Process Matters: Conflict and Cooperation in Sequential Government-Dissident Interactions

STEPHEN M. SHELLMAN

Competing hypotheses on the relationship between government and dissident behavior emerge from both formal and empirical models. Yet, the current literature lacks a comprehensive theoretical account of such contradictory effects. This study develops a theory to account for a large number of competing hypotheses within a single framework. The theory explains various government and dissident tactical choices over the course of an internal political struggle by focusing on leaders, their motivations, and the link between their motivations and actions. The theory gives rise to a process model of sequential government-dissident interactions that is used to test several implied hypotheses. Empirical sequential time-series models of government and dissident behavior find support for most of the theory's implied hypotheses in Israel (1979–2002) and Afghanistan (1990–99).

Why do governments and dissidents repress and rebel at times and cooperate at other times over the course of a political struggle? Moreover, how do government and dissident levels of cooperation and conflict affect each other? This study offers a theory and empirical test of a conflict-cooperation process theory, an area of inquiry that much of the civil conflict literature ignores. The study seeks to explain the variance in government and dissident conflict and cooperation levels over time as opposed to the occurrence of conflict in a given country-year.

Much of the theoretical and empirical literature on civil conflict, and in particular civil war, focuses on the national attributes or structural variables that affect the onset, duration, or termination of civil conflict. While such studies can test whether or not the propensity of conflict increases as a function of national attributes like the quality of political institutions, economic prosperity, or the fragmentation of ethnic and religious divisions, those studies ignore how actors' decisions in constrained environments affect the magnitude and intensity of civil conflict over time. Charles Tilly contends that "since collective action is dynamic, and since its outcomes depend very strongly on the course of interaction, static models that simply match behavior to group characteristics or outcome to group behavior represent the entire process poorly."[1] While cross-national attribute studies can detect and explain the general economic, societal, and political conditions conducive to civil conflict, they cannot explain conflict processes over time. National attributes, like GDP and ethnic fractionalization, rarely change over time and change very little if they do. As a result, such studies are "incapable in predicting shifts" in hostility and cooperation.[2] To address the weaknesses of those studies, we need to develop process theories of civil conflict and design empirical analyses to rigorously test the hypotheses.

Taking processes into consideration implies that we should study conflictual and cooperative political interactions between governments and dissidents sequentially in order to understand and explain the dynamics of their interactive behavior. Sequential analysis is widely used as an effective tool to study marital and other social interactions.[3] Like those studying marital interactions between husbands and wives or professional interactions between bosses and employees, one can get a better understanding of how individuals relate to each other using a sequential approach to study political interactions between governments and dissidents. While nonsequential analyses can tell us things like how many cooperative or hostile acts a government carried out last year, sequential analyses can tell us the ways in which governments and dissidents respond to each other's tactics over the course of time. By focusing on event-by-event sequences, we can concern ourselves with how behavior changes in response to previous events and behavioral exchanges.

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[1] Charles Tilly, "Models and Realities of Popular Collective Action" (working paper no. 10, Center for Studies of Social Change, New School for Social Research, New York), 1.

[2] Christopher K. Butler, Scott Gates, and Michele Leiby, "Social Networks & Rebellion" (paper, Conference on Disaggregating the Study of Civil War and Transnational Violence, Institute of Global Conflict and Cooperation, University of California, San Diego, 7-8 March 2005), 3, http://weber.ucsd.edu/~kgledits/igcc/dscwtv/bgl_igcc2005.pdf. These authors concern themselves with peace and war as opposed to hostility and cooperation, but their general point is very much applicable.

[3] Roger Bakeman and John M. Gottman, *Observing Interaction: An Introduction to Sequential Analysis*, 2nd ed. (Cambridge: Cambridge University Press, 1997); John M. Gottman, James D. Murray, Catherine Swanson, Rebecca Tyson, and Kristin R. Swanson, *The Mathematics of Marriage* (Cambridge, MA: MIT Press, 2003).

This study seeks to build a process model of sequential government-dissident interactions. While the study certainly analyzes conflictual interactions, it also seeks to analyze how cooperation can affect the behavioral interactions of governments and dissidents, something absent from much of the civil conflict processes literature. Sequential analysis of conflict-cooperation processes can uncover the sequences of interactions that escalate conflict and the sequences of events that de-escalate conflict and give rise to cooperation.

Explanation of the variance in government and dissident behavior can lead to prediction of cycles of violence or periods of relative cooperation. Such predictions can help humanitarian agencies prepare for the externalities created from periods of violent conflict.[4] Moreover, the analyses can produce policy implications on how to decrease levels of civil conflict and increase levels of cooperation. The implications can often be more specific than those produced by national attribute studies. Process models, developed in the style below, are able to say something about what will happen tomorrow or the next day in a given conflict rather than predicting with some probability that a civil conflict will break out in country X sometime next year. The model I develop below also places more emphasis on actors' decisions and motivations such that policies to decrease the likelihood of civil conflict can be directed at particular actors or the motivations of actors as opposed to increasing or decreasing macro-level state characteristics (GDP). Moreover, models like mine have the potential to illustrate how low-intensity civil conflict can lead to full-scale civil war, something that many previous over-aggregated, national attribute studies fail to address.[5]

Specifically, this study focuses on government and dissident leaders and identifies the causal mechanisms that lead them to escalate and de-escalate conflict and cooperation. In my model, both leaders are motivated by retaining their leadership positions and both face internal and external threats to their tenure. While internal threat refers to threats of replacement from within one's own coalition (coup d'état, electoral defeat, vote of no confidence), external threat refers to threats of replacement by one's opponents

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[4] For an example of scholarly work that uses the conflict-cooperation process literature to model refugee migration, see Stephen M. Shellman and Brandon M. Stewart, "Political Persecution or Economic Deprivation? A Time-Series Analysis of Haitian Migration to the United States," in *Conflict Management & Peace Science* (New York: Routledge, forthcoming). In a subsequent study, they develop an early warning model of refugee migration. See Stephen M. Shellman and Brandon M. Stewart, "Predicting Risk Factors Associated with Forced Migration: An Early Warning Model of Haitian Flight," *Civil Wars* (New York: Routledge, forthcoming).

[5] James D. Fearon and David Laitin, "Ethnicity, Insurgency, and Civil War," American Political Science Review 97, no. 1 (2003): 75-90; Nicholas C. Sambanis and Annalisa Zinn, "From Protest to Violence: An Analysis of Conflict Escalation with an Application to Self-Determination Movements" (unpublished manuscript, Yale University, December 2005); Christian Davenport, David A. Armstrong, and Mark I. Lichbach, "From Mountains to Movements: Dissent, Repression, and Escalation to Civil War" (unpublished manuscript, University of Maryland).

(revolution, assassination, abduction, imprisonment).[6] As opponents of one another, government and dissident leaders engage in political battles over domestic policies while trying to protect their authority positions. The theory implies that government and dissident leaders should choose tactics that minimize internal and external threats to their tenure. From these assumptions, I deduce behavioral rules which logically lead to most of the tactical choices we observe governments and dissidents making under particular conditions.[7] Then I specify multiple equation time-series models of government-dissident interactions to test the hypotheses. By highlighting the relationship between the two leaders' motivations and actions, I produce a model which can explain (1) why different tactics are chosen under particular conditions over the course of an internal conflict and (2) the sequential tactical variation observed in conflict-cooperation processes.

The article proceeds as follows. First, I describe the gaps in the current literature that the project seeks to fill. Second, I put forth a theoretical framework to explain the variation in government-dissident interactions. Using this framework, I deduce the implications and subject them to empirical testing. Following the presentation of hypotheses, I describe the research design, discuss case selection (Israel, 1979–2002 and Afghanistan, 1990–99), and present the findings.

THE LITERATURE AND CONTRIBUTION

Students of domestic contentious politics find competing theoretical arguments at different levels of analysis (individual, group, and system), competing empirical studies with different research designs (qualitative, comparative time-series, large-N cross-national panel, and pooled time-series), and contradictory empirical results (positively v. negatively signed coefficients) in the literature. Though studies differ with regard to theoretical orientation, research design, and empirical findings, they all essentially ask variations of the same question: what factors influence the intensity of domestic conflict?

As I alluded to above, most studies emphasize structural and environmental factors, while few studies call attention to groups' and individuals' behavior and their causal effects on one another. Yet scholars such as Ted Gurr and Charles Tilly, and Mark Lichbach contend that "government coercion . . . [is] . . . "perhaps the most important factor accounting for political dissent."[8] There are, of course, a few studies which do examine the effects of government behavior on dissident behavior or vice versa. While

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[6] Note that "external" refers to threats external to a leader's coalition, not to his or her state or country.

[7] Charles Tilly, *From Mobilization to Revolution* (New York: Random House, 1978), 6.

[8] Ted Robert Gurr, *Why Men Rebel* (Princeton: Princeton University Press, 1970); Tilly, *From Mobilization to Revolution*; Mark Lichbach, "Deterrence or Escalation? The Puzzle of Aggregate Studies of Repression and Dissent," *Journal of Conflict Resolution* 31 (1987): 267.

some scholars explore how government behavior (repression, coercion, negative sanctions, accommodation, facilitation, cooperation) impacts dissident behavior (collective dissent, protest, riots, accommodation, cooperation), other scholars explore how dissident behavior impacts government behavior.[9] However, the results of these studies often conflict and corroborate multiple—and in many instances four—diametrically opposed hypotheses. I review each of these competing hypotheses below.

To begin, the resource mobilization and political process schools argue that repression imposes costs on opposition groups, which inhibit their ability to mobilize resources and supporters.[10] Thus, repression should deter dissent. Proponents of the rational choice school, similarly argue that

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[9] On how government behavior impacts dissident behavior, see Susan Eckstein, "Revolutions and the Restructuring of National Economies: The Latin American Experience," *Comparative Politics* 17 (1965):473–94; Ted Robert Gurr, "Psychological Factors in Civil Violence," *World Politics* 20 (1968): 245–78; Gurr, *Why Men Rebel*; David Snyder and Charles Tilly, "Hardship and Collective Violence in France: 1830–1960,"*American Sociological Review* 37 (1972): 520–32; Douglas A. Hibbs, Jr., *Mass Political Violence, A Cross-National Causal Analysis* (New York: Wiley, 1973); Tilly, *From Mobilization to Revolution*; Mark Lichbach, "Deterrence or Escalation?"; Dean Hoover and David Kowalski, "Dynamic Models of Dissent and Repression," *Journal of Conflict Resolution* 35 (1992): 150–82; Marc. V. Simon, "Hawks, Doves, and Civil Conflict Dynamics: A Strategic Action-Action Model," *International Interactions* 19 (1994): 213–39; Marwan Khawaja, "Repression and Popular Collective Action: Evidence from the West-Bank," *Sociological Forum* 8 (1993): 47–71; Johan L. Olivier, "Causes of Ethnic Collective Action in the Pretoria-Witwatersrand Triangle, 1970–1984," *South African Sociological Review* 2 (1990): 89-108; Johan L. Olivier, "State Repression and Collective Action in South Africa, 1970–1984," *South African Journal of Sociology* 22 (1991):109–17; Susan Olzak. *The Dynamics of Ethnic Competition and Conflict* (Stanford: Stanford University Press, 1992); Karen Rasler, "Concessions, Repression, and Political Protest in the Iranian Revolution," *American Sociological Review*, 61 (1996): 132–52; Will H. Moore, "Repression and Dissent: Substitution, Context, and Timing," *American Journal of Political Science* 42, no. 3 (1998): 851–73. On how dissident behavior impacts government behavior, see Conway W. Henderson, "Conditions Affecting the Use of Political Repression," *Social Science Quarterly* 74 (1991): 322–33; Steven C. Poe and C. Neal Tate, "Repression of Human Rights to Personal Integrity in the 1980s," *American Political Science Review* 88 (1994): 853–72; Christian Davenport, "Multi-Dimensional Threat Perception and State Repression: An Inquiry into Why States Apply Negative Sanctions," *American Journal of Political Science* 38, no. 3 (1995): 683–713; Christian Davenport, "Understanding Covert Repressive Action: The Case of the U.S. Government Against the Republic of New Africa," *Journal of Conflict Resolution* 49, no. 1 (2005): 120–40; James DeNardo, *Power in Number*s (Princeton: Princeton University Press, 1985); Will H. Moore, "The Repression of Dissent: A Substitution Model of Government Coercion," *Journal of Conflict Resolution* 44 (2000): 107–27. Though each scholar may define the same terms in different ways, most of them concur with Tilly that the terms "repression," "dissent," "hostility," or "conflict" imply that one actor imposes costs on another actor. While repression would exude images of governments imposing costs on dissidents (curfews, decrees, quelling protests, infringement on citizens' human rights, etc.), dissent would reflect images of dissident groups, like students or armed rebel groups, imposing costs on the government (protests, riots, ambushes, bombings, etc.). I use "conflict" and "hostility" interchangeably to represent the imposition of costs on one actor by another, while the terms "repression" and "dissent" are actor-specific. Much like hostility imposes costs on actors, cooperation lowers an opponent's costs (time, energy, resources, etc.). The words "facilitation," "accommodation," and "cooperation" are used interchangeably to denote lowering one's opponent's costs. Tilly, *From Mobilization to Revolution*.

[10] Snyder and Tilly, "Hardship and Collective Violence in France"; Tilly, *From Mobilization to Revolution*; Doug McAdam, *Political Process and the Development of Black Insurgency, 1930–1970* (Chicago: University of Chicago Press, 1982); Doug McAdam, Sidney Tarrow, and Charles Tilly, *Dynamics of Contention* (Cambridge: Cambridge University Press, 2001).

repression increases an individual's costs to participate in collective action and hypothesize that repression deters dissent.[11] Whether the studies focus on the individual or the group, the two schools argue that repression works in that it leads to a decline in collective action.[12] Thus, repression is said to deter dissent.

In contrast, psychological theories posit that repression acts as a catalyst in initiating mobilization.[13] Susan Eckstein, Gurr, and Douglas Hibbs empirically show that coercion breeds civil strife.[14] Theorists argue that repression causes loss of legitimacy and often incites civil unrest. Margaret Levi argues that the use of coercion "often precipitates resentments that can fuel the flames of opposition."[15] Dean Hoover and David Kowalski, surveying over one hundred studies published between 1965 and 1990, find that 70 percent confirm the escalation hypothesis that repression increases opposition hostility.[16]

So what can account for these two competing hypotheses (deterrence v. escalation)? Mark Lichbach's formal model sheds light on the inconsistencies with theories of dissident responses to state repression by showing that dissidents switch tactics from one set (cooperative) to another set (conflictual) when the former is repressed.[17] Will Moore provides empirical support for Lichbach's hypotheses.[18] However, the model is silent on state responses to dissidents' changing tactics. In an attempt to tackle the problem from the government side, Moore examines government responses to dissident behavior.[19] He finds that governments substitute accommodation for repression and repression for accommodation whenever either action is met with protest. This finding parallels Lichbach's theoretical arguments about dissidents' changing tactics and the findings of Moore.[20] Moore's analyses show that some states (Peru and Sri Lanka) are sensitive to costs imposed on them by dissidents and respond with tactics that are effective.[21] Governments substitute hostility for accommodation and accommodation for hostility to effectively control their dissident counterpart.

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[11] Mark I. Lichbach, *The Rebel's Dilemma* (Ann Arbor: University of Michigan Press, 1995).

[12] Matthew Krain, *Repression and Accommodation in Post-Revolutionary States* (New York: St. Martin's, 2000), 106.

[13] Gurr, *Why Men Rebel*.

[14] Eckstein, "Revolutions and the Restructuring of National Economies"; Gurr, "Psychological Factors in Civil Violence"; Ted Robert Gurr and Raymond Duvall, "Civil Conflict in the 1960s: A Reciprocal Theoretical System with Parameter Estimates," *Comparative Political Studies* 6 (1973): 135–69; Hibbs, *Mass Political Violence*.

[15] Margaret Levi, *Of Rule and Revenue* (Berkley: University of California Press, 1989), 32.

[16] Hoover and Kowalski, "Dynamic Models of Dissent and Repression," 637.

[17] Lichbach, "Deterrence or Escalation?"

[18] Moore, "Repression and Dissent Substitution, Context, and Timing."

[19] Moore, "The Repression of Dissent: A Substitution Model," 120.

[20] Moore, "Repression and Dissent Substitution, Context and Timing."

[21] Moore, "The Repression of Dissent: A Substitution Model."

Ronald Francisco's studies expand the literature to examine the endogenous relationship between protest and coercion.[22] While Francisco models dissident and government behavior within the same model (something Moore and Lichbach do not do), he uses a different type of data (types of protest and coercion and numbers of protesters, arrests, and deaths) and aggregates the data by weeks (as opposed to Moore's sequences). In these studies, he tests competing hypotheses (backlash and adaptation) head to head using a predator-prey model specification. In the two studies, Francisco finds mixed results for the competing hypotheses across his cases (German Democratic Republic, Czechoslovakia, Israel-Palestine, West Germany, and Northern Ireland). My theory and model attempt to account for such mixed results within a single theoretical framework.

With those contributions in mind, Moore's studies and Francisco's studies are silent on how governments react to dissident cooperation and how dissidents react to government cooperation. My study seeks to explain all that Lichbach's and Moore's studies can, as well as explain additional dynamics and account for additional hypotheses that those studies cannot. Governments and dissidents often make agreements or concessions to one another. Many of the previous studies focus narrowly on the hostile behavior taken by governments and dissidents, rather than studying a more holistic range of behavior. Failure to analyze cooperative actions can lead to biased parameter estimates as there is almost certainly a selection effect for ignoring cooperative events and only selecting hostile events for one's study.

While the previous studies emphasized repression (coercion) and dissent (protest), a few studies focus on the effect of accommodation on dissent. On the one hand, Edward Muller and Karl-Dieter Opp argue that regime accommodation leads the opposition to believe that it can control the government's policies to a certain degree.[23] This may lead to increased collective participation and higher opposition hostility levels. Dennis Chong argues that regime accommodation assures both current and future dissident members that their collective efforts will pay off.[24] Similarly, Anthony Oberschall adds that accommodation signals a regime's vulnerability and leads protesters to believe that their efforts are successful.[25] Cooperation seems to give the opposition

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[22] Ronald A. Francisco, "The Relationship between Coercion and Protest: An Empirical Evaluation in Three Coercive States," *Journal of Conflict Resolution* 39 (1995): 263–82; Ronald A. Francisco, "Coercion and Protest: An Empirical Test in Two Democratic States," *American Journal of Political Science* 40 (1996): 1179–204.

[23] Edward N. Muller and Karl-Dieter Opp, "Rational Choice and Rebellious Collective Behavior," *American Political Science Review* 80 (1986): 871–87.

[24] Dennis Chong, *Collective Action and the Civil Rights Movement*, (Chicago: University of Chicago Press, 1991), 116–25.

[25] Anthony Oberschall, "Rational Choice in Collective Protests," *Rationality and Society* 6 (1994): 79–100.

a license to protest.[26] Karen Rasler finds support for such hypotheses during the Iranian Revolution.[27]

On the other hand, accommodation may signal to the dissidents that the government wants to end the contentious nature of their interactions and move contentious issues to the bargaining table.[28] Dissidents may believe that a settlement can be reached and will also move to negotiations. Thus, government accommodation deters dissident hostility and increases dissident accommodation. The empirical results in the literature differ as to which hypothesis is supported.

From the literature, we can conclude that government behavior influences dissident behavior and dissident behavior influences government behavior, but we are not so confident how each actor's behavior influences the other's behavior or the conditions under which hypothesis is supported. Unfortunately we lack comprehensive theoretical explanations of the many empirically observed effects of government and dissident behavior on one another. To fill this void, we must generate an argument that can "deduce different empirical outcomes as special cases of the same fundamental process."[29] The primary purpose of this study is to resolve the "indeterminacy" in the relationships between government and dissident behavior.[30]

To tackle this puzzle, I develop a rational choice account in which actors use information in their environment to "appraise...their self-interest displaying egoistic, but not necessarily greedy, behavior."[31] Some argue that rationalist accounts do not consider colorful details and rich description. By abstracting from reality, however, such accounts "make theory-building possible and facilitate comparisons across cases that may at first appear too different to compare."[32] Any formal account of government and dissident behavioral interactions is an incomplete description of such interactions.

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[26] Krain, *Repression and Accommodation in Post-Revolutionary States*, 106; Peter K. Eisenger, "The Conditions of Protest Behavior in American Cities," *American Political Science Review* 67 (1973): 27–28.

[27] Rasler, "Concessions, Repression, and Political Protest in the Iranian Revolution."

[28] Krain, *Repression and Accommodation in Post-Revolutionary States,* 110.

[29] Lichbach, "Deterrence or Escalation?" 271.

[30] "Attempts to resolve the...indeterminacy in the relationship between government coercion and opposition activities." Lichbach, "Deterrence or Escalation?" 267. Here I examine the reciprocal effects of dissident behavior on government behavior as well as examine cooperation in addition to violence and nonviolence. I should note, however, that Lichbach highly influences my thinking along with Ames, Bates, Bueno de Mesquita et al., Levi, and Moore. See Barry Ames, *Political Survival: Politicians and Public Policy in Latin America* (Berkley: University of California Press, 1987); Robert H. Bates, *Markets and States in Tropical Africa: The Political Basis of Agricultural Policies* (Berkeley: University of California Press, 1981); Bruce Bueno de Mesquita, James D. Morrow, Randolph M. Siverson, and Alastair Smith, "An Institutional Explanation of the Democratic Peace," *American Political Science Review* 93, no. 4 (1999): 791–808; Bruce Bueno de Mesquita, Alastair Smith, Randolph M. Siverson, and James D. Morrow, *The Logic of Political Survival* (Cambridge, MA: MIT Press, 2003); Levi, *Of Rule and Revenue*; Moore, "Repression and Dissent Substitution, Context, and Timing"; Moore, "The Repression of Dissent: A Substitution Model."

[31] Lichbach, "Deterrence or Escalation?" 271.

[32] Barbara Geddes, "Uses and Limitations of Rational Choice," in *Latin America in Comparative Perspective*, ed. Peter Smith (Boulder: Westview, 1995).

However, I abstract from reality to simplify a complex world and highlight the relationships between causal mechanisms and outcomes while filtering out secondary and extraneous factors. The model is a deliberate simplification of the world which focuses on certain elements of government-dissident behavioral interactions "to lay bare how motivations and actions are interrelated."[33] That said, there are certainly shortcomings to parsimonious model forms. Therefore, it is necessary to explicate the particulars that are illuminated and not illuminated by the model so that we know what the model can and cannot tell us about the world.

I am interested in explaining both government responses to dissident actions and dissident responses to government actions. In other words, I am interested in explaining sequential interaction and answering the question: how do governments and dissidents react to one another's behavior? An overview of a typical internal conflict situation should help to illustrate the focus and purpose of the model.

On 22 March 2004, BBC news reported that "Sheikh Yassin was leaving a mosque in Gaza's Sabra district in his wheelchair with an entourage when they were attacked by Israeli helicopter gunships at dawn on Monday."[34] Following the targeted assassination, "tens of thousands thronged the streets of Gaza City carrying the sheikh's coffin draped in the green flag of militant group Hamas . . . A number of officials of Yasser Arafat's Fatah movement marched with them . . . Thousands more took to the streets elsewhere in Gaza and the West Bank, in a spontaneous outpouring of grief and rage." Israeli troops then began to quell the protests and killed at least "four Palestinians . . . , including an 11-year-old boy." Soon after, the Palestinians fired at least four rockets into Israel. Finally, following the rocket launches, the Israeli military moved armored vehicles into Northern Gaza.

The example illustrates a brief sequential interaction between the Israeli government and Palestinian dissidents: the government assassinates a dissident leader, the dissidents begin a protest, the government quells the protest, the dissidents retaliate by launching missiles at the government, and the government counters by moving tanks into dissident territory. My theory seeks to explain event sequences much like the one above. That is, I focus attention on explaining the sequential response of dissidents to government actions and the sequential responses of governments to dissident actions. I can then begin to answer questions such as the following: If the dissidents protest, what will the government do? If the government represses, what will the dissidents do? If the government initiates talks with a dissident group, how

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[33] James D. Morrow, *Game Theory for Political Scientists* (Princeton: PUP, 1994), 8.

[34] See BBC News, "World anger after Hamas killing," 22 March 2004, http://news.bbc.co.uk/1/hi/world/middle_east/3559469.stm; "Yassin killing ignites fury," 22 March 2004, http://news.bbc.co.uk/1/hi/world/middle_east/3556589.stm; "Hamas vows revenge," 22 March 2004, http://news.bbc.co.uk/1/hi/world/middle_east/3557445.stm.

will the dissident group react? If the dissidents initiate negotiations with the government, how will the government react? My goal is to explain general trends in the sequences of political events occurring between governments and dissidents. After establishing a theoretical model which explains empirical regularities, we can begin forecasting future sequences of events and address the policy implications.[35]

In terms of the design, several systematic empirical studies employ a form of Lewis Richardson's arms race model to test some or all of the competing hypotheses outlined above.[36] This is an appropriate test if we wish to treat them as competing hypotheses. My theory, however, views these hypotheses as complementary. That is, under certain conditions, we may find support for hypothesis 1 but under different conditions we may find support for hypothesis 2. A typical action-reaction model such as Richardson's cannot capture potential contradictory effects (positively v. negatively signed coefficients) of government behavior on dissident behavior and dissident behavior on government behavior. For example, if one regresses government behavior on dissident behavior, a positively signed partial slope coefficient for dissident behavior indicates a reciprocity process (cooperation returned for cooperation or hostility returned for hostility), while a negatively signed coefficient indicates inverse responses (cooperation in response to hostility and vice versa).[37] As a result, much research corroborates one or another competing hypothesis. Still other research finds that governments and dissidents do not respond to one another at all (statistically insignificant coefficients). In sum, this project develops a theory to accommodate contradictory hypotheses within the same framework and then develops an appropriate model to test its implications. The results help explain many of the null and mixed findings in the literature.

THE ARGUMENT

My theory contends that government and dissident leaders use their experiences and observations to assess their self-interest and make decisions about how to employ their costly tactics to maximize their tenure in office. While leaders have substantive and survival preferences, leaders cannot implement their preferred policy positions without maintaining office. Thus, the most

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[35] It is also useful to discuss the model's limitations. Specifically, it does not address the factors which provoke the initiation of the conflict. Furthermore, it cannot explain third-party intervention or directly examine the interaction of multiple groups and the government. Each of these questions is interesting and should be explored in separate studies, especially if this parsimonious model performs well.

[36] Lewis F. Richardson, *Arms and Insecurity* (Pittsburgh: Boxwood Press and Quadrangle Books, 1960).

[37] Similarly, the impulse response functions simulated using the results from a Vector Autoregression (VAR) model illustrate a positive or negative response to a shock in the system.

important goal of government and dissident leaders is to maintain the support of their coalition.[38] Below, I elaborate on leaders' motivations, threats to their goals, their available tactics, and each tactic's associated costs. Using these assumptions, I develop a behavioral rule for government and dissident leaders to follow while operating under various conditions.

Actors

In the interest of parsimony, I simplify the world to only a few actors: a single dissident group with a single leader and a government with a single leader.[39] I define the government as an established system of political administration which exercises its authority over a state or sovereign territory. I define a dissident group as an entity of individuals that challenges the government's authority to rule. I further assume that both the government and the dissidents are controlled by leaders and each is primarily responsible for choosing actions to attack, defend, and create policies. As stated before, the two actors are opponents of one another. For stylistic and communicative purposes, throughout the manuscript I use the labels "leader" to refer to government and dissident leaders and "opponent" to refer to government and dissident opponents of such leaders. Thus, leader may represent either a government leader or dissident leader, and opponent would refer to the dissidents in the former case and the government in the latter case.
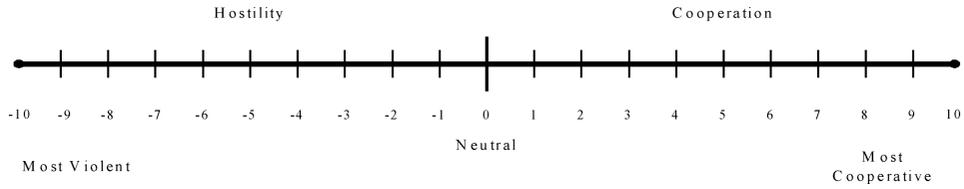
Actions

Each leader has goals and must take actions, or tactics, to achieve those goals.[40] I depict each leader's action set in Figure 1. The range of actions leaders can choose to fight their battles range from highly hostile actions

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[38] Ames, *Political Survival*, 8.

[39] See Mark Irving Lichbach, "An Economic Theory of Governability," *Public Choice* 44 (1984): 307–37; Lichbach, "Deterrence or Escalation?"; Moore, "Repression and Dissent Substitution, Context, and Timing"; Moore, "The Repression of Dissent: A Substitution Model." Many scholars make similar assumptions about dissident leaders (Lichbach, Chong, Gates) and government leaders (Ames, Bates, Levi). This may seem overly simplistic and unrealistic, but remember that the theory intends to highlight particular causal mechanisms. Besides, we observe many dissident groups in the world that operate under an umbrella organization controlled by a leader. For example, Abdul Rashid Dostam led an alliance made up of ex-government forces against the Taliban. Many case studies also discuss the presence of dissident alliances or social movement organizations (Popkin, McCarthy, and Zald). These empirical realities give reason to invoke the "single dissident group with a single leader" assumption. We can explore the utility of dividing the dissidents into two or more populations with different leaders in future studies. Lichbach, "Deterrence or Escalation?"; Chong, *Collective Action and the Civil Rights Movement*; Scott Gates, "Recruitment and Allegiance: The Microfoundations of Rebellion," *Journal of Conflict Resolution* 46, no. 1 (2002): 111–30; Ames, *Political Survival*; Bates, *Markets and States in Tropical Africa*; Levi, *Of Rule and Revenue*; Samuel Popkin, *The Rational Peasant* (San Diego: University of California Press, 1979); John D. McCarthy and Mayer N. Zald, *The Trend of Social Movements in America* (New Jersey: General Learning Press, 1973).

[40] I use the words "tactics" and "actions" synonymously to avoid repetition.

FIGURE 1 Government and dissident leaders' action set.

(bloody coups) to low-level hostile actions (making negative statements) to low-level cooperative actions (making supportive statements) to highly cooperative actions (agreeing to a peace settlement). Positive values indicate cooperative actions, while negative values represent hostile actions. Following Tilly, I define cooperative actions (statements of support, negotiations, agreements) as actions that lower an opponent's costs (time, energy, resources, etc.), while hostile actions (negative statements, riots, and guerrilla warfare) refer to actions that raise an opponent's costs.[41]

Each leader chooses a tactic on the hostility-cooperation continuum to employ against his or her opponent over the course of a political struggle. Yet, to perform any action, leaders must expend resources. I refer to these expenditures as tactical or action costs. Both hostile and cooperative tactics are costly to government and dissident leaders; both types require thought, time, energy, manpower, or money. Furthermore, I assume that on average, the price per unit of hostility is more costly than cooperation.[42] Thus, the distribution of costs across the hostility-cooperation continuum is U-shaped, with a steeper positive slope for hostile tactics than for cooperative tactics. For example, it is more costly to put armed troops in the streets than sit at a negotiating table. It is cheaper to allow the free roaming of individuals than set curfews, create checkpoints, and police the public. Finally, it is cheaper to invite an opposition group to join the political process rather than fight a civil war.[43] This assumption is consistent with Bruce Bueno de Mesquita's assumption that actors "prefer to resolve their differences through negotiation rather than war"—because it is cheaper.[44] In short, both leaders face resource constraints and must budget their resources while choosing tactics to fight their battles. Their tactical decisions are a function of (1) their goals and (2) threats to their goals.

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[41] Tilly, *From Mobilization to Revolution*, 55.

[42] Kelly M. Kadera, *The Power-Conflict Story: A Dynamic Model of Interstate Rivalry*, (Ann Arbor: University of Michigan Press, 2001), 52, 58–59.

[43] These examples refer to possibilities at about the same absolute level of cooperation or hostility, but in terms of costs, the cooperative tactics are cheaper than the hostile ones. Also note that the cost refers to the cost associated with taking the action itself, not the potential backlash effects of the opponent or the leader's coalition. Those costs are measured by opponent costs and coalition audience costs, which I discuss below.

[44] Bruce Bueno de Mesquita and David Lalman, *War and Reason* (New Haven: Yale University Press, 1992). Levi also contends that "coercion is expensive." Levi, *Of Rule and Revenue*, 32.

Goals

Like Barry Ames, I argue that while leaders have preferences of two kinds, survival and substantive, their substantive preferences cannot be implemented unless the leader survives in office.[45] Survival refers to behavior that "ensure(s) holding onto the office itself" and substantive refers to all other "preferences—those the executive can implement if he or she maintains office."[46] In short, a leader must retain office in order to enact and protect new and existing policies. Thus, retaining office is the most important goal.

Threats and Costs

Each leader chooses tactics from his or her action set to retain office. Each leader's tactical choice at any given time is a function of three threats or costs to his or her tenure: tactical, opponent, and coalition audience costs.

First and foremost, leaders face internal threats to their tenure—threats of replacement from within their own coalition (coup d'état, electoral defeat, vote of no confidence). Each leader (L) remains in power only through the support of his or her winning coalition, a coalition that consists of "those people whose support is required to keep the incumbent in office."[47] If she "loses the loyalty of a sufficient number of members of the winning coalition, a challenger can remove or replace her in office."[48] Thus, the most important goal of government and dissident leaders is to maintain the support of a winning coalition.[49]

My model highlights the link between government-dissident interactions and job performance. This is similar to highlighting the relationship between job performance and foreign policy success or failure.[50] For example, interactions between a government and a dissident group take place on a public stage, and each leader's coalition judges its respective leader's performance in interactions with its opponent, much like coalitions judge their leader's

[45] Ames, *Political Survival*, 4. While the assumption is often invoked in studies of political office holders (Bueno de Mesquita et al., Ames; Bates; Geddes), other scholars similarly assume that dissident leaders are tenure-maximizers (Chong; Hampton; Kirk). Barbara Geddes, *Politician's Dilemma: Building State Capacity in Latin America* (Berkeley: University of California Press, 1994); Jean Hampton, "Free-Rider Problems in the Production of Collective Goods," *Economics and Philosophy* 3 (1987): 245–73; R. M. Kirk, "Political Terrorism and the Size of Government: A Positive Institutional Analysis of Violent Political Activity," *Public Choice* 40, no. 1 (1983): 41–52.

[46] Ames, *Political Survival*, 4.

[47] Bueno de Mesquita et al., "An Institutional Explanation," 793.

[48] Ibid., 8.

[49] Ames similarly contends that in crisis situations, survival preferences dominate substantive preferences completely. Ames, *Political Survival,* 8.

[50] See, for example, Michael Colaresi, "When Doves Cry: International Rivalry, Unreciprocated Cooperation, and Leadership Turnover," *American Journal of Political Science* 48, no. 3 (2004): 555–70; Will H. Moore and David J. Lanoue, "Domestic Politics and U.S. Foreign Policy: A Study of Cold War Conflict Behavior," *Journal of Politics* 65, no. 2 (2003): 376–96.

foreign policy successes and failures.[51] Outcomes from government-dissident interactions reward one leader and punish the other. Lichbach contends that "past successes and failures are key indicators of the probability of future victories and losses."[52] A leader's coalition judges his or her performance in interactions with the opponent based on the leader's successes and failures. Similar to Michael Colaresi, I define success as an outcome where L matches or exceeds the hostility level or falls short of the cooperation level of the opponent (sctr O).[53] In contrast, failure is the outcome when L is less bellicose or more cooperative than sctr O.[54]

Successful confrontations in government-dissident interactions make leaders appear strong to their winning coalitions and to their rivals.[55] Confrontational failures make leaders appear weak to their winning coalitions. In the international conflict literature on rivalry, Paul Huth argues that government leaders are more likely to lose their jobs after overcooperating (being more cooperative) with a rival state.[56] A recent study by Colaresi finds that following overcooperation with a rival state, leaders face a hostile backlash from their coalitions and are more likely to lose their jobs.[57]

Similar to rival states, governments and dissidents are relentless enemies and in many cases fight for control of resources such as territory or sovereignty. I contend that if coalitions disapprove of tactical choices and leaders do not alter their behavior to conform to their coalition's desires, both government and dissident leaders will lose support from their coalitions and ultimately their jobs. Leaders who neglect to respond aggressively to failures will be replaced in office.[58] Therefore, if leaders wish to remain in office, they should seek to exceed the opponent's hostility levels, and

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[51] See Giacomo Chiozza and H.E. Goemans, "International Conflict and the Tenure of Leaders: Is War Still Ex Post Inefficient?" *American Journal of Political Science* 48, no. 3 (2004): 604-19; Colaresi, "When Doves Cry"; James D. Fearon, "Domestic Political Audiences and the Escalation of International Disputes," *American Political Science Review* 88, no. 3 (1994): 577–92; Lichbach, *The Rebel's Dilemma*, 66–67; Maurice Jackson, Eleanora Peterson, James Bull, Sverre Monsen, and Patricia Richard, "The Failure of an Incipient Social Movement," *Pacific Sociological Review* 3 (Spring 1960): 40. All discuss how success or failure affects dissident groups.

[52] Lichbach, *The Rebel's Dilemma*, 66.

[53] Colaresi, "When Doves Cry." Note that L applies to both government and dissident leaders. scfr O represents the dissidents for a government leader, and scfr O refers to the government for a dissident leader.

[54] This is similar to how Colaresi measures foreign policy success or failure in the rivalry literature.

[55] Lichbach, *The Rebel's Dilemma*, 67.

[56] Paul K. Huth, *Standing Your Ground: Territorial Disputes and International Conflict* (Ann Arbor: University of Michigan Press, 1996).

[57] Colaresi, "When Doves Cry," 556.

[58] For example, Ariel Sharon's recent disengagement plan from Gaza was protested by right-wing Likud members who threatened to quit the coalition. He ultimately had to revise the plan and fire two ministers before the plan passed. In the meantime, he reinstated the policy of targeted killings of known militants (Hamas leaders Yasin and Rantisi). Sharon tactically responded to his coalition's disapproval to maintain the support of his hawk coalition by adjusting his plan and enacting tactics pleasing to his hard-line constituents. In contrast, Ehud Barak was criticized for being a bad negotiator and giving up too much territory during his term. He had campaigned on not giving up Jerusalem, but following the

when failing to do so, they should increase their hostility levels toward their opponent to maintain their positions.[59]

Second, leaders face external threats to their tenure—threats of replacement from one's opponent (revolution, assassination, abduction, imprisonment). For government leaders, the consequences of disorder and upheaval, like bloody revolutions or assassinations, may be "immediate, personal and severe."[60] Dissent "threatens the existing distribution of rewards and power, of which the authorities are the primary beneficiaries."[61] Leaders, not wishing to give up their benefits, protect themselves using force if necessary. Similarly, dissident leaders are subject to removal from their positions by governments (assassination, incarceration, or expatriation). Repression depletes dissidents' resources (pecuniary and non-pecuniary), deters participation in the movement, and impedes groups' abilities to mobilize. Thus, dissident leaders also have to protect against external threat.

Cooperative opponent tactics lessen a leader's costs (time, energy, resources, etc.), while hostile opponent tactics increase a leader costs.[62] As a result, leaders want to minimize opponent costs—the costs imposed on leaders by their opponents. However, this goal is less important than maintaining a winning coalition.

Finally, leaders who do not pursue their goals in an economical manner will last no longer than a consumer who does not budget expenditures or the business executive who does not maximize profits.[63] Leaders must budget their actions and cannot continuously spend high amounts of resources. As a result, tactical decisions will be constrained by previous tactical costs.

Sequences and Contexts

My theory envisions government and dissident actors taking turns acting and reacting to each other's tactics like the sequence of interactions depicted below:

$$G_1, D_2, G_3, D_4, G_5, D_6, \ldots$$

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election, he made concessions on that very issue. He was criticized for his overcooperation as public opinion at the time reflected a preference for someone more hawkish. After Barak failed to reconcile his behavior toward the Palestinians and his winning coalition's desires, he lost the election to Sharon.

[59] This argument parallels aspects of the rational expectations argument, but in places it predicts different dynamics than an error correction process would predict. Stephen M. Shellman, "Taking Turns: A Theory and Model of Government-Dissident Interactions" (Ph.D. dissertation, Florida State University, 2003), http://etd.lib.fsu.edu/theses/available/etd-11152003-004651/unrestricted/FinalDissertation.11.25.03.singlespaced.pdf.

[60] Charles Lewis Taylor and David A. Jodice, *World Handbook of Political and Social Indicators*, 3rd ed. (New Haven: Yale University Press, 1983).

[61] Lichbach, "An Economic Theory of Governability," 309.

[62] Tilly, *From Mobilization to Revolution*.

[63] Lichbach, "An Economic Theory of Governability," 278.

The government (G_1) imposes public policy, the dissidents (D_2) take actions to alter the policy, and the government (G_3) defends its policy. The government and dissident actions and reactions form sequences of actions performed by each actor like the one illustrated above. Since my theory seeks to explain why actors choose the particular actions they choose at the times they choose them, I analyze actors' decisions in sequences and hypothesize about how actors will act given the relative levels of audience, opponent, and tactical costs.

Together, these three cost terms form six decision-making contexts in which leaders make decisions about how to behave toward their opponent. While the most important of the three variables is success or failure, the other two cost terms magnify or suppress the effect of success or failure in certain contexts. I discuss these effects in the hypotheses section. Varying the values of audience costs, opponent costs, and tactical costs gives rise to six possible decision-making contexts in which government and dissident leaders operate.

Table 1 depicts the six contexts: (1) overcompetition, (2) undercooperation, (3) bully, (4) undercompetition, (5) overcooperation, and (6) bullied. Each context contains information regarding the presence or absence of recent success or failure (coalition audience costs), the relative levels of the opponent's recent tactics (opponent costs), and leader L's recent tactics (tactical costs). Each scenario posits a continuum of possible tactics where h and c represent the quality of the action (hostility v. cooperation) and the > and < symbols indicate the relative magnitudes of L's and O's tactical choices on the hostility-cooperation scale.[64] Both actors' actions were taken in a previous turn. The cost column then lists whether or not particular costs were suffered and the arrow represents the hypothesized direction for how L should behave in the next turn.

Three of the six contexts connote leader success (overcompetition, undercooperation, and bully) in the previous interaction, while the other three connote leader failure (undercompetition, overcooperation, and bullied) in the previous interaction. Beginning with the first two successful outcomes, overcompetition refers to Context 1 where L and O are both hostile, but L is more hostile than O; whereas undercooperation refers to Context 2 where L and O are both cooperative, but L is less cooperative than O. The comparative foreign policy literature refers to contexts 3 and 6 as "bully" outcomes.[65] I borrow the term here such that bully behavior refers to O returning hostility to L's cooperation. To differentiate who does the bullying from who is being

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[64] In quantitative terms, the scale ranges from −10 to +10, where hostility ranges from −10 to 0 and cooperation ranges from 0 to +10.

[65] See Jack Hirshleifer and Juan C. M. Coll, "What Strategies Can Support the Evolutionary Emergence of Cooperation?" *Journal of Conflict Resolution* 32 (June 1988): 367–98; Joshua S. Goldstein and John R. Freeman, "*U.S.*–Soviet–Chinese Relations: Routine Reciprocity, or Rational Expectations?" *American Political Science Review* 85, no. 1 (1991): 17–36.

TABLE 1 Contexts and Associated Costs

Context	Scenario	Costs
	Overcompetition	
	L(h) < O(h)	AC: No, L overcompetes
1	→	OC: Yes, O is h
	----L---O----|---------------	TC: Yes, $h > $c
	h c	
	Undercooperation	
	L(c) < O(c)	AC: No, L undercooperates
2	←	OC: No, O is c
	--------------|-------L---O-----	TC: Yes, but $c < $h
	h c	
	Bully	
	L(h) < O(c)	AC: No, L overcompetes (L bullies O)
3	→	OC: No, O is c
	----L---------|------O----------	TC: Yes, $h > $c
	h c	
	Undercompetition	
	L(h) > O(h)	AC: Yes, L undercompetes
4	←	OC: Yes, O is h
	----O---L----|---------------	TC: Yes, $h > $c
	h c	
	Overcooperation	
	L(c) > O(c)	AC: Yes, L overcooperates
5	←	OC: No, O is c
	--------------|-------O---L-----	TC: Yes, but $c < $h
	h c	
	Bullied	
	L(c) > O(h)	AC: Yes, L undercompetes (O bullies L)
6	←	OC: Yes, O is h
	-------O-------|------L---------	TC: Yes, $h > $c
	h c	

Note: AC represents audience costs, OC represents opponent costs, TC represents tactical costs, L represents a government or dissident leader of interest, O represents the tactical costs government or dissident leader's opponent, h and c are hostile and cooperative actions respectively, and $h and $c are the price of hostile actions and cooperative actions respectively.

bullied, I label Context 3 as the bully outcome and Context 6 as the bullied outcome. In Context 3, L is said to bully O, while in Context 6, L is bullied by O. Finally, Overcooperation refers to Context 5 where L and O are both cooperative, but L is more cooperative than O; whereas undercompetition refers to Context 4 where L is hostile, O is hostile, but L is less hostile than O. Given these different contexts and threats to their tenure, how will rational government and dissident leaders respond?

My argument gives rise to two types of hypotheses: directional and qualitative. To begin, my argument implies that actors will move in certain directions on the hostility-cooperation continuum. Second, my argument implies that actors in certain contexts will choose a cooperative versus a hostile tactic. I review both types below in more detail.

DIRECTIONAL HYPOTHESES

Table 2 illustrates the specific directional hypotheses. The hypotheses are marked with the delta (Δ) symbol to represent change and to distinguish them from the qualitative hypotheses described below. Table 2 contains the same h-c continuum as in Table 1, but I replace L and O with G and D. The purpose is to show the predicted direction that both government (G)

TABLE 2 Government and Dissident Hypotheses

Context	Scenario	G & D Hypotheses (1–12)
	Dissident Overcompetition $D(h) < G(h)$	
1	$+$ $-$ $\rightarrow$ $\leftarrow$ ----D_{PT}---G_{PT}----|--------------- h c	H1: D_T reduces h; remains h H7: G_T increases h; remains h
	Dissident Undercooperation $D(c) < G(c)$	
2	$-$ $-$ $\leftarrow$ $\leftarrow$ --------------|---D_{PT}----G_{PT}---- h c	H2: D_T reduces c; remains c H8: G_T reduces c; remains c
	Dissident Bully $D(h) < G(c)$	
3	$+$ $-$ $\rightarrow$ $\leftarrow$ ----D_{PT}--------|-----G_{PT}-------- h c	H3: D_T reduces h; remains h H9: G_T reduces c; changes to h
	Dissident Undercompetition $D(h) > G(h)$	
4	$+$ $-$ $\rightarrow$ $\leftarrow$ ----G_{PT}---D_{PT}----|--------------- h c	H10: D_T increases h; remains h H4: G_T reduces h; remains h
	Dissident Overcooperation $D(c) > G(c)$	
5	$-$ $-$ $\leftarrow$ $\leftarrow$ --------------|---G_{PT}----D_{PT}---- h c	H11: D_T reduces c; remains c H5: G_T reduces c; remains c
	Dissident Bullied $D(c) > G(h)$	
6	$+$ $-$ $\rightarrow$ $\leftarrow$ ----G_{PT}--------|-----D_{PT}-------- h c	H12: D_T reduces c; changes to h H6: G_T reduces h; remains h

Note: D and G refer to dissidents and governments respectively. The subscripts PT represent previous turn, the subscript T represents the current turn, and h and c are hostile and cooperative tactics respectively. H1–H12 correspond to the numbered directional hypotheses.

and dissident (D) actors should move in each given context.[66] I label these contexts similarly to those in Table 1. However, I qualify each by placing the label "dissident" in front of "overcompetition," etc. This is necessary since dissident overcompetition is the same as government undercompetition. The arrows represent the hypothesized directions each actor should move on the h-c continuum given the conditions in each context. An arrow pointing right represents positive change, while an arrow pointing left represents negative change. The arrows and signs will be useful in evaluating the statistical findings.

Dissident Success/Government Failure (Contexts 1–3)

In Table 2, in Context 1, the hostility of the dissident action (D_{PT}) exceeds that of the government action (G_{PT}). Ergo, D_{PT} is labeled a successful tactic in that it produces a successful outcome. Similarly, we observe in Context 2, where $D(c) < G(c)$, that the dissidents undercooperate with the government in the previous turn. Finally, we see that the dissidents bully the government in Context 3, $D(h) < G(c)$, by exceeding the government's hostility levels.

The theory implies that in each of these situations in which the dissidents previously succeed in exceeding the government's hostility levels, the dissidents will take an action that is similar to the action that they took in the previous turn. When leaders succeed in exceeding the other actor's hostility levels, they should repeat similar actions until failing to do so. In particular, success strengthens a dissident leader's coalition. Survey research and indirect aggregate evidence support the idea that as a dissident's belief in the efficacy of protest increases, his or her propensity to participate in dissent also increases.[67] Leaders must capitalize on strength in numbers and the increasing confidence of their followers.[68] Thus, we should observe that leaders repeat successful tactics and revise their tactics after defeats. However, because of resource constraints, on average, leaders even after success will decrease the level in which they act in the current turn relative to their level in the previous turn. In some of these situations, we might expect leaders to maintain their positions and not change their behavioral levels much or at all.

ΔH1: IN CONTEXT 1, CHANGE IN DISSIDENT BEHAVIOR (ΔD_T) WILL BE POSITIVE

To illustrate how dissidents behave in different contexts, I pose a few hypothetical examples that exemplify the hypothesized directional shifts in

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[66] Note that in each context, one actor succeeds and the other fails. For example, in contexts 1–3, the dissident leader succeeds, while the government leader fails. In contrast, in contexts 4–6, the dissident leader fails, while the government leader succeeds.

[67] For survey research, see E. Muller, "A Test of a Partial Theory of Potential for Political Violence," *American Political Science Review* 66 (1972): 947; Bert Klandermans, "Mobilization and Participation," *American Sociological Review* 49 (1984): 592. See also, Gurr, *Why Men Rebel*, 221–23.

[68] See James DeNardo, *Power in Numbers* (Princeton: Princeton University Press, 1985); Chong, *Collective Action and the Civil Rights Movement*.

behavior using substantive examples. I randomly chose behaviors associated with different scaled events (explained in my data section) to illustrate the sequential nature of hostile and cooperative government and dissident interactions. To begin, under the conditions in Context 1, assume that the first action in a sequence of government-dissident interactions opens with dissidents bombing government buildings, resulting in deaths of government employees. Following the bombings, the scenario envisions the government responding by abducting a high-ranking dissident official. How will the dissident leader respond?

The theory implies that successful outcomes increase support for the movement. As a result, dissidents can continue to act in a hostile manner and press their claims on the government. At the various least, the dissident leader should repeat his or her previous action. Yet in an effort to conserve resources, dissident leaders should decrease their hostility levels. The dissidents had success in the last interaction and should continue to use hostile tactics, but the costly behavior of their previous tactic should cause dissident leaders to decrease their levels of hostility.[69] In the current turn, dissidents are predicted to behave comparable to bombing empty buildings.

ΔH2: In Context 2, change in dissident behavior (ΔD_T) will be negative

In Context 2 of Table 2, the dissidents open the sequence by taking a more cooperative action such as requesting more support from the government. The government follows by introducing favorable legislation in terms of tax breaks and incentive programs for the group. In this instance, the group is successful: it cooperates but at a lower level than the government. The dissident leader should reduce the group's overall level of cooperation in the current turn (H2). The hypothesis predicts that the group will take an action synonymous with making positive remarks about the government.

ΔH3: In Context 3, change in dissident (ΔD_T) behavior will be positive

In Context 3, the dissidents, like in the first context, will decrease the level of hostility directed toward the government (H3). In the hypothetical sequence, the dissidents bomb a building and the government responds by releasing detained dissidents. The dissidents exceed the government's action on the scale so the hypothesis predicts the dissidents will continue to employ hostile actions in the next turn; but in an effort to conserve resources, the dissident leader should reduce the group's level of hostility. Under these conditions, the dissident leader would reduce hostility comparable to staging demonstrations against the regime's policies.

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[69] There is no incentive to increase their hostility levels.

In contrast to the dissidents, the government did not have success in contexts 1–3. Similar to dissident leaders, government leaders lose their coalition's confidence if they take actions that fail. Following events in which leaders take unsuccessful actions in their dealings with the opponent, coalition support drops. Tenure-maximizing leaders must react in ways that increase support for their leadership. So what types of responses increase a leader's support after suffering defeats?

The short answer is actions that demonstrate strength and resolve. Weak leaders are rarely followed, while strong leaders often are. Tenure-maximizing government leaders, after failing to exceed the opponent's hostility level in the last interaction, will generally want to move left on the scales illustrated in Table 2. Leaders, aiming to exceed the other actor's hostility level, will naturally want to increase their levels of hostility after failing to exceed the opponent's levels. The other factors within the context will also sometimes compound the effects of failure. For example, in the over-competition and bullied contexts, opponent costs should magnify the effects of failed outcomes and cause leaders to increase their hostility levels more than in other contexts.

ΔH4: In Context 1, change in government behavior (ΔG_T) will be negative

In Context 1, the government, failing to be more hostile than the dissidents in its previous turn, should increase its hostility levels (H4). The leader faces both hostile dissidents (external threat or opponent costs) and angry supporters (internal threat or audience costs). Both threaten his or her tenure. Government leaders have strong incentives to increase their levels of hostility and most likely have the resources to do so. Imagine that following the government's abduction of a second-tier dissident leader, the dissidents bomb human targets. The government leader would look weak if he or she did not respond to the dissident bombings with hostile retaliation. Moreover, the leader reacts to the imposed opponent costs by increasing levels of government hostility (raising the dissident costs). Government leaders protecting against external and internal threats should respond by elevating the regime's hostility to a level comparable to raiding dissident headquarters.

ΔH5: In Context 2, change in government behavior (ΔG_T) will be negative

In Context 2, the government fails to exceed the dissidents' hostility levels; but in contrast to the first context, both actors are on the cooperative side of the scale. The leader does not face hostile dissidents (opponent costs) as in the first context. In this context, we should see that on average, in the current turn, the government leader reduces cooperation levels (H5). Take the following example. Suppose a nation-state passes favorable legislation

that positively affects the dissidents. Following the legislation, the dissidents request additional support. In the current turn, the government leader should lower his or her group's cooperation levels to a level comparable with agreeing to talk to the dissidents about such increased support.

ΔH6: IN CONTEXT 3, CHANGE IN GOVERNMENT BEHAVIOR (ΔG_T) WILL BE NEGATIVE

In Context 3, the government leader's previous cooperative tactic was met with dissident hostility. Not only should the level of government cooperation decrease, but the predicted action should be qualitatively distinct from the government's last action. Joshua Goldstein and John Freeman refer to this context as one in which the dissidents bully the government.[70] In other words, the dissidents return hostility to a cooperative initiative put forth by the government. The government leader looks weak if he or she does not respond with higher levels of hostility after being bullied. The leader's coalition will become angry if the antagonistic group is not dealt with sternly. Moreover, the dissidents previously imposed costs on the government leader, magnifying the effect of the failed outcome. As a result, government leaders should respond with hostile actions (H6). To illustrate, suppose the government releases dissidents from prison, and the dissidents retaliate by bombing human targets. The government leader under these conditions is predicted to increase his or her hostility levels (abducting dissident leaders). In this instance, opponent costs amplify the effect of failure and cause government leaders to decrease their cooperation levels and increase their hostility levels.

Dissident Failure/Government Success (Contexts 4–6)

Governments act in contexts 4, 5, and 6 just as dissidents act in contexts 1, 2, and 3. Government tenure-maximizing leaders should, on average, decrease hostile actions (H7) in Context 4, decrease cooperative actions (H8) in the Context 5, and decrease hostility levels (H9) in Context 6.

ΔH7: IN CONTEXT 4, CHANGE IN GOVERNMENT BEHAVIOR (ΔG_T) WILL BE POSITIVE

For example, in Context 4, imagine that the government carries out armed attacks on dissident headquarters which result in dissident deaths. Following the armed attacks, dissidents engage in riot behavior. In response, my hypothesis implies that the government should reduce hostility in the current turn. Yet, the dissidents recently imposed costs (opponent costs) on the government leader, so the government leader should continue to impose costs

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[70] Joshua S. Goldstein and John R. Freeman, *Three-Way Street: Strategic Reciprocity in World Politics* (Chicago: University of Chicago Press, 1990); Goldstein and Freeman, "U.S.-Soviet-Chinese Relations."

on the dissidents by maintaining a hostile posture. In this scenario, we should observe a government response comparable to imposing restrictions on the group such as a curfew or censorship of materials.

ΔH8: In Context 5, change in government behavior (ΔG_T) will be negative

In Context 5, assume that following a series of dissident bombings, the government agrees to reform favorably to the dissidents. Following the government's agreement, the dissidents respond by ceasing the bombing for the day. Such a sequence should cause the government to decrease its levels of cooperation in the current turn. The lack of opponent costs should lead a government leader to respond by not imposing costs on the dissidents. For example, the government may make statements of support toward the dissidents in the current turn.

ΔH9: In Context 6, change in government behavior (ΔG_T) will be positive

In Context 6, suppose the government carries out armed attacks on dissident headquarters, which result in dissident deaths. Following the armed attacks, suppose the dissidents release hostages. The hypothesis implies that in response, the government leader should reduce hostility in the current turn. In this situation, we should observe government behavior comparable to confiscating anti-regime propaganda.

ΔH10: In Context 4, change in dissident behavior (ΔD_T) will be negative

Dissident leaders in contexts 4 through 6 respond much like government leaders do in contexts 1 through 3. For example in Context 4, following a hypothetical sequence in which the dissidents protest and the state responds with armed attacks, the dissident leader should increase his or her hostility comparable to starting riots or bombing buildings. The dissident leader suffers audience costs by failing to exceed the government's hostility level and opponent costs from the government's hostile actions. Opponent costs magnify the effect of audience costs, and both trump the effect of tactical costs. Thus, we expect dissident leaders to increase their hostility levels toward the government.

ΔH11: In Context 5, change in dissident behavior (ΔD_T) will negative

In Context 5, the dissidents also fail to exceed the government's hostility levels. The government, however, is not using hostile force. Without the threat of violent government actions (opponent costs), the dissidents should

continue to cooperate; but in an attempt to decrease costs, I expect dissident leaders to reduce their levels of cooperation in the current turn (H11). For example, we should see that if dissidents begin by releasing hostages, which is met by government proposals for action, the dissidents should employ actions comparable to proposing conditions for a peaceful settlement.

ΔH12: In Context 6, change in dissident behavior (ΔD_T) will be negative

Finally in Context 6, the dissidents are bullied by the government. Dissident leaders, in fear of losing supporters, must regain confidence and increase levels of hostility. In fear of looking weak, the leader cannot conserve resources and take cooperative actions. Moreover, the government recently imposed costs on the dissidents, which magnifies the effect of failure. The dissident leader must retaliate by increasing levels of hostility (H12). We, therefore, should observe the greatest dissident change in this context as leaders shift their behavior from more cooperative tactics to more hostile tactics. For example, if releasing hostages is met with government force, the dissidents will increase their hostility levels and should take actions comparable to rioting in the streets.

QUALITATIVE HYPOTHESES

While the theory implies that leaders will escalate and de-escalate hostility and cooperation in response to prior contexts, it also implies whether or not leaders should choose hostile or cooperative tactics in response to particular successes and failures. To begin, dissident overcompetition (Contexts 1 and 3) should be followed by hostile tactics. Similarly, dissident undercompetition (Context 4) should elicit dissident leaders to employ hostile tactics in the next round. However, overcooperation and undercooperation (Contexts 2 and 5) should engender dissident leaders to elicit cooperative responses. Finally, after being bullied by the government (Context 6), dissident leaders should employ hostile tactics. In this situation, the dissident leader incurs both audience costs and opponent costs. As it is, the dissident leader appears weak for losing to a hostile government, but his or her image will suffer further if failing to return hostility toward such a hostile government. Thus, dissident leaders should be more likely to use hostility than cooperation in response to Context 6 as opponent costs magnify the effect of failure. In sum, I hypothesize that dissident leaders are more likely to use cooperative tactics in contexts 2 and 5 and use hostile tactics in contexts 1, 3, 4, and 6.

The same hypotheses hold for the government in the corresponding contexts. Government leaders should be more likely to use cooperative tactics in contexts 2 and 5 and hostile tactics in contexts 1, 3, 4, and 6. And much like dissident leaders in Context 6, government leaders in Context 3 should switch from cooperative tactics to hostile tactics.

These hypotheses encompass the extant competing hypotheses outlined at the beginning of the article. The first competing hypothesis contends that hostility discourages hostility; and in the dissident overcompetition context, government hostility is hypothesized to elicit a decrease in dissident hostility. The second competing hypothesis asserts that hostility escalates hostility. I expect this response from the government in the dissident bullied and dissident overcompetition contexts. The third competing hypothesis argues that cooperation elicits hostile responses. I expect the government to respond in this fashion in the dissident bullied context. Finally, the fourth competing hypothesis posits that cooperation begets cooperation. I expect the over-cooperation and undercooperation contexts to elicit cooperative responses for both actors. Now I move to discussing the design employed to test the hypotheses.

RESEARCH DESIGN

Case Selection

My theory is general and argues that government and dissident leaders in all types of societies wish to maintain their authority positions while they pursue political goals. My theory applies to different regime types, economic climates, and cultures. As such, any country that contains a government and a dissident group is a potential candidate for selection. This implies a "most-different-systems" comparative design.

Given a most-different design, if we find a common characteristic across our sample (similar government and dissident responses to one another's hostility or cooperation), we can rule out the social, political, and social differences between countries as explanations.[71] Adam Przeworski and Henry Teune add that most-different designs "center on eliminating irrelevant system factors."[72] Selecting countries with differing characteristics avails one the opportunity to test whether the behavior predicted by the theory is invariant to political, economic, and social climates. For example, if we find parallels with respect to a Sunni Muslim state and an Ashkenazi Jewish state, ethnicity and religion cannot account for the similarities. Results such as these would provide stronger evidence that the theory predicts behavior invariant to such variables. However, in the event that we find differences, the design will only allow one to speculate whether culture, regime type, or economics are causing the observed differences. Since I do not measure these variables and test their impacts, we cannot draw inferences as to how they may impact the differences observed across countries. That said, using the most-different

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[71] Jarol B. Manheim and Richard C. Rich, *Empirical Political Analysis: Research Methods in Political Science* (White Plains, NY: Longman, 1995), 253.

[72] Adam Przeworski and Henry Teune, *The Logic of Comparative Social Inquiry* (New York: Wiley, 1970), 35.

systems design, I choose to study dissident-government relations in demo-
cratic Israel (1979–2002) where the government faces Palestinian opposition
and totalitarian and Taliban-controlled Afghanistan (1990-1999). While these
regime types vary, so do the countries' economic, religious, ethnic, and cul-
tural characteristics. Really, the only shared characteristic is that they are both
enmeshed in long-term conflicts, and I return to this issue at the conclusion
of the study when I discuss the generalizability of my findings.

Data

My theory is about explaining the hostile and cooperative behavior of gov-
ernments and dissidents. Thus, I need data that measures actors' behavioral
levels on a cooperation-hostility continuum. Such data that capture these
measures are often referred to as "event data" or "day-by-day coded accounts
of who did what to whom as reported in the open press."[73] Goldstein con-
tends that event data offer the most detailed record of interactions between
and among actors.[74] Thus, event data seem like a natural choice for analysis.

    Typical event data include four important pieces of information: the ac-
tor, the target, the event, and when the event occurred. These data then
must be aggregated together to measure the relationships among actors.[75]
Many event-data projects convert events into a measure of conflict or co-
operation.[76] The scaled events measure the intensity of one actor's behavior
directed toward another actor. Since I have simplified my theoretical model
to two actors, I aggregate all dissident actions taken toward the government
and all government actions taken toward the dissidents.[77]

    I use the Israeli and Afghan data from the Kansas Event Data Project
(KEDS) project for the analyses.[78] KEDS developed a machine-coding procedure
that converts English language reports into event data by assigning particular
numerical codes to actors, targets, and verbs. As a result, it has produced sev-
eral event data sets primarily based on Reuters and, more recently, Agence
France Presse news wire reports. The events are classified into particular cat-
egories based on the World Events Interaction Survey (WEIS) coding scheme.[79]
Then, these categories are scaled on an interval conflict-cooperation

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[73] Joshua S. Goldstein, "A Conflict-Cooperation Scale for WEIS Events Data," *Journal of Conflict Res-
olution* 36 (1992): 369.

[74] Goldstein, "A Conflict-Cooperation Scale."

[75] Ibid., 370.

[76] Though there are many exceptions in the comparative politics literature, the IR projects include:
Cooperation and Peace Data Bank—COPDAB, World Events Interaction Survey—WEIS, Integrated Data for
Events Analysis—IDEA, Protocol for the Assessment of Nonviolent Direct Action—PANDA, Intranational
Political Interactions Project—IPI.

[77] The G-to-G actions are dropped as are the D-to-D actions.

[78] See University of Kansas, Kansas Event Data Project, http://web.ku.edu/keds.

[79] See Charles McClelland, "World Event/Interaction Survey (WEIS) Project, 1966-1978," ICPSR
no. 5211 (Ann Arbor: Inter-university Consortium for Political and Social Research, 1999),
http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/05211.xml.

continuum using the Goldstein scale.[80] KEDS has introduced new codes in addition to those used by Charles McClelland and the WEIS project. Most of these are borrowed from the Protocol for the Assessment of Nonviolent Direct Action (PANDA) project.[81] Project investigators assign weights to the new codes that are comparable to the Goldstein weights, and I use those weights in tandem with the Goldstein weights to create the scaled event data series that is analyzed in this study.[82]

After scaling the different event types into a conflict-cooperation measure, one must convert the events to a time series by temporally aggregating the data. Most researchers represent actor's behavior as an "accumulation of discrete actions over some uniform but ultimately arbitrary interval of time (e.g., weeks, months, quarters)."[83] Different units of aggregation produce different inferences.[84] Instead of making an arbitrary choice, I return to my theory to inform my decision. Since my theory is developed within a sequential framework, I must build a model that captures the sequential nature of government-dissident relations. My sequential model assumes that my data are aggregated in "turns."[85]

Renee Marlin-Bennet, Alan Rosenblatt, and Jianxin Wang distinguish between a "turn" and a "move." A move is a single action taken by one actor toward another, while a turn is defined as an uninterrupted sequence of moves by one actor directed toward another.[86] Note that not every action exhibited by an actor is reacted upon immediately. Time may pass between actions and a group may make two or more moves before its turn is over (before the opposition makes a move or reacts).

I produce an ordered sequence of moves and then aggregate the data by calculating the mean of each sequence of moves.[87] In effect, I transform the series of move interactions into a series of turn interactions. The data are in sequential order in which the dissidents and the government take turns acting and reacting. Now I direct attention to model specification.

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[80] Goldstein, "A Conflict-Cooperation Scale."

[81] For information on the PANDA project, see Harvard University, Weatherhead Center for International Affairs, http://www.wcfia.harvard.edu/ponsacs/research/PANDA_IDEA.htm.

[82] For WEIS codes and adaptations PANDA, see University of Kansas, Kansas Event Data Project, http://web.ku.edu/keds/data.html.

[83] William J. Dixon, "The Discrete Sequential Analysis of Dynamic International Behavior," *Quality and Quantity* 22 (1988): 239–54.

[84] Stephen M. Shellman, "Measuring the Intensity of Intranational Political Events Data: Two Interval-Like Scales," *International Interactions* 30, no. 2 (2004): 109–41; Stephen M. Shellman, "Time Series Intervals and Statistical Inference: The Effects of Temporal Aggregation on Event Data Analysis," *Political Analysis* 12, no. 1 (2004): 97–104.

[85] See Renee Marlin-Bennett, Alan Rosenblatt, and Jianxin Wang, "The Visible Hand: The United States, Japan, and the Management of Trade Disputes," *International Interactions* 17 (1991): 191–213; Moore, "The Repression of Dissent: A Substitution Model."

[86] Marlin-Bennet et al., "The Visible Hand," 202–03.

[87] I prefer the mean because it keeps inferences on a meaningful scale. Totaling values obscures the meaning of coefficient estimates: a "total" score of −27 on the −10 to +10 scale is difficult to interpret.
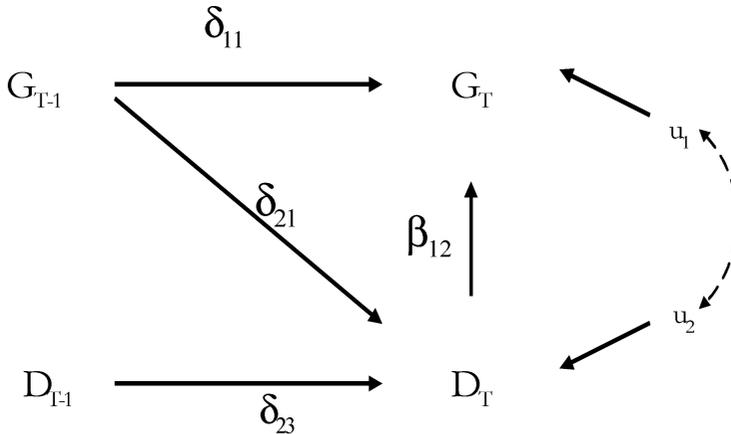
FIGURE 2 Sequential causal model of dissident government interactions.

Model

In order to test my hypotheses, the model must be able to illustrate sequences of two competing actors' actions. Hence, I must explain two dependent variables. Statistically, this means two equations. The sequence below depicts a series of government-dissident actions and reactions:
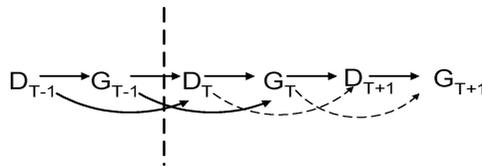
To explain the notation and causal sequences, I offer the following example. Suppose we wanted to model current government behavior (G_T) as a function of previous government and previous dissident behavior, and we wanted to model current dissident behavior (D_T) as a function of previous government and dissident behavior. Using the sequence above, we would write:

$$G_T = f(G_{T-1}, D_T) \tag{1.1}$$

$$D_T = f(G_{T-1}, D_{T-1}) \tag{1.2}$$

I display a path diagram in Figure 2 models the above sequence. Observe in Figure 2 that the government action at turn T (G_T) is explained by the dissident action at turn T (D_T) (which actually precedes G_T in temporal order) and the government's previous action (G_{T-1}), whereas D_T is explained by D_{T-1} and G_{T-1}. As a result, each government leader's current context is shaped by G_{T-1} and D_T, while each dissident leader's current context is shaped G_{T-1} and D_{T-1}.[88]

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[88] The result is a recursive sequential model and thus does not require an instrumental variables approach or unique identifier to estimate it. In other words, there is no contemporaneous endogenous correlation.

In this study, I want to model the effect of each decision-making context on government-dissident actions. Specifically, I am interested in how each context influences the change from one turn to the next in both actors' behavior. To model such change, I construct five dummy variables that represent contexts 1 through 5 (C1–C5) described above and regress change in dissident behavior (ΔD_T) and change in government behavior (ΔG_T) on each of them plus a constant.[89] The constant represents the effect of Context 6 (C6) on the dependent actor's behavior. Each of the dependent change variables is calculated by taking the first difference between each actor's behavior at turn T and at turn T-1. To fix ideas, I write the following model:

$$G_T = +\delta_{11}C1_T + \delta_{12}C2_T + \delta_{13}C3_T + \delta_{14}C4_T + \delta_{15}C5_T + \delta_{10} + e_{16T} \quad (2.1)$$

$$\Delta D_T = +\delta_{21}C1_T + \delta_{22}C2_T + \delta_{23}C3_T + \delta_{24}C4_T + \delta_{25}C5_T + \delta_{20} + e_{26T} \quad (2.2)$$

$$\Delta G_T = +\delta_{11}C1_T + \delta_{12}C2_T + \delta_{13}C3_T + \delta_{14}C4_T + \delta_{15}C5_T + \delta_{10} - e_{17T} \quad (2.1)$$

$$\Delta D_T = +\delta_{21}C1_T + \delta_{22}C2_T + \delta_{23}C3_T + \delta_{24}C4_T + \delta_{25}C5_T + \delta_{20} - e_{27T} \quad (2.2)$$

where ΔG_T represents the change in government behavior from turn T-1 to turn T, ΔD_T represents the change in dissident behavior from turn T-1 to turn T, and $C1_T$ through $C5_T$ are dummy variables equal to one when the conditions in Table 2 correspond to each contextual dummy variable. For example, when both actors are hostile and D_{T-1} is more hostile than G_{T-1}, then C1 is equal to one, and all other dummy variables are equal to zero. The constants δ_{10} and δ_{20} by model construction represent the conditions in Context 6 for the governments and dissidents respectively, and e_{17T} and e_{17T} are disturbance terms.[90] The six contexts are mutually exclusive, so the constant represents the effect of Context 6 on change in behavior.[91]

To interpret the effects of C6, observe the sign, magnitude, and statistical significance of the intercept term. To interpret the other variables' sign and magnitude, one must add the coefficient on the variable of interest to the intercept. The sum produces the impact of the decision-making context on the change in the dependent actor's behavior. For example, to observe the impact of C3 on the change in government behavior, one would add together $\delta_{13} + \delta_{10}$. The sum indicates the direction and magnitude of the dependent actor's change in behavior under the conditions in C3. An insignificant dummy

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[89] Note that there may be situations in which both actors' previous levels of behavior match each other. When this occurs, the contexts are coded as successful ones. For example, when the dissident leader matches the government leader's level of hostility, this scenario is coded as C1 for the dissident leader and C4 for the government leader. This rarely occurs and such rare events are consistent with my theory that relative position matters.

[90] Here, I make no argument about the functional form of the relationships between previous behavior and current behavior. On the issue of modeling the additive and interactive effects of the three independent variables (and their functional forms), see Stephen M. Shellman, "Taking Turns."

[91] Note that C1 for the dissidents is different from C1 for the government in that the model is sequential as depicted in Figure 2 and equations 3.1 and 3.2.

variable suggests that the context does not produce any significant changes in behavior from those produced by C6.

Although the analyses on change in behavior will allow one to get a handle on the direction in which actors shift their behavior on the h-c continuum in each context, it will be difficult to infer the probability an actor will choose a hostile or a cooperative action. To address this issue, I supplement the results with rare event logit analyses (with robust standard errors) on dichotomous dependent variables coded 1 when the dependent actor uses cooperation in the current period and 0 when the actor does not. The independent variables remain the same. To correct for the underestimation of event probabilities from unbalanced data - where hostility is more frequent than cooperation—I estimate rare event logit models to generate the expected probabilities of actors employing cooperative tactics in each context.[92] These results will be used to evaluate the qualitative hypotheses.

RESULTS

I report the ARIMA results in tabular form in Tables 5 and 6 but graph those results in Figure 3. I also display the coefficients for the logit analyses in Table 7 but report the predicted probabilities calculated from those coefficients in Table 3. I will rely on Figure 3 and Table 3 to communicate the findings.[93]

Figure 3 illustrates the estimated shifts in behavior in each context for both the dissidents (row 1) and the government (row 2) in Israel (column 1) and Afghanistan (column 2). Each bar represents the average change in the dependent actor's behavior in each of the six contexts. The change is calculated by adding the coefficient to the constant. The asterisks represent statistically significant coefficients (also see Tables 5 and 6).[94] The H1–H12 symbols link the bars to each of the twelve hypotheses. Furthermore, an H symbol located above the zero mark indicates that the change is hypothesized to be positive, while an H symbol located below the zero mark signals that the change should be negative. To illustrate, H1 is located above the zero mark in Figure 3, and the first bar (C1) in row 1 shows a positive change in dissidents' behavior across Israel (column 1) and Afghanistan (column 2). The figure communicates that hypothesis 1 is corroborated across both cases.

I begin by evaluating the first block of directional hypotheses 1–6. Hypotheses 1 and 3 state that in successful C1 and C3, dissident leaders' shifts in

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[92] See Gary King and Langche Zeng, "Logistic Regression in Rare Events Data," *Political Analysis*, 9, no. 2 (Spring 2001): 137–63. I implement the rare event logit routine written for Stata described in Tomz, King, and Zeng. The reported results are consistent with and do not differ much from the results obtained using a vanilla logit routine. Michael Tomz, Gary King, and Langche Zeng, "ReLogit: Rare Events Logistic Regression," *Journal of Statistical Software* 8, no. 2 (2003).

[93] A discussion of the diagnostic tests is reported in an online appendix, http://smshel.myweb.uga.edu/Research/Publications/TakingTacticalTurns.OnlineAppendix.pdf.

[94] Note that the asterisk tells which coefficients are significant, not which bars.

TABLE 3 Predicted Probability of Cooperation

	Israel (1979–2002) Dissident $Pr(D_T = C)$	Afghanistan (1989–1999) Dissident $Pr(D_T = C)$
$C1_T$	.14	.21
$C2_T$	.42	.17
$C3_T$	.29	.19
$C4_T$	.16	.10
$C5_T$	.41	.37
Constant ($C6_T$)	.25	.31
% classified correctly	74.67	70.72
	Government $Pr(G_T = C)$	Government $Pr(G_T = C)$
$C1_T$	.15	.24
$C2_T$	.49	.50
$C3_T$	.08	.41
$C4_T$	.20	.12
$C5_T$	.57	.60
Constant ($C6_T$)	.44	.12
% classified correctly	72.58	77.69

Note: To calculate the probability of hostility in each context, simply subtract the value for cooperation from 1.
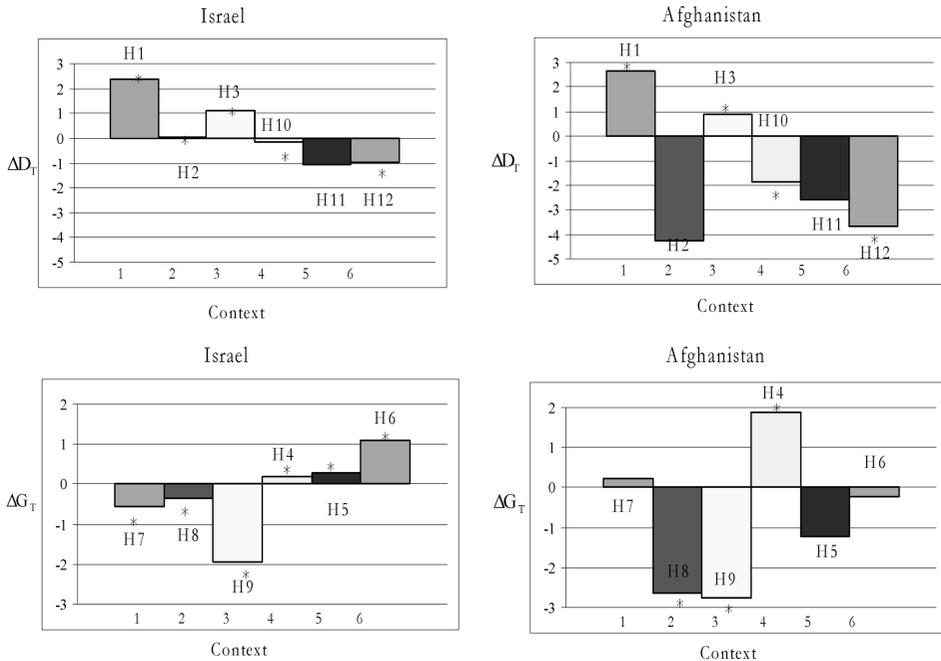
FIGURE 3 Average dissident and government change by country and context Note: *indicates that the associated coefficient on each context variable is statistically significant. (The coefficients on each context variable is added to the constant to produce the predicted change depicted in Contexts 1–5; Context 6 is represented by the constant term.)

TABLE 4 Summary of Supported Hypotheses by Country

	Israel		Afghanistan	
	Directional hypotheses	Qualitative hypotheses	Directional hypotheses	Qualitative hypotheses
H1 C1: D	✓	✓	✓	✓
H2 C2: D	✗	✗	✓	✗
H3 C3: D	✓	✓	✓	✓
H4 C4: G	✓	✓	✓	✓
H5 C5: G	✗	✓	✓	✓
H6 C6: G	✓	✓	✗	✓
H7 C1: G	✓	✓	✗	✓
H8 C2: G	✓	✗	✓	✓
H9 C3: G	✓	✓	✓	✓
H10 C4: D	✓	✓	✓	✓
H11 C5: D	✓	✗	✓	✗
H12 C6: D	✓	✓	✓	✓

Note: ✗ denotes no support, ✓ denotes support.

behavior should be positive. In such contexts, dissidents will decrease their hostility. The dissidents in Israel reduce their hostility by positively shifting their behavior from a higher level of hostility to a lower level in both C1 and C3.[95] The Afghan dissidents respond the same way. Qualitatively, both actors should choose the same type of tactic in the current turn as they did in the prior turn. Table 3 shows the predicted values for cooperation by actor, context, and country. To yield hostility probabilities, simply subtract the cooperation scores from 1. Thus, the model predicts that there is an 86 percent chance that Israeli dissidents and a 79 percent chance that Afghan dissidents choose a hostile tactic given the conditions in C1. Similarly, the predicted probabilities that Israeli and Afghan dissidents choose hostile tactics in C3 are .71 and .81, respectively. These findings are consistent with the hypotheses.

Hypotheses 4 and 6 contend that government leaders should respond in the same ways under those same conditions. In Figure 3, the Israeli government shifts its behavior in a positive fashion (becomes less hostile) in C4 and C6, while the Afghan government only does so in C4. In C6, the change in behavior (the constant) is not statistically different from zero. Qualitatively, governments should take hostile tactics in C4 and C6. This finding holds across all cases. For example, there is an 80 percent chance the Israeli government responds with hostility in C4 and an 88 percent chance the Afghani government responds in the same way. Furthermore, both governments are more likely to use hostile tactics than cooperative tactics in C6 as well. Hypotheses 2 and 5 posit that dissident and government leaders respectively

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[95] Note when an actor moves from more hostility to less hostility, the direction is positive, not negative.

TABLE 5 Dissident: Multiple Equation ARIMA Time Series Estimates

Variable	Israel (1979–2002) ΔDissident behavior	Afghanistan (1989–1999) ΔDissident behavior
	ARMA (2, 0)	ARMA (1, 0)
$DC1_T$	+3.29 (.137)***	6.35 (.467)***
$DC2_T$	+1.04 (.119)***	−.605 (1.04)
$DC3_T$	+2.09 (.162)***	4.58 (.494)***
$DC4_T$	+.824 (.094)***	1.82 (.457)***
$DC5_T$	−.067 (.173)	1.09 (1.07)
Constant ($DC6_T$)	−983 (.087)***	−3.67 (.350)***
AR(1)	−.561 (.012)***	−.338 (.041)***
AR(2)	−.282 (.012)***	—
Wald Chi 2	5504.50***	636.75***
N (turns)	6074	846
Joint-F (all DC = 0)	716.45***	136.75***
Joint-F (DC4 = Constant)	102.91***	35.95***
Joint-F (DC2 = DC5)	39.36***	2.08*
Joint-F (DC1 = DC4)	525.66***	85.70***
Joint-F (DC1 = DC3)	65.18***	15.49
Joint-F (DC1 = DC3)	—	6.56***

Note: Standard errors are shown in parentheses. ***significant at .01 level; **significant at .05 level; *significant at .10 level. One-tailed tests.

will cooperate in the next turn but decrease their cooperation levels. The bar graph indicates very little positive change in C2 for Israeli dissidents, yet the change is statistically significant from the change produced in C6. This finding conveys that while Israeli dissidents do not reduce cooperation levels in C2, they do not change their behavior much. Yet, Afghani dissidents do,

TABLE 6 Government: Multiple Equation ARIMA Time Series Estimates

Variable	Israel (1979–2002) ΔGovernment behavior	Afghanistan (1989–1999) ΔGovernment behavior
	ARMA (0, 1)	ARMA (1, 0)
$GC1_T$	−1.65 (.165)***	.451 (.475)
$GC2_T$	−1.43 (.135)***	−2.40 (1.36)**
$GC3_T$	−3.05 (.202)***	−2.53 (.526)***
$GC4_T$	−.900 (.100)***	2.11 (.501)***
$GC5_T$	−.794 (.219)***	−1.01 (1.16)
Constant ($GC6_T$)	1.09 (.095)***	−.227 (.387)
AR(1)	—	−.335 (.037)***
MA(1)	−.823 (.009)***	—
Wald Chi	15,700.00***	347.30***
N (turns)	6074	846
Joint-F (all GC = 0)	240.23***	21.37***
Joint-F (GC1 = GC3)	62.57***	.33
Joint-F (GC2 = GC5)	8.72***	10.77***
Joint-F (GC1 = GC4)	31.15***	9.62***
Joint-F (GC4 = Constant)	105.14***	.94
N	6075	847

Note: Standard errors are shown in parentheses. ***significant at .01 level; **significant at .05 level; *significant at .10 level. One-tailed tests.

TABLE 7 Rare Event Logit Estimates with Robust Standard Errors

Variable	Israel (1979-2002) Government Pr ($G_T = 1$)	Afghanistan (1989–1999) Government Pr ($G_T = 1$)
$GC1_T$	−1.45 (.155)***	0.87 (.314)***
$GC2_T$	0.21 (.094)**	2.04 (.526) ***
$GC3_T$	−2.14 (.184)***	1.70 (.325)***
$GC4_T$	−1.16 (.084)***	0.02 (.345)
$GC5_T$	0.53 (.179)***	2.43 (.534)***
Constant ($GC6_T$)	−0.25 (.072)***	−2.04 (.282)***
Wald Chi 2 576.18***		72.40***
	Dissidents Pr ($D_T = 1$)	Dissidents Pr ($D_T = 1$)
$DC1_T$	−0.73 (.160)***	−0.53 (.234)***
$DC2_T$	0.75 (.106) ***	−0.86 (.777)
$DC3_T$	0.18 (.146)	−0.63 (.276)***
$DC4_T$	−0.54 (.099) ***	−1.37 (.296)***
$DC5_T$	0.72 (.150) ***	0.27 (.479)
Constant ($DC6_T$)	−1.08 (.086) ***	−0.80 (.188)***
Wald Chi 2	337.12***	25.49***
N	6075	847

Note: DV (1 = cooperation), 0 = hostility). Robust standard errors in parentheses. ***significant at .01 level; **significant at .05 level; *significant at .10 level. One-tailed tests.

on average, decrease their cooperation levels following C2. While the bar does not indicate that change in C2 is statistically significant from change in C6, C6 illustrates decreases in Afghani dissident behavior. As a result, the finding is consistent with my expectation. Qualitatively, both governments and dissidents should be more likely to use cooperation in C2 and C5. These contexts produce the largest probabilities for the use of dissident cooperation across Israel and Afghanistan, but none are over 50 percent. However, The Afghan government clears 50 percent in C2, and both the Israeli and Afghani governments clear 57 percent in C5.

Now I evaluate the second block of hypotheses. Each of these hypotheses argues that leaders' behavior becomes more negative in failed contexts. Coalitions punish leaders who fail in interactions with the opponent. In Context 1, the government leader undercompetes and should retaliate by increasing repression (H7). Figure 3 (row 2) illustrates that while the Israeli government tends to increase its hostility in C1, the Afghanistan government does not. Instead, the government does not tend to change its behavior at all in C1, as the coefficient is not statistically significant. Qualitatively, government leaders should repeat hostile tactics in C1. Table 3 reports that government leaders in Israel (.85) and Afghanistan (.76) are more likely to use hostile tactics in C1, as expected.

Hypothesis 8 argues that government leaders will reduce their cooperation levels after overcooperating (C2). Figure 3 (row 2) shows that C2 produces a negative, statistically significant change in government behavior. Moreover, Table 3 shows that Afghan government cooperation is more likely

in C2, as anticipated. In Israel, the government is likely to use cooperation about 50 percent of the time. This is not completely inconsistent with the hypothesis, as the bar graphs indicate, that both governments are moving in the anticipated directions.

Before discussing the bully and bullied contexts (H9 and H12), I will evaluate hypotheses 10 and 11. Hypotheses 10 and 11 for the dissidents are the same as 7 and 8 for the government. H10 contends that dissident leaders increase their hostility levels in C4. Figure 3 displays a negatively signed bar for C4, illustrating that change in dissident behavior across Israel and Afghanistan is in fact negative in C4. Qualitatively, government leaders should remain hostile; Table 3 confirms that in C4, dissident leaders in both Israel and Afghanistan are more likely to use hostile tactics than cooperative ones. In fact, conditions in C4 lead Afghan dissidents to use hostile tactics 90 percent of the time. Hypothesis 11 states that dissident leaders should decrease cooperation levels in the overcooperation context (C5). Figure 3 (row 1) illustrates negative C5 bars across Israel and Afghanistan. As expected, Israeli and Afghan dissidents decrease cooperation levels in C5.[96]

Finally, I evaluate hypotheses 9 and 12 implied by the bully and bullied contexts, C3 and C6. In each context, the bully should reduce hostility levels, and the actor bullied should switch from using cooperative tactics to using hostile tactics. This implies that the actors reduce cooperation levels and increase hostility levels. Figure 3 illustrates large negatively signed bars for C3 for the Israel and Afghanistan governments. The figure also shows large negatively signed bars for C6 for the Israel and Afghanistan dissidents. Furthermore, in each case excluding the Israeli dissidents, the bars indicating responses to bully behavior are the largest, statistically significant bars for each graph. This further consolidates support for the hypotheses. Also, Table 3 reports that both actors across both countries are more likely to switch from cooperative tactics to hostile tactics after being bullied by their opponents. For example, Table 3 shows that the Israeli government is 92 percent likely to switch from cooperative to hostile tactics in C3. In the conclusion, I discuss the implications of the results more broadly and recount where these results fit into the literature on this topic.

CONCLUSION

The results for two empirical tests across two cases corroborate 83 percent of the hypotheses implied by the theory. A summary of supported hypotheses appears in Table 4. The results show how a single theory and appropriate empirical tests can answer four particular questions posed in the literature:

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[96] Note that neither is statistically significant, yet this implies that there is no difference between the amount of change produced by C5 and C6. C6 is negative and statistically significant.

1) Why do governments repress hostile dissident tactics at times and accommodate hostile dissident tactics at other times?
2) Why do governments repress cooperative dissident tactics at times and accommodate cooperative dissident tactics at other times?
3) Why do dissidents respond with hostility to hostile government actions at times and accommodate hostile government actions at other times?
4) Why do dissidents accommodate cooperative government actions at times and respond with hostility to cooperative government actions at other times?

In response to question 1, the theory argues that a government leader represses hostile tactics sometimes to minimize erosion of support from his or her coalition and to quell hostile violence on behalf of the dissidents (C1 and C3). On the contrary, a hostile government will rarely accommodate hostile dissident tactics. In response to question two, the theory argues that government leaders repress cooperative dissident tactics at times because they are repeating successful tactics that worked in the prior turn (C4 and C6). They are protecting against erosion of support from their coalition. In contrast, they sometimes accommodate cooperative tactics to prevent the dissident group from elevating its violence levels (C2 and C5). Cooperative tactics are also less of a drain on resources. This, coupled with the idea that opponent cooperation lowers one's costs, leads a government leader to employ cooperative tactics after the dissidents have employed a cooperative tactic. In response to question 3, the theory argues that dissident leaders respond to a government's hostile tactics with hostility to maintain the confidence of their followers if the dissidents were successful in the previous interaction (C1 and C3). Leaders who back down from hostile government tactics are weak. Finally, in response to question 4, my theory argues that dissidents will cooperate with a cooperative government to reduce costs (C2 and C5). When the government cooperates, the dissident leader responds with hostile tactics in the event that the dissidents previously used hostility (C3). In this instance, the leader is maintaining a strong posture to protect against internal threats but will lower his or her hostility levels to reduce costs. In sum, my theory and results account for all four competing hypotheses described at the start of the paper.

While the above payoffs are associated with this study, many other questions remain unanswered. How many previous turns do leaders consider in making their decisions? Does the length of the turn matter? Does the number of moves within each turn affect decisions? And finally, does the model apply to situations with multiple groups in competition with the state? Unfortunately, responses to these questions will have to wait for future research to answer them.

Another limitation of this study, and others like it, is that it only examines the government-dissident interactions in two countries. Furthermore, both of

these countries have long histories of conflict. We need to conduct more time series analyses in different countries, and perhaps in those that may not have such long histories of conflict, to corroborate the theory's predictions. The results from this study suggest that a micro-level theoretical and event data approach to civil conflict dynamics may bear more fruit in the future. Given these findings, more studies should be designed and carried out to determine if Israel and Afghanistan are both outliers or whether other cases comprise similar dynamics.

My theory and model will certainly not be the last word on explaining government-dissident interactions, but this study moves the literature forward by modeling government and dissident sequences, accounting for mixed findings in the literature, and concentrating on leaders and their motivations. Furthermore, the theory illuminates why many government-dissident relationships evolve into rivalries. Each leader's fear of replacement from overcooperating with the opponent leads to a perpetual rivalry between the government and the dissidents. The process tends to cycle as leaders caught in a sequence of mutual cooperation attempt to undercut one another's cooperation levels. Now that we can explain the cycle, more attention can be placed on policy recommendations to alter the cycle toward peaceful settlement.

As Francisco states, "The relationship between coercion and protest is a central element in any theory of protest . . . [and at the present time] . . . it remains unresolved."[97] This study moves us closer to understanding government-dissident, short-run dynamics. Once we better understand the core relationships between government and dissident behavior, we can begin to address other issues—building early warning models, sequentially analyzing events leading to coups and regime changes, and modeling forced migratory processes—with more confidence.

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[97] Francisco, "Coercion and Protest," 1179.