from engaging in large-scale land grabs. However, the twin threats of discovery and war do not by themselves deter challenger states from smaller scale border activity. I use a model where a dissatisfied state can choose a bold foreign policy, in which it claims large chunks of territory but risks alerting its dispute opponent and causing major push-back or even outright war, or it can take a more conservative approach, garnering small territorial advantages with a smaller chance of negative consequences. I conclude that deterrence is most likely when border monitoring is relatively intense and the opponent’s resolve is relatively low. In addition, strategic boundaries can make border monitoring more informative, which aids states that are seeking to prevent territorial encroachments. Conversely, extra uncertainty resulting from the defending state’s inability to interpret border activity and understand the challenger state’s intentions may make war more likely by making the challenger state more likely to take risks.

To substantiate my argument, I use a data set of unilateral border activity in disputed regions of Asia from 1945 to 2015. The data set records instances in which troops of a disputing state, with some level of permission or approval from their central government, intentionally cross a status quo boundary in a disputed territory and attempt to capture
some amount of land that was previously controlled by the opposing state. The data include information on the scale of the attempt to change the status quo, ranging from modest border incursions to large-scale land grabs, as well as the degree of the other state’s response, ranging from a minimal or purely diplomatic response to outright war. I also include a measure of whether there had been reports of increased or decreased border monitoring by the target state in the two years prior to the reported attempt at fait accompli. Using these measures, I test the hypotheses and mechanisms explored in the model.

4.1 Explaining Faits Accomplis

Territorial disputes serve as a major source of conflict and crisis within international relations (Hensel 1996, 2000; Huth 1996a, b). As a major source of international tension, such disputes can take a long time to resolve peacefully (Dreyer 2012; Hassner 2003, 2006/2007; Toft 2002). Huth, Croco and Appel (2011)’s data on attempts by states to peacefully negotiate border disputes suggest that out of 1140 attempts at dialogue in international boundary disputes between 1945 and 2000, only 96 led to a peaceful resolution. The background conditions that make peaceful resolution most likely can be hard to fulfill, ranging from conditions on the distribution of power, to political regimes and leader incentives, to the convergence of international legal norms (Chiozza and Choi 2003; Huth, Croco and Appel 2013; Kacowicz 1994; Powell and Wiegand 2010).

At the same time, outright military conflict is an expensive endeavor that states often prefer to avoid if possible (Fearon 1995; Slantchev 2003a). As an alternative to trying to resolve or strengthen claims in a dispute through bilateral means such as diplomacy, coercion, war, or litigation in international courts, states can choose to take unilateral measures to advance their claims, capture new territory, or otherwise reinforce their control over contested areas. Accordingly, Altman (Forthcoming) defines a fait accompli as “limited unilateral gain at an adversary’s expense in an attempt to get away with that gain when the adversary
chooses to relent rather than escalate in retaliation.” “Limited,” in this case, means that the fait accompli “does not aim to conquer the deterrer outright or change the regime.”

To the extent that the international security literature has looked at the strategic logic of faits accomplis, they typically mention it in passing as an example of deterrence failure, even though, as Altman notes, faits accomplis are more common than coercion within the international system (George and Smoke 1974; Rogers 1991; Snyder and Diesing 1977). Kilgour and Zagare (1991) discuss how deterrence of unilateral action depends on states’ uncertainty about their opponents’ preferences and willingness to retaliate, but more work needs to be done specifically about this category of border activity.

Faits accomplis are appealing to dissatisfied states because, as in the rest of life, it is easier to ask forgiveness than permission when it comes to changes in the territorial status quo. Asymmetric information and credible commitment problems can lead states to undertake faits accomplis rather than engage in crisis bargaining, especially since doing so gives them dissatisfied states additional bargaining power (Tarar 2016). Moreover, because it is easier to ask forgiveness for small transgressions than for large ones, minor border activity that does not entail major territorial change is even more common. The most active disputes can see recurring periods of building construction, patrolling into areas controlled by opponent states, and other movement for years at a time. Such seemingly minor events deserve more scholarly attention because they constitute a significant portion of state border management.

Given the underdeveloped literature in this area, it is no surprise that scholars have not tried to differentiate between the logics of different kinds of faits accomplis. Japan’s annexation of Manchuria prior to World War II was an audacious land grab of an entire chunk of territory with major international consequences, which makes it a somewhat different beast from a gradual encroachment on questionably occupied territory on the Sino-Indian border, the periodic capture of small maritime features by disputants in the South China Sea which
has regularly led to skirmishes, or the years of Israeli settlements in disputed territory that have contributed to uncertainty and polarizing rhetoric in the Israel-Palestine conflict.

One axis of fait accompli differentiation is the relative size and speed of territorial advancement and consolidation. The literature on foreign policy substitutability (Morgan and Palmer 2000; Regan 2000) posits that in order to better understand countries’ political decision-making, international relations theories must take into account the fact that “similar factors could lead to distinct concrete or empirical foreign policy responses” (Most and Starr 1984). In this sense, states that wish to change the status quo have multiple options, not merely between war, peace, and crisis bargaining, but also between different types of fait accompli. Such dissatisfied states may find it advantageous to go take as much territory as possible, and then deal with the consequences of their actions from a better bargaining position. However, the uncertainty and risk inherent to international disputes might lead other states to decide that they should stick to small-scale activity that can easily be halted, reversed, or downplayed, should the target state respond poorly.

4.1.1 Uncertainty and Risk in Border Policy

Uncertainty and risk are endemic to international relations, and territorial disputes are no exception (Kessler 2011; Koremenos 2005; O’Neill 2001; Rathbun 2007). Unilateral actions such as faits accomplis are particularly prone to informational problems because international accountability is not guaranteed. As the formal model in this paper will show, dissatisfied states cannot consistently commit to inaction on the border when their opponents have no fool-proof mechanisms for verifying inaction. This lack of credible commitment presents related problems for would-be challenger and target states. Target states want to know how they can reduce uncertainty about their opponents’ actions. Challenger states want to know how much they can get away with, and how to optimize their border policies according to the level of risk that the policies entail.
Typically, the dissatisfied state has a specific claim in a specific border dispute, and it wants to know how best to overcome an undesirable status quo. One option is through a gradual process of erosion that takes advantage of ambiguity in the status quo. As an example, Cambodia and Thailand went to the International Court of Justice over territory surrounding the Temple of Preah Vihear twice, the second time in 2011 because even though the ICJ had awarded Cambodia the vicinity of the temple in 1962, it had not specified how large the vicinity was. In 2008, Thailand therefore moved troops to a place 980 feet away from the temple under the grounds that this was not in sufficiently close vicinity to the temple to count as illegal. By making similarly small changes in other disputes, states can sometimes get away with a lot without generating a major deterring response from their opponents. In a similar vein, Fortna (2003) suggests that “marking the exact location of the cease-fire line provides a focal point that can help prevent ‘salami tactic’ attempts to push the line to either side’s advantage,” thus implying that clear geographical boundaries are necessary to prevent repeated small-scale changes along a border.

Salami-slicing tactics are the result of a learning-by-doing process of policymaking. The goal is to achieve incremental gains through a series of short-to-medium foreign policy actions from which a state can quickly retreat if other actors respond too negatively. States learn about how others might respond to their actions as a way of mitigating the risk inherent to messing with disputed boundaries. Gradually testing the waters allows states seeking to change the status quo to figure out just how much can be changed without going too far and provoking a response.

States considering the method of gradual erosion face a trade-off when they decide how best to alter the status quo. On the one hand, as described by Fearon (1997), under the right circumstances, a state can create a series of faits accomplis such that its opponent is never willing to risk war in order to challenge the challenger’s moves. If the challenger state is savvy about its policy choices, the target state might never have good reason to start a serious conflict, thereby allowing the gradual erosion of its territorial claim.
On the other hand, there are also advantages to attempting a large land grab, which entails risks but also reduces uncertainty about long-term efficacy. If a large-scale fait accompli is successful, the state can achieve a big change in the status quo that it might never achieve if asking for a series of minor concessions. The risk of inadvertently sparking a military conflict may deter such a state, but it has to weigh risk and reward when choosing a border management policy. How does a dissatisfied state make this decision? I argue that one explanation is informational in nature, as state behavior in territorial disputes varies according to how closely its opponent, the defending state, monitors changes in the status quo.

4.1.2 Border Monitoring

Tarar (2016) tells an informational story about faits accomplis in which the satisfied state is not sure about how expensive and difficult it is for the dissatisfied state to capture territory via a land grab. However, territorial disputes entail many other sources of uncertainty beyond uncertainty about costs, including ignorance about dissatisfied states’ intentions and confusion resulting from an inability to interpret received signals about those intentions (Rathbun 2007; Wolford, Reiter and Carrubba 2011). In particular, states engaged in a dispute often do not know exactly if, when, or how their opponents plan to try a fait accompli. They also do not know whether the opponent plans in the immediate term to merely take a small chunk or to go for something bigger.

The difficulty is further increased for situations in which challenger states do not directly capture large areas of land, but instead rely on small and relatively ambiguous ways to chip away at the status quo. For example, observers varied widely in their interpretations of China extending its Air Defense Identification Zone over the East China Sea in 2013. Some characterized it as “a relatively minor move designed to appease domestic nationalists” while others viewed it as “a gradual expansion of territorial claims and eventually an attempt at
regional dominance.” Such foreign policy moves become something of a Rorschach test for observers trying to identify a state’s strategy.

The model presented in this paper assumes that a bolder move is more likely to be noticed, judged to be part of the state’s overall policy rather than a coincidence, and acted upon by the state’s opponent. The intensity of border monitoring is a key part of the model’s causal mechanism, since the alacrity with which a state can respond to perceived aggression by an opponent may determine what kinds of aggressions the opponent would even consider making. If the potential target of a fait accompli can quickly identify that a border transgression has happened, determine the extent of the transgression, and react appropriately, then the state seeking to challenge the status quo may prefer to be conservative and stick to minor border changes. Conversely, if the target is lax in monitoring its boundaries or reluctant to go to war when the status quo is challenged, then the challenger may accept the relatively low risk of conflict and go for a major land grab.

An implication of the model is that while states seeking to deter changes in the status quo may not be able to prevent salami-slicing via more intensive border monitoring and the gathering of information, they can at least slow down the rate of encroachments by a determined and dissatisfied state and prevent outright land grabs. Moreover, as I explore in a subsequent incomplete information game in which the discovery of a fait accompli does not reveal all relevant information to the target state, the presence of rivers, forts, and other strategically informative geographical boundaries can help defending states reduce the scope of salami-slicing. Uncertainty resulting from incomplete information even after discovery does, however, increase the likelihood of militarized conflict.

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4.2 Modeling Faits Accomplis

In this section, I consider a game in which two states are in a territorial dispute, and the challenger state wants to know how quickly it should optimally grab territory in order to maximize the value of territory gained while, if possible, minimizing the risks of provoking the other state into a militarized conflict. I restrict the cost of war such that the game only looks at situations in which a dissatisfied state is willing to undertake some level of risk of retaliation, so that this model focuses specifically on cases in which states are choosing between different levels of fait accompli.

The key idea in the model sketched out below is that states can decide whether they prefer to attempt major faits accomplis, in which they might be able to make a big shift in the status quo in their favor but risk immediate retaliation by their opponent, or whether they prefer to restrict themselves to more modest faits accomplis, in which they cannot expect to change the status quo very much but might fly under their opponent’s radar while still making gains. If they think they can get away with it, states grab as much territory as they deem optimal, with the hope that they can successfully occupy the whole of a disputed territory for long enough that they have consolidated control over the territory (Carter 2010). However, they face a trade-off between fast results and fast retaliation.

The model also assumes that the state that is the target of aggression does not learn about the challenger state’s policy choice except through monitoring. This assumption is appropriate when the target country cannot predict where or how the challenger country will take over disputed territory, even if the target country is alerted to the possibility that its opponent is actively considering altering the status quo. For example, the Line of Actual Control, which roughly separates lands controlled by India from lands controlled by China in the Sino-Indian border dispute, is over 4000 kilometers long, requires regular border patrols, and has unmarked lines of demarcation that make it difficult to differentiate between
accidental and purposeful border transgressions (Smith 2014). If either country wished to
invade the disputed area, then its opponent would have to know a lot of information beyond
the intent and scope of invasion to retaliate appropriately and quickly. Such information
would best be obtained through heavy border monitoring, such as surveillance technology
and troop movements.

4.2.1 The Model

Two states that are in dispute over a territory of value 1 enter a two-period game. Following other empirical analyses of territorial disputes (Huth and Allee 2002; Huth, Croco
and Appel 2011, 2013), I treat one state as the “challenger” state, which seeks to alter
the status quo, and one state as the “target” state, from whom the challenger state is
attempting to take territory. The challenger state and the target state both have claims
over the territory worth \( x \in (0, 1) \) and \( 1 - x \), respectively. If they go to war (or adjudication)
over the disputed area, the challenger state has an \( x \) chance of winning, for a net payoff of
\( x - K \), where \( K \in (0, 1) \) is the cost of going to war. The target state has a \( 1 - x \) probability
of winning, for a net payoff of \( 1 - x - K \).

At the beginning of the game, the challenger state may choose some policy \( z_1 \in [0, 1 - x] \) such that its claim increases by \( z_1 \) in the first period. If the second round occurs,
the challenger may then choose a policy \( z_2 \in [0, 1 - x - z_1] \). In each round, the target
state has a chance \( n \sum z_{i=1}^{i} \), for \( n \in (0, \frac{1}{1-x}] \), to figure out what policy the challenger has
chosen. \( n \) represents the level of dispute monitoring in which the target state is engaged,
both militarily and diplomatically. The bolder the policy, the more likely it is that the

\(^{5}\)Rahul Bedi, “India, China to Hold COIN Drills Despite Border Confrontation,” IHS Jane’s Defence
hold-coin-drills-despite-border-confrontation.

\(^{6}\)As was the case in the cited papers, both states could in theory be challenger states, depending on the
situation, but it is analytically useful to look at the relationship between the “challenger” state and the
“target” state.

\(^{7}\)For the remainder of this model, I refer to the outside option as “war,” but it is worth noting that this
reasoning should apply just as well to a situation in which the states are considering turning to arbitration
or adjudication to settle their dispute.
target state will notice the move, figure out what the challenger is up to, and thereby have an opportunity to counter the challenger’s attempt at a fait accompli.

If the target state successfully identifies the policy, it can choose to go to war. If war occurs, the challenger can expect a payoff of $x - K$ in the first round or $x + z_1 - K$ in the second round, after it has already captured some new territory. Analogously, the target state can expect a payoff of $1 - x - K$ or $1 - x - z_1 - K$, respectively. If the target state chooses to avoid war, the game ends, with the challenger holding $x + \sum_{i=1}^{t} z_i$ of the territory, and the target holding $1 - x - \sum_{i=1}^{t} z_i$. If the challenger state makes it to the end of round 2 without facing retaliation or confrontation, then the target state will have effectively ceded its territory, at which point the game ends, and the challenger gets a payoff of $x + z_1 + z_2$.

Figure 4.1 depicts the possible courses of events in this game.

4.2.2 Guaranteeing Peace Versus Risking War

The target state chooses to retaliate with war if it stands to lose land that is worth more than the cost of war, i.e. when $z_1 > K$ at the end of round 1 and $z_2 > K$ at the end of round 2. The would-be challenger consequently faces a trade-off whereupon a bigger land grab may lead to war, but salami-slicing results in less territory gained. I focus on interior solutions.
Working backwards, in the second round, the challenger compares the utility of risking war to the utility of guaranteeing peace. If \( K > 1 - x - z_1 \), then only peace-guaranteeing equilibria are possible, and the challenger state maximizes by choosing the largest possible peace-guaranteeing fait accompli at \( z_2 = 1 - x - z_1 \) for a payoff of 1. Otherwise, if \( K \leq 1 - x - z_1 \), A has an expected utility of

\[
x + n(z_1 + z_2)(z_1 - K) + [1 - n(z_1 + z_2)](z_1 + z_2)
\]

from choosing a war-risking fait accompli at \( z_2 > K \). Substituting the interior solution of the first-order condition, \( z_2 = \frac{1-nK-nz_1}{2n} \), into the above expression gives the challenger’s best possible outcome from risking war, which is

\[
x + \left(\frac{1-nK+nz_1}{2}\right)[z_1 + K + \frac{1+nK-nz_1}{2n}].
\]

The challenger prefers war if the expected utility of war is greater than the payoff of guaranteed peace at \( z_2 = K \). Comparing these quantities gives the following possibilities for the second round:

**Lemma 4.1.** If \( K \leq 1 - x - z_1 \), then the challenger risks war in the second round if \( 1 - x > \frac{1-nK+nz_1}{2n} \), \( K < \frac{1-nK-nz_1}{2n} \), and \( 1 - n^2(z_1 + K)^2 > 2n(z_1 + 3K) \). Otherwise, within the interior solutions, the challenger chooses a peace-guaranteeing fait accompli at \( z_2 = K \).

To characterize the first-round equilibria, we look at each case in turn. The case where \( K > 1 - x - z_1 \) and \( z_2 = 1 - x - z_1 \) is consistent with the challenger state choosing \( z_1 = 0 \) and \( z_2 = 1 - x \), such that \( K > 1 - x \). I focus now on cases where \( K < 1 - x - z_1 \).

First suppose that peace is guaranteed in the second round with \( z_2 = K \). The challenger can guarantee peace in the first round with

\[
x + nz_1^2 + (1 - nz_1)(z_1 + K),
\]
which is maximized at \( z_1 = K \). The challenger can also risk war in the first round with

\[
x - nz_1K + (1 - nz_1)(z_1 + K).
\]

Taking the first-order condition of the latter expression gives \( z_1 = \frac{1}{2n} - K \). Comparing the two utilities gives Lemma 4.2.

**Lemma 4.2.** If peace is guaranteed in the second round, and \( K \leq 1 - x - z_1 \), then the challenger state chooses \( z_1 = K \) in the first round if \( K < \frac{1}{4n} \), and \( z_1 = \frac{1}{2n} - K \) if the reverse is true.

Now suppose war has a chance of occurring in the second round with \( z_2 = \frac{1-nK-nz_1}{2n} \).

First consider the challenger’s maximum utility for guaranteeing peace. The first-order condition for a local maximum of the resulting negative cubic function in the utility of guaranteeing peace is not in the range \( z_1 < K \). Therefore, the challenger maximizes its utility by choosing the maximum possible amount at \( z_1 = K \), for a utility of

\[
x + nK^2 + \frac{1-nK}{4n}.
\]

Next consider the challenger’s maximum utility for risking war in both rounds. The first-order condition for a local maximum of the resulting negative cubic function is within the bounds of \( z_1 > K \) when \( K < \frac{1}{6n} \). Otherwise, the challenger chooses peace, since its war-risking utility is maximized at \( z_1 = K \), which is superseded by the peace-guaranteeing function. When applicable, the utility of choosing \( z_1 = K \), given above, is compared to the utility of risking war, which is

\[
x - nz_1K + (1 - nz_1) \left( \frac{1-nK+nz_1}{2} \right) \left( z_1 - K + \frac{1+nK-nz_1}{2n} \right),
\]
given that the first-order condition gives

$$z_1 = \frac{-1 + 2nK + \sqrt{1 - 16nK + n^2K^2}}{3n}. $$

In all cases where the challenger risks war in this inequality, the condition \( K < \frac{1}{6n} \) is satisfied. Lemma 4.3 summarizes the findings, which may be numerically approximated although they are algebraically intractable. Note that it can also be shown through numerical approximation that the region where the challenger risks war in both rounds is compatible with the conditions laid out in Lemma 4.1.

**Lemma 4.3.** If war has a chance of occurring in the second round, and \( K \leq 1 - x - z_1 \), then the challenger state chooses \( z_1 = K \) in the first round if the utility of guaranteeing peace is greater than the utility of risking war, and \( z_1 = \frac{-1 + 2nK + \sqrt{1 - 16nK + n^2K^2}}{3n} \) if the reverse is true.

I reconcile the conditions of the first round with the conditions of the second round to show that three types of interior equilibrium exist when \( K < 1 - x \). First, there exists a zone where the challenger state risks war in both rounds, most frequently when both border monitoring, \( n \), and the cost of war, \( K \) are low. Second, there exists a zone where the challenger state only risks war in the first round, when it has less to lose, but is conservative thereafter. This zone occurs primarily when \( n \) and \( K \) are at medium values. Third, there exists a large zone where the challenger prefers to salami-slice conservatively, avoiding the risk of war in both rounds; in this case, border monitoring is high and the target’s resolve to fight is low. Figure 4.2 depicts these conditions and illustrates how the scale of attempted fait accomplis changes as the target state’s level of border monitoring, \( n \), and the cost of war and therefore level of resolve, \( K \), change.

To summarize, the equilibria of this model vary along with the cost of war \( K \) and the level of border monitoring \( n \). If the cost of war is very high (that is, \( K > 1 - x \)), then the challenger state can take as much as it wants without repercussion. If the cost of war and the level of border monitoring are relatively high, the challenger salami-slices in such a way
as to guarantee that the target state will not respond, even if the challenger is caught. If the cost of war and the level of border monitoring are somewhat lower, then the challenger risks war initially, but later becomes more satisfied and is likely to risk war in future. Finally, there is a zone where the cost of war and level of border monitoring are lowest, where the challenger is bold over multiple rounds and makes large land grabs. Thus, escalation to war only occurs when border monitoring is sparse. Proposition 4.1 summarizes these findings.

**Proposition 4.1.** The following interior solutions exist:

1. If \( K > 1 - x \), then the challenger makes a single land grab of size \( 1 - x \) with no risk of war.

2. When the level of border monitoring \( n \) and \( K \) are high, then the challenger avoids war in both rounds with faits accomplis equivalent to value \( K \).

3. When \( n \) and \( K \) are moderately low, then the challenger risks war in the first round with \( z_1 = \frac{1}{2n} - K \) and avoids war in the second round with \( z_2 = K \).

4. When \( n \) and \( K \) are very low, the challenger risks war in both rounds with \( z_1 = \frac{-1+2nK+\sqrt{4-16nK+n^2K^2}}{3n} \) and \( z_2 = \frac{4-5nK+\sqrt{4-16nK+n^2K^2}}{6n} \).
4.2.3 Peace, Consolidation, and War

As Proposition 4.1 indicates, states that wish to challenge the status quo will generally prefer to avoid risk and stick to small-scale faits accomplis. Such states will not escalate to larger land grabs so long as the cost of war is relatively high (so their resolve to fight is low), and border monitoring is low. If these values are in an intermediate range, then challenger states will occasionally be bold but otherwise stick to salami-slicing behavior. Challenger states are most likely to risk war repeatedly if the target state is not monitoring the border too closely.

From Proposition 4.1 I expect war-risking land grabs to be most common when the target state cannot monitor the border closely. For instance, challenger states will be bolder if the target state is not closely watching the disputed region through such means as regular patrolling, high-quality surveillance equipment, and building of forts and other infrastructure that make observing border activity easier.

**Hypothesis 4.1.** States are more likely to risk war in land-grabs when border monitoring by a targeted state is light.

The model result suggests that although complete deterrence of border activity is not plausible, states can deter major changes along their disputed borders. If the target state is engaging in heavy border monitoring, the challenger will still engage in salami-slicing behavior, where it always avoids the possibility of war, but the target will be able to limit the number of major land-grab attempts made by the challenger, as well as the size of any war-risking land grabs. This analysis therefore offers a mixed outlook for states seeking effective ways to maintain the status quo. Incomplete deterrence is better than no deterrence, but continued small-scale border activity means that disputes will likely remain active and salient over time, even without regular outbreaks of war.

The mechanism for the previous hypothesis comes from the model’s assumption that the target state is more likely to respond at all when the level of border monitoring is
relatively high, and that the probability of war increases as the size of the fait accompli increases. These two assumptions are the source of deterrence for the challenger state, which would otherwise prefer to capture as much territory as possible, but which does not want to get caught and perhaps end up in a militarized conflict from which it cannot back down. I therefore intend Hypotheses 4.2 and 4.3 as tests of the model’s assumptions.

**Hypothesis 4.2.** Target states are more likely to respond when border monitoring is high.

**Hypothesis 4.3.** Target states are more likely to respond with military force as the size of the attempted fait accompli increases.

### 4.2.4 Uncertainty and Strategic Boundaries

In this section, I expand the basic model by introducing the possibility that once the target state identifies how the challenger state is making a move, it nonetheless is not entirely certain about the challenger state’s intended endgame and therefore not certain as to the exact values of $z_1$ and $z_2$. Empirically, this source of uncertainty happens when states in border disputes realize that their opponents are making a move, but face uncertainty about how much territory their opponents are currently trying to grab. The extension also explores what happens when there is some natural boundary or preexisting defensive monitoring position exists in the disputed area that can aid the target in knowing whether the challenger state has breached that geographical position.

In the initial extension, I suppose that when the target state realizes that the challenger has attempted a fait accompli, it learns the exact values of $z_1$ and $z_2$ with probability

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\( \omega \in (0, 1) \) but does not find out any information about \( z_1 \) or \( z_2 \) with probability \( 1 - \omega \). Then, in the second extension that extends this scenario, I suppose that the target state has an advantage in identifying whether or not border encroachments have gone beyond a certain geographical point, such as a river or fort, at location \( R \). Once the target discovers that the challenger state is making a move on disputed territory, with probability \( 1 - \omega \), it learns partial information about the challenger’s actions rather than no information. Namely, the target learns whether the total amount taken by the challenger, \( x + \sum z_i \), is greater than or less than \( R \in (x, 1) \) (i.e. that the challenger has captured land past this river or fort). In both extensions, after receiving the signal, country \( B \) chooses to retaliate with war when \( \mathbb{E}(z_1) > K \) in the first round and \( \mathbb{E}(z_2) > K \) in the second round. Otherwise, the rest of the game proceeds as before.

### 4.2.5 Comparison to Complete Information Equilibria

Suppose that the target state learns the value of \( z_i \) with probability \( \omega \), and only that the challenger has made a move with probability \( 1 - \omega \). I focus on interior solutions and solutions where \( K < 1 - x \), since if the cost of war is sufficiently high, the target state will not contest the challenger state capturing all the territory uncontested, regardless of discovery. I begin by characterizing some pure perfect Bayesian equilibria to show that in many cases, the complete information equilibria still hold.

First, consider the complete information game for the case where the challenger state chooses \( K \) in both rounds, to see if there still exist stable equilibria in the extension. Suppose that the target state only goes to war if it receives information contradicting this belief. I compare the challenger’s utility from choosing \( K \) in both rounds to its utility from deviating in either the first or second round. As Lemma 4.4 summarizes, the complete information equilibrium holds some, but not all, of the time.

**Lemma 4.4.** When the target state only declares war in response to clear evidence of a deviation from its belief, the values of \( n \) and \( K \) that induce a peaceful equilibrium with the
challenger choosing \( K \) in both rounds is a non-empty subset of the values that induce such an equilibrium in the complete-information model.

A second category of Bayesian equilibrium, where the target state is less suspicious in its beliefs, also echoes the existing complete-information model. Suppose that the challenger state chooses \( z_1 = \frac{1}{2n} - K \) and \( z_2 = K \), and that the target state chooses war in the first round and peace in the second round upon discovery, unless it receives directly contradictory information. The second round leads to the same conclusion as in Lemma 4.4. However, in the first round, if the target receives a partial signal and goes to war, the challenger has no incentive to deviate, since it has already maximized its payoff with the assumption that being caught would lead to war. If the target receives an informative signal, it will still go to war, so again, the challenger does not benefit from deviating. Thus, the equilibrium in which the challenger sometimes risks war and sometimes avoids it has fewer conditions than for the entirely risk-avoiding equilibrium.

Finally, in those cases where the challenger state chooses to risk war in both rounds, the equilibrium is stable, since the challenger has already maximized its land grabs with the expectation of having to fight if caught. In other words, only a subset of conditions that lead to peaceful equilibria in the base model also lead to peaceful or partially peaceful equilibria in the strategic boundaries game, but all war-risking equilibria from the base model are still stable. Proposition 4.2 summarizes this result.

**Proposition 4.2.** The complete-information equilibrium where the challenger risks war with \( z_1 = \frac{-1+2nK+\sqrt{4-16nK+n^2K^2}}{3n} \) and \( z_1 = \frac{4-5nK+\sqrt{16nK+n^2K^2}}{6n} \) still holds. However, only a subset of equilibria with \( z_1 = K \) or \( z_2 = K \) in the complete-information game are perfect Bayesian equilibria under incomplete information.

From this, one can conclude that this form of incomplete information tends to make war more likely, because it reduces the range for stable equilibria in which the challenger state sticks to thin salami slices in order to avoid fighting, but does not reduce the range for
which challenger states risk war just as in the complete information model. This result is summarized in Hypothesis 4.4.

**Hypothesis 4.4.** If the target state cannot determine the challenger state’s intentions upon discovering unilateral border activity, then war is more likely.

### 4.2.6 Strategic Boundary as Deterrent

I now examine some cases in which the complete-information solution is not stable to demonstrate that the presence of a strategic boundary can sometimes cause the challenger to abandon salami-slicing, either in favor of biding its time or of risking war. I conjecture the existence of equilibria where the target state responds with war unless it can be assured that the challenger has chosen to capture an amount $z_i < K$. Namely, there may be equilibria where $R - x - z_1 < K$ in the second round, so that the target state can be assured that it does not prefer to declare war as long as $z_2 \leq R - x - z_1$, and where $R - x < K$ in the first round, so that the target will not go to war if $z_1 \leq R - x$.

In the second round, the challenger compares its expected utility from choosing to guarantee peace, $R$, and compares it to the payoff of deviating and risking war, which as in the complete-information game is maximized with $z_2 = \frac{1-nK-nz_1}{2n}$. The challenger prefers risking war if

$$x + \left(\frac{1-nK+nz_1}{2}\right)\left(z_1 - K + \frac{1+nK-nz_1}{2n}\right) > R.$$

If the challenger prefers to guarantee peace in round 2, then guaranteeing peace in the first round is always better than risking war, since

$$R > -nz_1K + (1 - nz_1)R.$$ 

In this case, there is an equilibrium at $z_1 = R - x$ and $z_2 = 0$. 

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By contrast, if the challenger prefers risking war in round 2, it compares the payoff of war,

\[ x - nz_1K + (1 - nz_1) \left( \frac{1-nK+nz_1}{2} \right) \left( z_1 - K + \frac{1+nK-nz_1}{2n} \right), \]

which gives the same values of \( z_1 \) and \( z_2 \) as in Lemma 4.3, with the payoff of peace in the first round,

\[
\begin{align*}
    nR(R - x) + [1 - n(R - x)] & \left[ x + \left( \frac{1-nK+n(R-x)}{2} \right) \left( R - x - K + \frac{1+nK-n(R-x)}{2n} \right) \right] \\
    &= nR(R - x) + [1 - n(R - x)] \left[ x + \left( \frac{1-nK+n(R-x)}{2} \right) \left( \frac{1-nK+n(R-x)}{2n} \right) \right].
\end{align*}
\]

Thus, as Proposition 4.3 summarizes, there exists a new peaceful equilibrium where the challenger state moves up to the boundary in the first round but does not proceed further, as well as an equilibrium where the challenger moves up to the boundary in the first round, thereby avoiding war, and then risks war in the second round. The war-risking equilibria are similar to those seen in the base model.

**Proposition 4.3.** If the target state believes that \( z_i > K \) unless directly observing otherwise, and if reaching the boundary \( R \) does not provoke war, there may exist a peace-guaranteeing equilibrium at \( z_1 = R - x \) and \( z_2 = 0 \), or an equilibrium that guarantees peace only in the first round, \( z_1 = R - x \) and \( z_2 = \frac{1-nK-n(R-x)}{2n} \). The war-risking equilibrium remains at

\[
\begin{align*}
    z_1 &= \frac{-1+2nK+\sqrt{4-16nK+n^2K^2}}{3n} \quad \text{and} \quad z_1 = \frac{4-5nK+\sqrt{3-16nK+n^2K^2}}{6n}.
\end{align*}
\]

In other words, although uncertainty on the part of the target state about challenger intentions increases the size of faits accomplis and the overall rate of war, the presence of a strategic boundary can deter the challenger from multi-period, war-avoiding salami-slicing in some cases. The challenger is deterred from further movement at the strategic boundary, because the target state’s lack of ability to pinpoint the challenger’s movements encourages the target to distrust the challenger’s intentions and move more quickly toward war. In
addition, the challenger may shift from front-loading its risk, where $z_1$ induces war but $z_2$ does not, to waiting until the second round when fast consolidation of effective control is possible. In the real world, this may be a useful deterrence strategy, since causing states to delay on initiating large-scale border actions can be valuable for diplomacy and border management. Delays in land grabs may very well lead to a lower overall incidence rate of major border incidents. Hypothesis 4.5 summarizes these interpretations of Proposition 4.3.

**Hypothesis 4.5.** Clear strategic boundaries in disputed territories reduce the scope of attempted faits accomplis and the prevalence of large land grabs.

### 4.3 Data

In order to test hypotheses on the causes of variations in faits accomplis, I compile a data set of attempted territorial transgressions in disputed regions of Asia from 1945 to 2015. The data set includes the size of attempted transgressions, the size of the target state’s reaction, and whether the target state had reportedly been either beefing up or downgrading border monitoring prior to the attempt.

I first discuss the coding of the key variables in this data set. I briefly discuss how I identified and accounted for the difficulties inherent to identifying attempted faits accomplis, how I coded militarized responses by the target state, and how I measured changes in the level of border monitoring by the target state given limited available information.

#### 4.3.1 Identifying Faits Accomplis

Following earlier work by Huth and Allee (2002), Schultz (2017) identifies 41 disputes over land territory in Asia after 1945. I identified 21 of the 41 disputes as having a combined 189 directed dyad-years in which attempts at fait accompli occurred. Sources for the data

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9Data are available upon request. “Asia” is here defined as including all of Asia except the Middle East, following Schultz (2017) and Huth and Allee (2002).
included declassified CIA records from the President’s Daily Briefs, dating through 1977, and the CREST archives, dating through 1992; Foreign Broadcast Information Service (FBIS) news articles; English-language news sources; and various books and articles detailing the history of territorial disputes in Asia, including Fravel (2008), Fravel (2011), Wiegand (2011), and others.

For the purposes of coding the data, an attempt at a fait accompli is defined as an instance in which troops of a disputing state intentionally cross a status quo boundary in a disputed territory and attempt to stake a physical claim in an area that it did not previously control. The purpose of the boundary transgression must be to capture or otherwise make some physical change to the territory, through such means as infrastructure construction, changes to the land, or human occupation of the area, and the move must be targeted at the opposing state. The troops must apparently be acting with some level of permission or approval from their central government, rather than entirely of their own volition or on behalf of a separatist or non-governmental group. Thus, I do not include transgressions that appear to result from civil war spillover, policing of border-related crime, accidental errors of navigation in poorly demarcated land, and so forth. The action must also occur outside of the context of interstate war.

Because not all faits accomplis are observed or easily dated, particularly unsuccessful ones or ones that escape initial notice by the target state, I use directed dyad-years of years in which border activity was observed rather than individual incident counts. Target states’ counts of the number of border transgressions in a disputed region often far exceed the number of reported transgressions in publicly available documents, but a year-by-year coding can give a sense of whether, in a particular year, there was foment along the border and attempts by one or both sides of the dispute to change the status quo. This manner of coding also helps to alleviate the difficulty of determining the intent of challenger states’ leaders for each individual incident, since many small encroachments over the course of a
year point to the presence of some state policy that directly or indirectly encourages border activity.

The years of territorial encroachment are coded using ordered categories from 1 to 3. Dispute-years in which a challenger state attempted unilateral changes in the status quo are coded as 1 if there were modest or temporary changes to the physical control of territory by either side of a dispute. Examples range from the placement of signposts, markers, and other minor infrastructure changes, to isolated troop movements with intent to cross a *de facto* line of control for a significant period of time. Dispute-years are coded as 2 if there were attempts to significantly change the status quo of territorial possession through construction activities across a *de facto* line of control, or through troop movements intended to take a sizable chunk of territory that nevertheless is not large relative to the total size of the claimed territory. Dispute-years are coded as 3 if there were attempts at unilateral capture of areas of territory that were large relative to the total size of the disputed area, such as Indonesia’s 1962 attempts to capture the whole of West New Guinea from the Netherlands.\(^\text{10}\)

### 4.3.2 Measuring Target State Reactions

In addition to identifying and coding a rough measurement of the scale of each year of unilateral border activity, I code a rough measurement of the scale of the target state’s response to the border activity. As Hypotheses 4.1 and 4.2 suggest, increased border monitoring and increased scale of border activity should both lead to a higher magnitude response. For each directed dyad-year in which an attempted fait accompli occurred, the response of the target state was recorded on a scale ranging from 0 to 3. The lowest level, 0, indicates a minimal or purely diplomatic response to the fait accompli. If the target state responded with a diplomatic note, complaints to the press, or other non-violent moves, then the reaction is coded as a 0.

\(^{10}\)For a longer explanation of the coding with examples of each level of dispute-year, see my paper, “Legal Ambiguity in Territorial Disputes.”
The next lowest level, 1, indicates a minor military reaction, standoff, or short skirmish between troops of the challenging and the target states, typically lasting a few days. For instance, in July 1977, the press reported that “at least seven Pakistani and three Indian have been wounded in shooting across the border for the past six days” in response to an action by Pakistan.\textsuperscript{11} In this case, relatively few troops are inferred to have been involved, and further escalation did not occur.

The next highest level, 2, indicates a prolonged or violent conflict or retaliatory land grab. This could include many casualties or a prolonged and stand-off between large numbers of troops. The 1986 clash between Chinese and Indian forces near Sumdurong Chu in the disputed portion of Arunachal Pradesh is an example of an incident coded as a reaction level of 2. India deployed multiple mountain divisions in response to the Chinese seizure of a seasonally occupied Indian observation post, and although the two countries ultimately showed restraint, at one point total troop levels potentially reached as many as 50,000 (Fravel \textsuperscript{2008}). In general, either the mobilization of troops by the target state had to escalate to significant numbers, as occurred in this case, or there had to be at least 10 deaths reported.

The last and highest level, 3, is the most self-explanatory and the easiest to identify. Target state reactions were coded as a 3 if there was a shooting war or significant military clash with heavy casualties and reports of at least 100 deaths. This includes major conflicts such as the 1962 Sino-Indian War and smaller conflicts with notable numbers of deaths, such as the Nathu La and Cho La clashes in Sikkim in 1967.

\subsection*{4.3.3 Measuring Changes in Border Monitoring}

The level of monitoring on a given disputed border can be difficult to ascertain on a year-by-year basis, due to lack of consistent information across governments and time. Publicly available troop estimates are intermittently made for high-profile disputes, but often only when border tensions are particularly high and states are already expecting to have to

\footnote{Foreign Broadcast Information Service (FBIS) Daily Reports, FBIS-MEA-77-145, from Hong Kong AFP, “Patriot Reports on Indian-Pakistan Clashes,” July 28, 1977.}
identify and respond to unilateral border activity from their opponents. The quality and emplacement of surveillance infrastructure is also inconsistently reported. As a workaround, I triangulate on the border monitoring measurement by identifying years in which border monitoring appears to have increased, decreased, or stayed the same. Although this measure is not precisely the same as the concept of border monitoring presented in the model, changes in monitoring are more likely to be reported than specific numbers, and can provide some insight into how monitoring affects challenger state behavior. One would expect attempted border activity to be smaller in scale in years when border monitoring by the target has intensified, and vice versa.

I code whether changes in monitoring, including changes in troop levels and surveillance equipment, were reported in either the calendar year of or the calendar year prior to the reported border activity. The monitoring level for a given attempted transgression is recorded as a -1 if the target state is noted in a source to have reduced troop levels or other forms of border surveillance in the year of or prior to the attempt. In practice, since surveillance technology tends to improve over time, this typically means a troop withdrawal or other reduced human presence in the disputed region. I also include instances where the challenger’s attempt can be linked to a specific instance of reduced border monitoring, such as in 1999, when Pakistani activity in the Siachen Glacier was timed to take advantage of the annual winter vacating of the area by Indian troops. I also code a -1 for monitoring if the area was neither occupied nor put under regular surveillance prior to the challenger state’s attempts, as was usually the case for captures of maritime features in the South China Sea in the first decades of the dispute.

The changes in monitoring variable is coded as a 1 if the target state is noted to have increased troops or improved surveillance in the year or two prior to the attempts. The most common type of monitoring change reported was larger troop deployments to a

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12 As with identifying border monitoring, I use a variety of sources including, but not limited to, declassified U.S. intelligence documents such as the CIA CREST archives from 1945 to 1992, FBIS and other open source news articles, and supplementary texts dealing with specific border disputes.
given area or, in the case of maritime disputes, increased patrolling by naval and coast guard units. However, I also included notable upgrades in technology or infrastructure, such as the building of radar installations, border posts, roads, or other infrastructure that would make detection and patrolling easier.

Lastly, I coded monitoring as a 0 if no changes were reported prior to a given fait accompli attempt. Although a coding of 0 is not necessarily precise, as it likely omits small deployment changes and minor equipment and infrastructure upgrades, it should at least capture a general sense by would-be challenger states that the probability of being caught in unilateral border activity has not substantially changed.

4.4 Empirical Testing of Faits Accomplis

I use the data described above in a plausibility test of the first three hypotheses created from the fait accompli formal model. This section presents the empirical analysis.

4.4.1 Research Design and Control Variables

I study two sets of outcome variables in the analysis. First, I look at the effect of changes in border monitoring on the size of attempted faits accomplis by challenger states. Second, as evidence for the proposed mechanism that border monitoring deters larger faits accomplis through the threat of target state reaction, I look at the effect of both monitoring and the size of the attempted fait accompli on the scale of the target state’s reaction. In both cases, I use a least-squares dummy variable estimator controlling for challenger or target state fixed effects and, since both the transgression size and target reaction variables are coded as ordered categories, an ordered logistic regression as alternative specifications to test the hypotheses. Because the formal model focuses on the challenger state’s choice between minimal, low-risk gains, and larger, higher-risk land grabs, I restrict the analysis to years in which a challenger state attempted a fait accompli in a given dispute.
In addition to the primary explanatory and outcome variables described in the previous section, I include a number of control variables that may also explain challenger state choices with respect to their border disputes. Enduring rivalries may affect disputing states’ behavior, as a history of conflict tends to predict subsequent conflict. To identify rivalries, I adapt Huth, Croco and Appel (2013)’s measure, which denotes country dyads in which there has been at least five militarized disputes, wars, or crises in the past 20 years. Other geopolitical factors that may affect challenger state aggression includes whether or not the two states are in an alliance (Gibler 2009), whether or not the states are both democracies (Russett and Maoz 1993; Bueno de Mesquita et al. 1999), and the relative parity of the states’ military overall resources.13

I include a measure of past border activity, since the success of past attempted fait accomplis might affect the likelihood that the challenger tries again. Specifically, the measure includes the number of years within the five years prior to the year of the territorial transgression in which the challenger had previously engaged in unilateral border activity. For testing the effect of monitoring on the size of territorial transgressions, I additionally include a measure of the number of years within the last five that the target state reacted militarily to the challenger’s border activity, since the challenger state may be less likely to take chances when the target state has a history of noticing and responding to its actions. I also include a variable marking the year of the dispute, since surveillance technology is likely to improve over time, such that the quality of monitoring a disputed border may increase as a natural result of military upgrades.

I include two controls that describe the disputed territories themselves. Hensel and Mitchell (2005) code an indicator of population-based territorial claim salience, which describes whether the disputed area has no permanent population, towns and villages, or at least one city. The extent to which a territory is populated may affect both how eager the

13Following Huth, Croco and Appel (2013), military parity is defined as the absolute value of the challenger’s Composite Index of National Capability (CINC) score, divided by the sum of the challenger and target’s CINC scores, minus one-half. As this value increases, the parity of the two countries’ military capabilities increases.
challenger state is to attempt a fait accompli and how eager the target state is to watch and defend it. Second, terrain features are useful as a proxy for the existence of strategic boundaries, since craggy terrain may be less likely to be clearly delineated in such a way that target states can enforce the status quo of a dispute. Following Shaver, Carter and Shawa (Forthcoming)’s measure of terrain ruggedness, originally coded in 1 km by 1 km grid-squares, I measure the ruggedness of a given dispute area by calculating the average ruggedness across the entire area of the terrain, which in turn is the difference in altitude between each grid-square and its adjacent squares. The ruggedness data are also rescaled to be measured in terms of kilometer rather than meter differences between adjacent grid-squares, for ease of interpretation of the coefficients in the statistical analysis.

4.4.2 Results

Table 4.1 summarizes the results of the statistical tests where the outcome variable is the size of the challenger’s fait accompli attempts. The first column represents a least-squares dummy variable regression model including the control variable for military parity. Since the updated CINC scores from which the parity variable is derived only extend through 2012, I also include a similar model in the second column that omits the parity variable so as to take full advantage of the data set. Both regressions include both challenger and opponent fixed effects. The third column, which shows the results of the ordered logistic regression, also omits the parity variable. Due to multicollinearity from the relatively small number of countries and disputes involved, I only include challenger fixed effects in this specification.

Hypothesis 4.1 predicts that states are more likely to attempt risky faits accomplis when border monitoring is relatively light, and vice versa. Accordingly, Table 4.1 suggests a statistically significant negative correlation between changes in monitoring and the size of the fait accompli attempt.\footnote{I also tested a model with directed dispute dyads and year fixed effects, which offers similar results. A Hausman test comparing fixed effects to a random effects model strongly supports the use of a fixed effects model in this case.} In addition, there is a negative correlation evident between the
Table 4.1: Border Monitoring and Size of Territorial Transgressions

<table>
<thead>
<tr>
<th></th>
<th>LSDV</th>
<th>Ordered Logistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
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<tr>
<td>Monitoring</td>
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<td>−0.132**</td>
</tr>
<tr>
<td></td>
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<td>(0.059)</td>
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<td>(0.112)</td>
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<tr>
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<tr>
<td></td>
<td>(0.213)</td>
<td>(0.199)</td>
</tr>
<tr>
<td>Military Parity</td>
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<tr>
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<td>(0.038)</td>
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<tr>
<td>Past Reactions</td>
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</tr>
<tr>
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<td>(0.111)</td>
<td>(0.098)</td>
</tr>
<tr>
<td>Year</td>
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<td>−0.009***</td>
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<tr>
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<td>(0.003)</td>
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<tr>
<td>Challenger Fixed Effects</td>
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<td>Yes</td>
</tr>
<tr>
<td>Opponent Fixed Effects</td>
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<td>Yes</td>
</tr>
</tbody>
</table>

Note: *p<0.1; **p<0.05; ***p<0.01
year of the attempt and the size of the attempt. This latter association is not conclusive, particularly since it may be driven by salami-slicing behavior by states in the South China Sea in the 2010s. However, one would expect surveillance technology to improve over time simply through the process of military upgrades and technological innovation, so the result is compatible with increased border monitoring leading to a reduced scope of fait accompli attempts. Overall, the data support the overall conclusion of the model, which is that border monitoring by target states tends to deter their opponents from attempting major land grabs.

Of the control variables, the alliance and joint democracy variables are significant in at least one model specification, with the other specifications’ results signed in the appropriate directions. This provides limited support for the standard international relations hypotheses that states are less likely to engage in risky dispute behavior or fight when they are allies or both democracies. The significance of the ruggedness variable varies by specification, but this may be because geography does not change very much over time, such that the average ruggedness of each dispute is largely stable over time, except when disputing states agree to delimit incomplete portions of their border. Enduring rivalry, somewhat surprisingly, has no clear significance.

Table 4.2 shows the results of tests for Hypotheses 4.2 and 4.3. The first of these predicts that target states are more likely to respond with military force when they are closely monitoring their disputed borders, and the second predicts that they are more likely to respond as the size of the fait accompli attempt increases. As in the previous set of tests, the first two columns refer to a least-squares dummy variable model, presented here with challenger fixed effects, and the third column shows the result of an ordered logistic regression with challenger fixed effects.

The results support both hypotheses, albeit weakly in the case of Hypothesis 4.2. The likelihood and scale of the target state’s reaction increase in relation to increased border monitoring, which suggests that the threat of a militant reaction by the target is indeed the mechanism by which the challenger state is deterred from bolder border activity. There is
Table 4.2: Reactions to Territorial Transgressions

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<th>Ordered Logistic</th>
</tr>
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<td>(2)</td>
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<tr>
<td>Border Monitoring</td>
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<tr>
<td></td>
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<td>Fait Size</td>
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<td>0.569***</td>
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<td>(0.131)</td>
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</tr>
<tr>
<td>Challenger Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
</tr>
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</table>

Note: *p<0.1; **p<0.05; ***p<0.01
also limited evidence of a positive correlation between the year and the reaction, which also suggests a positive relationship between border monitoring and reaction likelihood, given that surveillance technology usually improves over time. The likelihood and scale of a militant reaction also clearly increase as the size of the attempted fait accompli increases, which both makes sense and supports the model’s assumption that the target state values disputed land and will in some cases fight to keep it.

Of the control variables, enduring rivalry unsurprisingly strongly predicts the likelihood and scale of a reaction by the target state. The existence of a significant human population within the disputed region is also associated with an increase in the likelihood and scale of a reaction. The existence of significant human settlements may increase the value of the territory for the target state, which is therefore more likely to engage in a violent reaction. By contrast, alliance, joint democracy, and military parity do not have a significant effect on the target state’s reaction. This last set of findings is surprising, given that one would expect states to be more reluctant to respond with military action against allies, other democracies, or stronger opponents.

4.5 Conclusion

By proposing a theory of when states engage in minor faits accomplis, as opposed to larger land grabs, I fill in a gap in the literature on territorial disputes. This literature has only just begun to turn its attention to faits accomplis and other forms of border activity that are not intended to lead to dispute resolution, yet such activity forms the bulk of states’ actions in such disputes. States typically prefer to play the long game on their borders, since they usually have no obligation to either resort to a legal means of resolution, or to come to the bargaining table and seriously work towards a negotiated settlement. During the decades over which a dispute may drag on, states that are dissatisfied with the status quo engage
in unilateral border activity as a way of holding onto and improving their claims without having to commit to any permanent, written agreements.

Dissatisfied states must weigh the risk of war against the possibility of long-term territorial gains when they attempt to unilaterally change the status quo on disputed borders. If the state does not expect to get caught, because the target state is not monitoring the border closely, but does expect to have to fight if it does get caught, because the target state’s resolve to fight is high, then the challenger state will tend to attempt large land grabs. By contrast, if the challenger expects its opponent to quickly notice any border activity, but to refrain from fighting unless the border changes are egregiously large because of its low resolve to fight, then the challenger state will restrict the scope of its attempted activity so that it can guarantee some gains even if it is caught.

The model implies that border monitoring is a major mechanism by which states can deter their dissatisfied opponents from attempting large-scale unilateral changes on the border. Potential target states cannot necessarily deter their would-be challenger opponents from engaging in border activity altogether, but increased troop deployments, improved monitoring infrastructure, and better surveillance technology reduce the scope of what their opponents may attempt. Conversely, as occurred in 1999 when Pakistan moved into certain areas along the Siachen Glacier after Indian troops had vacated the area during the harsh winter, challenger states will act more boldly if they perceive that they will not get caught until after their move is complete, i.e., once the Indian troops returned during the spring. This method of deterrence has implications for how states that are satisfied with the territorial status quo can prevent this status quo from shifting over time and potentially scuttling subsequent attempts at dispute settlement.

This paper is part of an ongoing project to characterize how foreign policy leaders weigh risk and reward when jockeying for advantages in territorial disputes. Leaders may be more willing to try out risky policies in situations where they expect to be able to learn from the reactions of the other side, the international community, or domestic audiences.
Future work could incorporate an extension of the game in which the challenger learns from the first round results in the second round, either about the target’s monitoring levels or about its resolve to fight. States could be more willing to take on the added risk associated with larger faits accomplis, if there is a prospect of learning more about their opponents in the process.

Although I specifically apply my formal model of fait accompli to territorial disputes in East and South Asia, the logic of the model applies to other areas of international relations, as well as other areas of politics in general. For example, the theory of border monitoring could be applied to Israeli settlement expansion in the Israel-Palestine dispute, perhaps with the additional angle of international monitoring. Looking beyond territory, one can also study other deterrence-related situations, such as the Iranian process of nuclear weapon development during the 2000s. Prior to the deal made between Iran and the P5+1 countries in 2013, Iran’s behavior had been described as nearing a fait accompli but one can conceptualize the Iranian nuclear program as a series of smaller faits accomplis, in which each step carries a risk of provoking a military reaction from neighbors or the international community. The nuclear literature has long recognized international monitoring as a key feature of proliferation deterrence, but research on faits accomplis may tie seemingly unrelated behaviors together theoretically. Dissatisfied states must balance risk and reward, regardless of the issue area in which they are attempting to change the status quo.

Chapter 5

Conclusion

Because territorial disputes can last for decades, states frequently spend far more time and resources managing unresolved borders than they do on serious attempts at bargaining, settlement, or resolution of those borders. Over the course of this dissertation, I have tried to characterize some of the dynamics at play in this intermediate stage in the life of such disputes. Doing so helps to fill in a gap in the international relations literature, where territorial disputes have long been acknowledged as a major source of interstate conflict but which has inadequately explained many of the unilateral conflict management activities in which states engage, including legal tricks to circumscribe other states’ legal claims, as well as faits accomplis along the physical border.

The first paper of the dissertation offers a high-level, conceptual overview of how the policymaking process happens in the face of uncertainty over the intentions and resolve of other states, the potential reactions of third-parties, and, ultimately, policy outcomes. Policymaking is an iterative process in which leaders formulate potential policies, choose one by weighing risk and reward, and decide whether to keep that policy or generate new ones. They do not merely do so myopically, with an eye to the immediate results of their proposed policies. Instead, they sometimes choose policies, even if they bear significant risks, that will contribute to their long-term interest by helping them learn and adapt for the future.
The learning process allows states to hedge their bets and minimize uncertainty. By seeing how other international actors respond to these trial balloons, leaders adjust and shape their foreign policy.

In the formal model of policy experimentation, leaders are only choosing between a few potential strategies, but in reality foreign policy leaders have dreamed up a huge and diverse toolkit for handling their border claims. Border management activities range from the legal or abstract, like using international law to get a tribunal to make rulings about dispute parameters, as the Philippines did with China in the South China Sea dispute, to the physical, like building roads in disputed regions. They range from actions that take the long view, like, China’s declaration of an Air Defense Identification Zone over the East China Sea, to actions that are downright petty, like flags planted in disputed areas and graffiti with declarations of sovereignty. Countries are creative; they send patrols, dredge sand, sell oil contracts, buy up land, promote tourism, and, of course, sometimes even assert control over new land. Any of these actions might be one of the policies under consideration. However, the logic of the insights from the formal model applies to a variety of situations, because all border policies carry risks, could entail potential rewards, and might help the state learn something about its strategic environment.

The latter parts of the dissertation focus on a particular category of mid-dispute activity, in which a dissatisfied state seeks to challenge the physical status quo by unilaterally encroaching on disputed territory without giving its opponent the opportunity to respond. One paper explores when this type of activity occurs at all, by showing how ambiguity in the legal status quo increases the likelihood of challenger states engaging in unilateral actions. Another paper assumes that the state has already decided to make a unilateral move, but has yet to hammer out the details. This latter essay focuses on the dimension of scope, and adds in a strategic element by suggesting that increased border monitoring by the target state can partially deter even a state that is intent on taking action. In this way, I demonstrate
that intermediate stages of border disputes can be successfully analyzed at multiple levels of abstraction, with notable policy implications.

By paying attention to the smaller, less apparently significant events in border disputes, we can build up better theories about why and when the significant events occur. Conflicts do not flare up out of nowhere; rather, they require the correct grievances, the correct geopolitical situation, and the correct sparks. These intermediate events can contribute both to a sense of grievance and to the prevalence of potentially incendiary incidents. One can use the recent flare-up of tensions between India, China, and Bhutan in the Himalayas as an example. Border incidents had been on the rise in the 2010s, which seemed to aggrieve the Indian government, albeit not to the point of retaliation. Then, the building of a road into the disputed border between China and Bhutan provided a spark. In order to get a complete picture of why the subsequent stand-off happened, we must also study why these comparatively insignificant events happen.

This dissertation has sought to establish some starting points for investigation, particularly with information-related causal mechanisms, but many avenues for future research remain. For instance, my analysis of faits accomplis primarily focused on physical changes to the border, such as infrastructure and troop incursions. However, not all unilateral activity related to border disputes occur in the physical realm. Governments publish propaganda, dig up historical evidence, and otherwise engage in behaviors intended to affect the dialogue surrounding a dispute, rather than the de facto physical circumstances. These actions may also occur in the interstices between major border events, and they deserve to be studied because they affect how states manage key moments of conflict. Future research could also look at non-informational motivations for various categories of border activity, whether those motivations are material in nature, normative, or otherwise. Filling in these theoretical and temporal gaps will enrich our understanding of territorial disputes, which drives so much regional conflict around the world.

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Appendix A

Proofs for Chapter Two

A.1 Proposition 1

*Proof.* The expected payoff of each policy is equivalent to the expected first-round payoff from testing the policy, plus the discounted expected value of the second round. The expected value of the second round is equal to the probability that the first policy test was successful times the expected payoff given that success, plus the probability that the second test was unsuccessful times the expected payoff given that failure:

\[
E(S) = s + \delta (\max \{ag, bh, s\})
\]

\[
E(A) = ag + \delta \left( p_{A}ag + \max \left\{ (1 - p_{A}a)g \frac{(1 - p_{A})a}{1 - p_{A}a}, (1 - p_{A}a)h \frac{(1 - \gamma p_{A})b}{1 - p_{A}a}, (1 - p_{A}a)s \right\} \right)
\]

\[
= ag + \delta (p_{A}ag + \max \{ (1 - p_{A})ag, (1 - \gamma p_{A})bh, (1 - p_{A}a)s \})
\]

\[
E(B) = bh + \delta \left( p_{B}bh + \max \left\{ (1 - p_{B}b)g \frac{a - \gamma p_{B}b}{1 - p_{B}b}, (1 - p_{B}b)h \frac{(1 - p_{B})b}{1 - p_{B}b}, (1 - p_{B}b)s \right\} \right)
\]

\[
= bh + \delta (p_{B}bh + \max \{ (a - \gamma p_{B}b)g, (1 - p_{B})bh, (1 - p_{B}b)s \})
\]

If the state tries a policy on the first round and achieves a success, then it will continue to use that policy on the second round. If the state chooses policy \( A \) on the first round, then it will choose \( A \) again on the second round if there is no success and \((1 - p_{A})ag > (1 - \gamma p_{A})bh\),
which is equivalent to $\gamma > \frac{bh-(1-p_A)ag}{p_A bh}$, $p_A < \frac{ag-bh}{ag - \gamma bh}$, and $p_B < \frac{(1-p_A)ag}{(1-\gamma p_A)bg}$. Otherwise, it will try $B$ on the second round. If the state tries policy $B$ on the first round and does not receive a success, then it will only switch to $A$ if $(a - \gamma p_B)g > (1 - p_B)bh$, which can be rewritten as $\gamma < \frac{a-(1-p_B)bh}{p_B bg}$, $p_B > \frac{bh-ag}{bh - \gamma bg}$, or $p_A > \frac{(1-p_B)bh}{(a-\gamma p_B)g}$.

\section*{A.2 Proposition 2}

\begin{proof}
Define a policy sequence $\{X, Y\}$ as a sequence in which the state chooses policy $X$ in round 1, sticks with $X$ in round 2 after a breakthrough, and chooses policy $Y$ in round 2 if there is no breakthrough. The policy sequence $\{A, A\}$ always offers a better expected payoff than $\{B, B\}$, since $ag > bh$ implies that

$$ag + \delta (1 - p_A)ag > bh + \delta p_B bh + \delta (1 - p_B)bh.$$  

The policy sequence $\{A, B\}$ is also always preferable to $\{B, B\}$:

$$ag + \delta (1 - \gamma p_A)bh > bh + \delta p_B bh + \delta (1 - p_B)bh$$

$$\frac{ag}{bh} > 1 > \frac{1 + \delta \gamma p_A}{1 + \delta p_A}$$

However, $\{A, B\}$ is not always preferable to $\{B, A\}$:

$$ag + \delta p_A ag + \delta (1 - \gamma p_A)bh < bh + \delta p_B bh + \delta (a - \gamma p_B)g$$

$$p_A < \frac{(1-\delta)(bh - ag) + \delta p_B (bh - \gamma bg)}{\delta (ag - \gamma bh)}$$

$$\iff p_B > \frac{ag(1 + \delta p_A - \delta) - bh(1 + \delta \gamma p_A - \delta)}{\delta (bh - \gamma bg)}$$

$$\iff \gamma > \frac{ag(1 - \delta + \delta p_A) - bh(1 - \delta + \delta p_B)}{\delta b(p_A h - p_B g)}$$
\end{proof}
If $p_A$ is small, then even when the expected payoff for $B$ is higher than the expected payoff for $A$, the state will prefer to experiment in a more information-rich environment and will choose the policy sequence $\{B, A\}$. For the state to prefer $B$ in round 1 to $A$, $\{B, A\}$ must also be preferable to $\{A, A\}$, although this does not vary with $p_A$:

$$ag + \delta p_A ag + \delta (1 - p_A)ag < bh + \delta p_B bh + \delta (a - \gamma p_B b)g$$

$$\frac{ag}{bh} < 1 + \delta p_B - \frac{\delta \gamma p_B g}{h}$$

$$\iff p_B > \frac{ag - bh}{\delta (bh - \gamma bg)}$$

$$\iff \gamma < \frac{bh(1 + \delta p_B) - ag}{\delta p_B bg}$$

Note for Corollary 2.1 that if $h > \gamma g$, then both of the above conditions hold true.

**A.3 Proposition 3**

**Proof.** Since $s > ag > bh$, the expected value of $S$ is $s(1 + \delta)$. Since $(1 - p_A)a s > (1 - p_A)ag$, the expected value of $A$ is

$$ag + \delta (p_A ag + \max \{(1 - \gamma p_A) bh, (1 - p_A a) s\}),$$

meaning that $A$ will never be chosen in the second round if it gives a zero payoff in the first round. Similarly, the expected value of $B$ is

$$bh + \delta (p_B bh + \max \{(a - \gamma p_B b) g, (1 - p_B b) s\}),$$

so that the state will not pursue $B$ twice unless immediately successful. From Proposition 2.2 the state knows whether it prefers to experiment with $A$ or with $B$. 

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Case 1. Suppose the state prefers $A$ to $B$. If the state unsuccessfully experiments with $A$ in round 1, then it switches from $A$ to $S$ if \( \frac{s}{bh} > \frac{1 - \gamma p_A}{1 - p_A a} \) and switches from $A$ to $B$ otherwise. There are now two possibilities:

1. \( \frac{s}{bh} > \frac{1 - \gamma p_A}{1 - p_A a} \). The state prefers $A$ to $S$ if \( s(1 + \delta) < ag + \delta p_Aag + \delta(1 - p_Aa)s \), which is equivalent to \( \frac{s}{ag} < \frac{1 + \delta p_A}{1 + p_Aa} \) and \( p_A > \frac{s - ag}{\delta a(g - s)} \).

2. \( \frac{s}{bh} < \frac{1 - \gamma p_A}{1 - p_A a} \). The state prefers $A$ to $S$ despite the fact that $S$ initially looked better than either $A$ or $B$, if \( s(1 + \delta) < ag + \delta p_Aag + \delta(1 - \gamma p_A)bh \). This is equivalent to both \( s < \frac{ag + \delta p_Aag + \delta(1 - \gamma p_A)bh}{1 + \delta} \) and \( p_A > \frac{(1 + \delta)a - bh + \delta ag}{\delta bh - \gamma bh} \).

Case 2. Suppose the state prefers $B$ to $A$. In round 2, after a lack of breakthrough with policy $B$ in round 1, it switches from $B$ to $S$ if \( s > (a - \gamma p_B)b \frac{h}{1 - p_B b} \), and from $B$ to $A$ otherwise. Two possibilities exist:

1. \( s > (a - \gamma p_B)b \frac{h}{1 - p_B b} \). The state prefers $B$ to $S$ if \( s(1 + \delta) < bh + \delta(p_Bbh + (1 - p_B b)s) \), which is equivalent to \( \frac{s}{bh} < \frac{1 + \delta p_B}{1 + \delta p_B b} \) and \( p_B > \frac{s - bh}{\delta bh - \gamma bh} \).

2. \( s < (a - \gamma p_B)b \frac{h}{1 - p_B b} \). The state prefers $B$ to $S$ if \( s(1 + \delta) < bh + \delta(p_Bbh + (a - \gamma p_B b)g) \), which is equivalent to \( s < \frac{bh(1 + \delta p_B) + \delta(a - \gamma p_B b)g}{1 + \delta} \) and \( p_B > \frac{(1 + \delta)s - bh + \delta ag}{\delta bh - \gamma bh} \).

A.4 Switching after Success

If it is not assumed that states, once having found a successful policy, stick with that policy, then the parameter values for which the state prefers policy $B$ to policy $A$ in the first round shift, although the dynamics remain similar. The state never prefers to experiment with $B$ over sticking with $S$, as long as \( s > ag > bh \).

Proposition A.1. Suppose the state does not always stick with a successful policy. It prefers $B$ in the first round to $A$ if \( \gamma g > h \) and \( \frac{ag(1 + \delta p_A) - bh(1 - \delta p_B g)}{\delta b(p_A h + p_B g)} < \gamma < \frac{ag(1 + \delta) - bh(1 + \delta - \delta p_B g)}{\delta p_B bg} \). If $B$ is successful, it switches to $A$, and if $B$ is unsuccessful, then it continues experimenting with $B$.  

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Proof. If the state knows from the results of the first round that $B$ is a good policy, then it knows that $A$ has a $\gamma$ chance of also being good. Therefore, if $\gamma g > h$, the state would choose on a success to subsequently switch to policy $A$. However, the state would never switch away from $A$ after a first-round breakthrough, since it knows that $B$ has a $\frac{b\gamma}{a}$ chance of being good, but that $\frac{b\gamma h}{a} < g$ because $ag > bh$. Thus, if $\gamma g > h$, then

$$E(B) = bh + \delta(\gamma p_B bg + \max\{(a - \gamma p_B b)g, (1 - p_B)bh, (1 - p_B) b\})$$

but $E(A)$ is unchanged.

Let $\gamma g > h$, so that a policy sequence $\{B, A\}$ or $\{B, B\}$ indicates that the state chooses $B$ in round 1, switches to $A$ in round 2 after a breakthrough, and chooses $A$ and $B$ respectively in round 2 if there is no breakthrough. The policy sequences $\{A, A\}$ and $\{A, B\}$ are both superior to $\{B, A\}$, since

$$ag + \delta(p_Aag + (1 - p_A)ag) > bh + \delta(\gamma p_B bg + (a - \gamma p_B b)g)$$

when $ag > bh$, which is already established, and

$$ag + \delta(p_Aag + (1 - \gamma p_A)bh) > bh + \delta(\gamma p_B bg + (a - \gamma p_B b)g)$$

$$\frac{ag}{bh} > \frac{1 - \delta + \delta \gamma p_A}{1 + \delta P_A - \delta},$$

which is true since $\frac{ag}{bh} > 1$.

The policy sequence $\{B, B\}$ is sometimes superior to $\{A, A\}$ and $\{A, B\}$, if two conditions hold true. First,

$$ag + \delta(p_Aag + (1 - p_A)ag) < bh + \delta(\gamma p_B bg + (1 - p_B)bh)$$

$$\gamma < \frac{ag(1 + \delta)(1 - bh)}{\delta p_B bg}.$$
Second,

\[ ag + \delta(p_Aag + (1 - \gamma p_A)bh) < bh + \delta(\gamma p_B bg + (1 - p_B)bh) \]

\[ \gamma > \frac{ag(1+\delta p_A) - bh(1-\delta p_B)}{\delta p_A h + p_B g}. \]

\[ \square \]

A corollary indicates that the status quo policy can have a high enough expected outcome that \( B \) is never considered.

**Corollary A.1.** If \( s > ag \), the state prefers \( S \) to \( B \).

**Proof.** From Proposition A.1, \( \gamma < \frac{ag(1+\delta) - bh(1+\delta - \delta p_B)}{\delta p_B bg} \), but \( s(1+\delta) < bh + \delta(\gamma p_B bg + (1-p_B)bh) \) implies \( s(1+\delta) < bh + ag(1+\delta) - bh(1+\delta - \delta p_B) + \delta(1 - p_B)bh \), which reduces to \( s < ag \), which is a contradiction. \[ \square \]
Appendix B

Proofs for Chapter Four

B.1 Lemma 1

Proof. Given the first-order condition, the challenger maximizes the second-round utility at the interior solution of

\[ 0 = n(z_1 - K) - n z_1 + 1 - n z_1 - 2 n z_2 \]

\[ z_2 = \frac{1 - n K - n z_1}{2n}, \]

with an expected utility of \( x + \left( \frac{1 - n K + n z_1}{2} \right) [z_1 - K + \frac{1 + n K - n z_1}{2n}] \) if this is an interior solution, i.e., \( \frac{1 - n K + n z_1}{2n} < 1 - x \) and \( \frac{1 - n K - n z_1}{2n} > K \). The challenger prefers war if this expected utility is greater than the payoff of guaranteed peace at \( z_2 = K \):

\[ x + \left( \frac{1 - n K + n z_1}{2} \right) (z_1 - K + \frac{1 + n K - n z_1}{2n}) > x + z_1 + K \]

\[ z_1 - 2 n K z_1 + n z_1^2 - K + n K^2 + (1 - n K + n z_1) \left( \frac{1 + n K - n z_1}{2n} \right) > 2 z_1 + 2 K \]

\[ -4 n^2 K z_1 + 2 n^2 z_1^2 + 2 n^2 K^2 + (1 - n K + n z_1)(1 + n K - n z_1) > 2 n z_1 + 6 n K \]

\[ -4 n^2 K z_1 + 2 n^2 z_1^2 + 2 n^2 K^2 + 1 - n^2 K^2 + 2 n^2 K z_1 - n^2 z_1^2 > 2 n z_1 + 6 n K \]

\[ 1 - n^2 (z_1 + K)^2 > 2 n (z_1 + 3 K) \]
Otherwise, among the interior solutions, the challenger chooses a peace-guaranteeing fait accompli at $z_2 = K$.  

\[ \]

### B.2 Lemma 2

**Proof.** Suppose $z_2 = K$. The challenger can guarantee peace in the first round with a utility of

\[ nK^2 + 2K(1 - nK), \]

or risk war in the first round with

\[ -nK \left( \frac{1 - 2nK}{2n} \right) + \left[ 1 - n \left( \frac{1 - 2nK}{2n} \right) \right] \left( \frac{1 - 2nK}{2} + K \right). \]

Compare and rearrange:

\[ -nK \left( \frac{1 - 2nK}{2n} \right) + \left[ 1 - n \left( \frac{1 - 2nK}{2n} \right) \right] \left( \frac{1 - 2nK}{2} + K \right) < nK^2 + 2K(1 - nK) \]

\[ -2nK \left( 1 - 2nK \right) + 1 + 2nK < 4n(2K - nK^2) \]

\[ 1 - 8nK + 8n^2K^2 < 0 \]

\[ \frac{-1 + \sqrt{2}}{2n\sqrt{2}} < K < \frac{1 + \sqrt{2}}{2n\sqrt{2}} \]

Because $z_1 = \frac{1 - 2nK}{2n} > K$ simplifies to $\frac{1}{4n} > K$, the challenger only prefers to risk war when

\[ K < \frac{-1 + \sqrt{2}}{2n\sqrt{2}}. \]
B.3 Lemma 3

Proof. Suppose that $K \leq 1 - x - z_1$, that $z_2 = \frac{1-nK-nz_1}{2n}$, and that this induces the risk of war in the second round. The payoff from guaranteeing peace in the first round is

$$x + n z_1^2 + (1 - nz_1) \left( \frac{1-nK+pz_1}{2} \right) \left( z_1 - K + \frac{1+nK-nz_1}{2n} \right).$$

The first-order condition of this expression gives a local maximum at

$$z_1 = \frac{3+2nK+\sqrt{12+12nK+n^2K^2}}{3n}.$$

However, this value is always greater than $K$, so the peace-guaranteeing maximum can only be at either 0 or $K$. Comparing the payoffs for 0 and $K$ gives

$$x + nK^2 + (1 - nK) \left( \frac{1}{4n} \right) > x + \frac{1-nK}{2} \left( -K + \frac{1+nK}{2n} \right)$$

$$4nK^2 > -nK(1 - nK),$$

which is always true since the values are greater than 0. Thus, the challenger state maximizes its peace-guaranteeing payoff with $z_1 = K$.

The payoff of risking war in the first round with $z_1 > K$ is

$$x - nz_1 K + (1 - nz_1) \left( \frac{1-nK+pz_1}{2} \right) \left( z_1 - K + \frac{1+nK-nz_1}{2n} \right).$$

The first-order condition of this expression gives a local maximum at

$$z_1 = \frac{-1+2nK+\sqrt{3-16nK+n^2K^2}}{3n}.\footnote{All following algebraic conditions in this proof were calculated with Mathematica unless otherwise stated.}$$
For the local maximum to be the optimal war-risking choice for the challenger, this value must be greater than $K$ and less than the maximum possible value of $z_1$, given that $z_2 = \frac{1-nK-nz_1}{2n}$. Since this value must be greater than $K$ for it to provoke war in the second round, the ceiling for $z_1$ is

\[
\frac{1-nK-nz_1}{2n} > K \\
\frac{1-3nK}{n} > z_1 \\
\frac{1-3nK}{n} > -1+2nK+\sqrt{4-16nK+n^2K^2}.
\]

This inequality holds true for $K < 1$ and $n < 1$, so the local maximum is always within the upper bound. It is within the lower bound when

\[
-1+2nK+\sqrt{4-16nK+n^2K^2} > K \\
K < \frac{1}{6n}.
\]

Otherwise, the optimal war-risking choice is $z_1 = K$, which is superseded by the payoff from guaranteeing peace with $z_1 = K$.

If $K < \frac{1}{6n}$, one can compare the peace-guaranteeing utility of $z_1 = K$, shown above, with the war-risking utility of $z_1 = -1+2nK+\sqrt{4-16nK+n^2K^2}$. The result is unwieldy and algebraically intractable, but can be shown through numerical computation to satisfy $K < \frac{1}{6n}$ within the relevant range. Hence, if the war-risking utility is greater, then the challenger risks war in both rounds. Otherwise the challenger plays it safe in the first round and only takes risks in the second. 

\[\square\]
B.4 Lemma 4

Proof. The posited second round equilibrium will be unstable if the challenger’s equilibrium payoff of $x + 2K$ is less than the payoff of capturing some amount $\epsilon > 0$ more territory, or

$$x + K + n(2K + \epsilon)[-\omega K + (1 - \omega)(K + \epsilon)] + (1 - n(2K + \epsilon))(K + \epsilon)$$

$$= x + K + n(K + \epsilon)(2K + \epsilon)(1 - 2nK - n\epsilon)(\epsilon - \epsilon\omega + K - 2K\omega),$$

for some $\epsilon < R - x - K$ when $x + K < R$ (in equilibrium, the fort does not observe the fait accompli), or some $\epsilon < 1 - x - K$ when $x + K > R$ (in equilibrium, the fort observes the fait accompli).

If the second round is stable, the first round will be unstable if the expected utility of staying on the equilibrium path, $x + nK^2 + 2K(1 - nK)$, is less than the expected utility of deviating, or

$$x + n(K + \epsilon)[-\omega K + (1 - \omega)(K + \epsilon)]$$

$$+ (1 - n(K + \epsilon))(K + n(K + \epsilon)(2K + \epsilon)(1 - 2nK - n\epsilon)(\epsilon - \epsilon\omega + K - 2K\omega)),$$

for some $\epsilon > 0$ that is less than $R - x - K$ if $R > x + K$, and less than $1 - x - K$ if $R < x + K$. \qed
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