

# *Repression and Dissent: Substitution, Context, and Timing\**

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*Theory:* Two expected utility theories and one psychological/resource mobilization theory of the impact of repression on dissent are tested in this study.

*Hypotheses:* Lichbach (1987) hypothesizes that dissidents will substitute violent protest for nonviolent protest behavior (and vice versa) when confronted with repression. Gupta, Singh, and Sprague (1993) put forth a contextual argument: repression spurs violence in democracies, but high levels of repression are effective in authoritarian regimes. Rasler (1996) contends that timing matters: repression is effective in the short run, but spurs protest in the long run.

*Methods:* Sequential tests of events data are used to test the hypotheses.

*Results:* Lichbach's theory is supported by the evidence, but neither Gupta, Singh, and Sprague's nor Rasler's theories receives support.

## **1. Introduction**

Repression sparks dissident behavior, yet repression also deters dissident behavior: statistical analyses of the relationship between the two indicate that both statements can be substantiated.<sup>1</sup> Interest in this apparent anomaly has recently attracted both formal theoretical analysis<sup>2</sup> and theoretically-driven statistical tests of hypotheses.<sup>3</sup> This study asks: "Why do

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<sup>1</sup>See Lichbach (1987, 268–71), Rasler (1996, 133), and Snyder (1976, 280–3).

<sup>2</sup>See Gartner and Regan (1996), Gupta (1990), Gupta, Singh, and Sprague (1993), Hoover and Kowalewski (1992), Kowalewski and Hoover (1994), Lichbach (1987), Simon (1994), Tong (1991), and Tsebelis and Sprague (1989).

<sup>3</sup>See Alfatooni and Allen (1991), Davis and Ward (1990), Francisco (1995, 1996), Gupta (1990), Gupta, Singh, and Sprague (1993), Khawaja (1993, 1994, 1995), Koopmans (1993), Moaddel (1994), Opp and Roehl (1990), Olivier (1990, 1991), Olzak (1992), Poe and Tate (1994), Poe et al. (1996), Rasler (1996), Tong (1991), and White (1995).

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dissidents sometimes respond to state repression by increasing their conflict behavior and at other times respond by decreasing their conflict behavior?"<sup>4</sup> It empirically examines three recent theoretical explanations: Lichbach (1987), Gupta, Singh, and Sprague (1993), and Rasler (1996).<sup>5</sup> I focus on these explanations because (1) each has received empirical support in the literature,<sup>6</sup> (2) each adopts a dynamic perspective for exploring the repression-dissent nexus (i.e., each focuses on the interplay between repressive behavior and dissident responses), and (3) the explanations have not been examined using a common set of cases (i.e., comparative tests across the theories have not been conducted).

The three theories examined here offer distinct, though not necessarily mutually exclusive, explanations for the varied response of dissidents to state coercive behavior. Lichbach (1987) suggests that dissidents seek to maximize their return on protest and substitute nonviolent protest for violent protest (and vice versa) depending on state responses of repression. Gupta, Singh, and Sprague (1993) argue that repression fomenters protest behavior in democracies but deters it at high and low levels in nondemocracies (i.e., the relationship between repression and dissent in nondemocracies can be represented by an inverted-U curve). Finally, Rasler (1996) contends that the short-run impact of repression is to deter dissent, that the long-run impact of repression is to stimulate dissent, and that—in revolutionary situations—accommodation further spurs dissent.<sup>7</sup>

The relationship between repression and dissent is important for at least two reasons. First, it is closely tied to one of the major debates in the literature on violent political conflict: many rational choice explanations, including the resource mobilization/political process school (McAdam, McCarthy, and Zald 1996), suggest that repression will reduce dissident activity whereas the relative deprivation approach (Gurr 1970) suggests that repression will increase dissident activity.<sup>8</sup> The first group contends that repression

raises costs to collective action whereas the second contends that repression will increase people's sense of relative deprivation. Second, the literature is plagued by inconsistent empirical findings connected to the contrary theoretical expectations. As such, it provides a puzzle for those of us interested in evaluating general explanations of political phenomena by confronting them with systematically gathered evidence.

The present study tests all three explanations of dissidents' responses to regime repression using data from the Violent Intranational Conflict Data Project (VICDP; Moore and Lindström 1996).<sup>9</sup> The analyses fail to falsify Lichbach's model while casting doubt on the arguments put forward by Gupta, Singh, and Sprague and Rasler.

The study proceeds as follows. In the next section I briefly review the three theoretical models. The following section discusses recent efforts to examine sequences of behavior. There I make my case for why we should examine sequences to test these theoretical models. In the fourth section I describe the research design and data used to conduct the empirical tests and then report the results. In the conclusion I describe three directions for additional research suggested by this study.

## 2. Substitution, Context, and Timing

Three distinct arguments have been presented in the literature to explain why dissidents sometimes respond to repression with less protest behavior and at other times respond with increased protest behavior. Lichbach (1987) presents a formal model of dissident decision-making that presupposes that nonviolent protest and violent protest are substitutes (i.e., dissidents are willing to swap use of one in exchange for the other). Lichbach assumes that dissidents use protest behavior to pressure governments to adopt new policies (i.e., those supported by the dissidents). Because dissidents are interested in maximizing the shift in policy, they will pursue the most effective protest activity. Hence, if the state responds to violent protest behavior with repression (as opposed to accommodation), then dissidents will abandon violent protest behavior in favor of nonviolent protest behavior. Similarly, if the state represses nonviolent protest behavior, then the dissidents will respond with violent protest behavior.

Lichbach begins with the assumption that states seek to regulate political behavior and that dissidents seek to evade such regulation. To be more specific, the state seeks to compel dissidents to obey the law and employs repression to enforce that effort. The dissidents can choose to obey the law (i.e., protest peacefully or, in some cases, not at all) or disobey the law (i.e.,

<sup>4</sup>A useful distinction between "reactive" and "proactive" repression should be noted (Snyder 1976). Reactive repression is a response to some type of dissident activity whereas proactive repression occurs in the absence of dissident activity. Genocide and politicide (Harff 1992, 1994) are examples of proactive repression. This study is concerned with reactive repression.

<sup>5</sup>Francisco (1995, 1996) offers a fourth recent account, and a replication of that work using the data used in this study is reported in Lee, Maline, and Moore (1997).

<sup>6</sup>Gupta, Singh, and Sprague (1993) and Rasler (1996) report findings consistent with their arguments. Lichbach's substitution hypotheses have not been tested directly, but Rasler (1996) cites his model and reports findings that are consistent with it.

<sup>7</sup>Opp and Roehl (1990, 522) also seek to explain the variance in dissident responses to repression, but explain that "[o]ur concern is not the complex interplay of social movement tactics and more or less repressive reactions by governing regimes."

<sup>8</sup>For recent analyses motivated by this debate, see Olivier (1990, 1991) and Khawaja (1993, 1994, 1995).

<sup>9</sup>To learn more about the VICDP data, please point a World Wide Web browser to: <http://garnet.acns.fsu.edu/~whmoore/vicdp/vicdp.html>

engage in violent protest). With respect to goals, the dissidents seek to change state policy so that it more closely matches their preferred policy. The dissidents also pursue their goals within two cost constraints: the costs imposed by repression and the organizational costs imposed by collective action (i.e., whether they use nonviolent or violent protest, collective action imposes organizational costs—it is “cheaper” to do nothing). Lichbach takes these assumptions and specifies a mathematical model of the dissident’s decision and derives the following implication:

P.1: An increase in a government’s repression of nonviolence will reduce the nonviolent activities of an opposition group but increase its violent activities (1987, 285).

The proposition is symmetric across nonviolence and violence: an increase in repression of violence will also reduce the level of violence used, but increase the level of nonviolence used. Put differently, dissidents faced with repression in response to one of their tactics will substitute the other tactic in response to that repression. This conclusion follows rather directly from the assumption that repression is costly.

Gupta, Singh, and Sprague (1993) revise Lichbach’s model, using Gupta’s (1990) expected utility model as a basis for their contention that dissidents choose between economic and political activity (rather than nonviolent and violent protest). They deduce from the model that political activity (i.e., protest behavior) will be a function of government coercion, regime type (i.e., whether the state is democratic or autocratic), group identity, and benefits from economic activity. Gupta, Singh, and Sprague conduct a pooled-time-series statistical analysis of twenty-four countries (1960–80) and report that in democracies repression is positively (and linearly) associated with both nonviolent and violent protest behavior, but in nondemocracies repression has an inverted-U relationship with both nonviolent and violent protest behavior.

The Gupta, Singh, and Sprague model proposes four modifications to Lichbach’s model. First, they reconceptualize the dissidents’ choice as one between violent protest and quiescence (whereas Lichbach distinguished between violent protest and nonviolent protest). Second, they contend that group identity (i.e., solidarity) will influence dissidents’ responses to repression (i.e., groups with higher levels of identity will be more likely to protest than groups with lower levels of identity). Third, they add a term that captures the return from economic activity, thus contending that people who have attractive economic alternatives will be less likely to engage in protest than those who do not. Finally, and most importantly for this study, Gupta, Singh, and Sprague add a variable that represents regime type. Gupta, Singh,

and Sprague are primarily interested in the impact regime type has on dissident behavior controlling for coercion, group identity, and the economic opportunity costs of dissident activity (1993, 306–7). They explain:

In democratic nations, government sanctions provoke a higher level of protest demonstrations. However, in nondemocratic countries . . . severe sanctions can impose an unbearable cost, resulting in an inverse relationship between sanctions and political deaths (1993, 301).

The contention, then, is that the morass of statistical findings has been driven primarily by a failure to control for relevant variables, particularly regime type. Put differently, Gupta, Singh, and Sprague reject Lichbach’s “substitution” explanation for the distinct reactions to repression and suggest that regime type, or context, provides an adequate explanation for the contradictory empirical findings. To draw out the differences more clearly: Lichbach expects variance in dissident responses within cases and homogeneity across cases whereas Gupta, Singh, and Sprague anticipate homogeneity in dissident responses within cases and variance across cases.

Finally, Rasler (1996) develops a set of hypotheses to account for the evolution of protest behavior during the 1979 Iranian Revolution, two of which she contends explain dissidents’ varied response to repression. First she suggests that it is important to distinguish between short-run reactions to repression and long-run reactions to repression. In the short run, Rasler argues, dissidents perceive repression as a cost and, hence, decrease their protest behavior. Yet, as weeks go by,<sup>10</sup> deprivation builds and leads to a lagged spur to new protest activity. Thus, a single act of repression has both a negative “instantaneous effect” on protest activity and a positive “lagged effect” on protest activity. Second, Rasler suggests that it is important to consider not only repression, but also concessions, and hypothesizes that—in a revolutionary context—concessions will spur further protest. Using events data from Iran that she collected and aggregated weekly, Rasler finds support for both of these hypotheses.

Rasler draws upon a broad array of literature to produce her synthetic explanation of the impact of repression on protest behavior. To be more specific, she draws on both the relative deprivation and resource mobilization/political opportunity models noted in the introduction and also gleans insights from the social choice literature, threshold models of collective action, and the statistical analyses of the various models that have been proposed. As

<sup>10</sup>Rasler reports that—in the Iranian case—the period of mourning (40 days) produces a protest cycle. That is, after a death caused by repression, the community goes into mourning, but once this mourning period is observed, it starts anew with a fresh round of protest. Her statistical analysis bears out this hypothesis.

a consequence, she specifies seven different hypotheses to investigate. In this study I focus on three of these:<sup>11</sup>

H3: Government repression has direct short-term negative and long-term positive effects on protest actions (1996, 134).

H4: The short-term and long-term effects are the same for low and severe levels of repression.

H6: Government concessions increase protest actions.

Rasler, then, expects government repression to deter protest action in the short run (because it is a cost), increase protest action in the long run (because it will increase relative deprivation), and that government concessions will provoke dissent. She further stipulates that repression has a linear relationship (H4) as opposed to the curvilinear relationship found in the literature and advanced by Gupta, Singh, and Sprague for nondemocracies. To contrast it with the other theories, like Lichbach, Rasler expects variance within cases in dissident response to repression, but unlike Lichbach, she expects the variance to be observable over time rather than across types of dissident activity. In addition, she rejects the Gupta, Singh, and Sprague expectation that there will be variance across regime types and that the relationship will be curvilinear.

Thus, we have three explanations for the observation that repression sometimes deters and at other times spurs dissident activity. The first suggests that dissidents view nonviolent and violent protest activity as substitutes and select the type that best achieves their goals, depending on state repression and concessions. The second suggests that context (i.e., the type of regime) explains the difference in responses. The third focuses on timing (i.e., short-run v long-run) effects and concessions. It is important to note that these explanations are not mutually exclusive. In fact, it is entirely possible that all three explanations are useful. Below, I confront each explanation with relevant evidence from the Peruvian and Sri Lankan cases. Yet first I explain why I believe it is important to focus on sequences of interactions when conducting such tests, something that neither Gupta, Singh, and Sprague nor Rasler do in their studies.

### 3. Sequences of Intranational Conflict Behavior

A number of scholars in political science and sociology have taken interest in studying sequences of behavior (Abell 1993; Abbott 1992; Dixon 1988; Heise 1989; Schrodtt 1990; Schrodtt and Gerner 1997) and several have

<sup>11</sup>Most of her other hypotheses address spatial diffusion—rather than repression-dissent—and do not have data that enables me to test her fully specified model.

done so with a particular focus on the repression-dissent nexus (Davies and McDaniel 1996; Khawaja 1993, 1994, 1995; Olzak 1992; Poe et al. 1996; Snyder 1976; Tilly 1985). Whether it makes sense to construct one's theories by thinking about the sequence of interactions among actors depends entirely on the questions one asks. In the present study I am interested in examining dissident responses to state behavior. I submit that it is intuitive to think about this question in terms of the sequence of interactions between the state and a dissident group. Abbott (1992, 428) describes the shift to conceptual sequential analysis this way:

[Scholars] want to make processes the fundamental building blocks of sociological analysis. For them, social reality happens in sequences of actions located within constraining or enabling structures . . . In the context of contemporary empirical practice, such a conception is revolutionary. Our normal methods parse social reality into fixed entities with variable qualities. They attribute causality to the variables—hypostatized social characteristics—rather than to agents; variables do things, not social actors.

Thus, if one has an interest in interaction as a process, it makes a great deal of sense to try to conceptualize that process as a sequence of interactions, and such a conceptualization is rather distinct from traditional conceptualization of intranational conflict.<sup>12</sup> With respect to the present study, the impact of repression on dissident decision making is a topic which I contend can be usefully conceptualized using a sequential analysis approach. Further, Lichbach's expected utility theory is explicitly a theory about the sequence of interactions between the state and a dissident group, and Rasler is partially motivated by such thinking.

The Abbott quote explains that there are research design consequences of conceptualizing answers to questions from a sequential analysis approach. I submit that with respect to the repression-dissent nexus, sequential analysis should be preferred on both conceptual and research design grounds. The superiority of a sequential analysis research design is, of course, dependent upon the acceptance of the claim made above that sequential analysis is conceptually superior (i.e., research designs must be driven by theory). That said, there are a number of reasons to prefer sequential analysis to what might be usefully labeled "aggregate analysis" when one is interested in studying conflict interactions. Dixon (1988) and Olzak (1992) are two good sources for more detailed accounts of the arguments sketched briefly here.

<sup>12</sup>For a discussion of the merits, and drawbacks, of constructing social theory by thinking about sequences, see Abell (1993), Abbott (1992), and Heise (1989).

Dixon is interested in the utility of action-reaction models to account for international conflict behavior. Olzak is interested in studying immigrant responses to coercive action taken by dominant ethnic groups that feel threatened by economic competition from the immigrants. Both note that the research designs of traditional statistical analyses of conflict behavior select a particular unit of time over which to aggregate their data. To select two studies that are germane to the present analysis, Gupta, Singh, and Sprague select the year over which to aggregate their observations and Rasler selects the week. Most all statistical analyses of the repression-dissent nexus choose some unit of time over which to aggregate their data. The charges leveled against this practice are that it is (1) arbitrary (i.e., the appropriate unit is not theoretically driven) and (2) the choice will influence the results obtained. The second charge has been substantiated by Freeman (1989) who demonstrates that a single statistical model produces different parameter estimates using data from a single source but aggregating that data over different units of time (i.e., years, quarters, and months). In addition, Tuma and Hannan (1984) point out that by aggregating the data over some unit of time we throw out information. When we are interested in questions concerning the interactions of actors over time, the information we are throwing out is precisely relevant to our question.

Unfortunately, there is no single statistical technique to use when one is interested in sequential analysis. Rather, there are several. Thus, scholars new to sequential analysis find themselves confronted with a variety of techniques from which to choose, some of which are not commonly available in statistical packages.<sup>13</sup> The good news, however, is that a number of different techniques have been developed to enable researchers to examine a number of different specific questions, and the ones used in this study are very familiar to political scientists.

#### 4. Empirical Tests

In this section I describe the statistical analyses. It is organized in three subsections: research design, data, and results.

##### 4.1 Research Design

Because the three theoretical arguments tested below are distinct (though not necessarily mutually exclusive), I developed different statistical tests for each. The same basic statistical model is used to test both the Gupta, Singh, and Sprague and Rasler explanations as the major distinction between them concerns specific variables. However, the Lichbach model produces hypotheses that are most usefully tested using a distinct research design.

##### 4.1.1 Substitution?

To test Lichbach's substitution hypotheses requires that we isolate specific sequences. To be specific, we are interested in the following sets of sequences:

- Nonviolent protest, State repression, \_\_\_\_\_
- Violent protest, State repression, \_\_\_\_\_

I am interested in the third event in each sequence: the dissident's response to state repression. Lichbach's model anticipates that in the first sequence the dissidents will respond with increased violence, and in the second sequence the dissidents will lower their level of violence.

To determine whether these hypotheses are fulfilled with the Peruvian and Sri Lankan data, I first isolated each of the sequences above from the rest of the sample and then conducted difference of means tests between the two actions taken by the dissidents in the sequence (i.e., the first and third event in each sequence).

##### 4.1.2 Action—Reaction?

As Lichbach (1987) suggests, the dominant theoretical model for understanding the interactive behavior of parties to a conflict situation is the action-reaction or tit-for-tat model (Axelrod 1984). This is especially true in the study of international relations where these models have met with a great deal of success when tested (Dixon 1988, 240; Goldstein 1995, 454–7). Both the Gupta, Singh, and Sprague and Rasler explanations can be incorporated nicely into such a framework: Gupta, Singh, and Sprague suggest that dissidents in democracies will respond differently to repression than will dissidents in nondemocracies, and Rasler suggests that repression will have both a short-run and long-run effect on dissident behavior, but both explanations anticipate dissident behavior to be primarily driven by state repression. Thus, like both the Gupta, Singh, and Sprague and Rasler studies, I design the statistical analysis by specifying an action-reaction equation where dissident activity is a function of repression, but instead of using the regression techniques used in those studies, I follow Dixon (1988) who makes a case for the superiority of using a logit estimator.

##### 4.2 Data

The data used in this study come from the Violent Intranational Conflict Data Project (VICDP; Moore and Lindström 1996). VICDP collected intranational conflict events data using a scheme modeled loosely after the Cooperation and Peace Databank (COPDAB; Azar 1982) over the years 1955–91. Using *The New York Times Index* and regional news diaries, coders generated the data using the coding scheme presented in Table 1. Both

<sup>13</sup>For an effort to improve upon this situation, see Bakeman and Quera (1995).

Table 1. VICDP Event Scale

<b>1) Agreement-Resolution:</b> The internal war is terminated because the underlying conflict is resolved such that each party's needs are guaranteed.
<b>2) Agreement-Settlement:</b> The internal war is terminated and the underlying conflict settled as a consequence of the construction of institutions that will manage future conflict.
<b>3) Agreement-Termination:</b> The parties agree to terminate the internal war but do not create new institutions for managing the underlying conflict.
<b>4) Statements of Support:</b> One party supports another; rescinding policies aimed at hindering adversary; cease-fire; release of prisoners.
<b>5) Negotiations:</b> Parties to the conflict negotiate with one another.
<b>6) Agreement to Negotiate:</b> Parties to the conflict agree to negotiate with one another.
<b>7) Meetings:</b> Talks about talks; exchanges of officials; dialogue between the parties; statements/expressions of willingness to consider adversary's positions; canceling censorship of press.
<b>8) Neutral and "No Comment" Statements:</b> Noncommittal comments regarding other parties to the conflict and their actions; government's release of prisoners against whom it has no case.
<b>9) Mild Verbal Expressions:</b> Mildly negative statements about other parties to the conflict, their representatives, proposals, or activities.
<b>10) Strong Verbal Expressions:</b> Strongly negative statements about other parties to the conflict, their representatives, proposals, or activities.
<b>11) Diplomatic-Economic Hostile Actions:</b> Urging other states to adopt economic sanctions; laws that restrict economic activity of minorities; strikes, consumer boycotts, nonviolent demonstrations.
<b>12) Political-Military Hostile Actions:</b> Demonstrations turned violent (only code state if police/army is sole perpetrator of violence—code nonstate activity as 11; if no state action, code dissident group as sole actor); discriminatory laws of a political nature; arrests; sentencing to prison, detention, death, etc.
<b>13) Small Scale Military Acts:</b> Land mines; sabotage (nonhuman targets); forced relocation of population (Private Villages); capturing adversary's troops.
<b>14) Limited War Acts:</b> Isolated/sporadic guerrilla activity (human targets); isolated/sporadic human rights violations (Collective Punishment); isolated/sporadic counterinsurgent operations; suspension of civil law in selected areas.
<b>15) Extensive War Acts Causing Deaths, Dislocation, and High Strategic Costs:</b> Regular guerrilla warfare; regular counterinsurgent operations; systematic human rights violations; widespread (greater than 80% of territory) suspension of civil law.

the actor and the target of the event were recorded as was the date and source used.

The coding scheme in Table 1 is built on the assumption that it is useful to conceptualize human interaction along a cooperation-conflict continuum

Table 2. VICDP Weighting Scheme

Scale	
	5.0*
2	10.0
3	9.0
4	5.0
5	5.0
6	4.0
7	3.5
8	0.0
9	1.5
10	3.0
11	3.5
12	6.0
13	6.0
14	8.0
15	8.5

\*This event was assigned a weight of either 0 or 10 by most judges, indicating that the instrument was poor. Yet, for this study that is not a problem as neither the Peruvian nor the Sri Lankan case has any events assigned a VICDP score of one.

and that when one does so it is possible to assign ordinal values to action taken by one party toward another.<sup>14</sup> Of course, these ordinal values cannot be used in statistical analyses that require interval-level measures, and thus a weighting scheme must be created that can be used to produce interval-level data. To create a weighting scheme, Moore and Lindström (1996, 5–6) followed Azar (1982) and Goldstein (1992) and surveyed twenty-one research faculty who have an interest in intranational conflict. The weights produced by the survey are reported in Table 2, and they were used to create the data used in the analyses reported below.

Producing weighted events data is, however, only part of the data preparation process for this analysis. Because I am interested in sequences of events, it is necessary to further manipulate the data. The trouble is that actors do not behave in the ordered manner that our theories impose on them (Dixon 1988, 247; Marlin-Bennett, Rosenblatt, and Wang 1991, 202). Thus, if one is interested in the VICDP event interaction between actors A and B, a common sequence one might observe—noting only the actors—is: A, A, A, B, A, B, B, A, B, . . . . As a consequence, the analyst must devise a method for producing an ordered sequence of interaction: A, B, A, B,

<sup>14</sup>The VICDP scheme thus produces data on what is often referred to as the "intensity" of conflict behavior (i.e., the degree of violence), but not the "scope" of the behavior (i.e., the number of people involved). See Gurr (1970, 9–10).

### *Correction*

Moore transposed the words ‘turn’ and ‘move’ on the top of p. 862. Starting with the sentence that begins “For example, the first three “turns”...” the remainder of the paragraph should read:

For example, the first three “moves” in the hypothetical sequence above (i.e., A, A, A) comprise actor A’s first “turn.” Actor B’s first “turn” is comprised of a single “move” (i.e., B), as is actor A’s second “turn.” Actor B’s second “turn” is comprised of two “moves” (i.e., B, B). Following Marlin-Bennett, Rosenblatt, and Wang, I transformed the stream of “move” interactions into a stream of “turn” interactions and use the “turn” data below. To convert the “moves” into “turns,” I calculated the mean score of the “moves” that comprised each “turn.”

A, . . . Marlin-Bennett, Rosenblatt, and Wang (1991, 202–3) introduce a useful distinction between “turns” and “moves.” In the hypothetical sequence above, each entry in the sequence is a “move” (e.g., the first four moves are: A, A, A, B). A “turn,” then, consists of an uninterrupted sequence of “moves” by the same actor. For example, the first three “turns” in the hypothetical sequence above (i.e., A, A, A) comprise actor A’s first “move.” Actor B’s first “move” is comprised of a single “turn” (i.e., B), as is actor A’s second “move.” Actor B’s second move is comprised of two “turns” (i.e., B, B). Following Marlin-Bennett, Rosenblatt, and Wang, I transformed the stream of “turn” interactions into a stream of “move” interactions and use the “move” data below. To convert the “turns” into “moves,” I calculated the mean score of the “turns” that comprised each “move.”

The hypotheses also require one to distinguish nonviolent protest, violent protest, and accommodation. The VICDP events data can be easily divided into such categories. All cooperative events (i.e., those scored between 1 and 7, inclusive on the VICDP scale) are considered accommodation events. The conflictual events are divided into two groups: nonviolent protest events (i.e., those assigned between 9 and 11, inclusive on the VICDP scale) and violent protest events (i.e., those assigned between 12 and 15, inclusive on the VICDP scale). In general I use the weighted VICDP score for each type of event in the tests below, but in some cases—which are noted in the text—it is appropriate to simply make use of a dummy variable which codes the absence/presence of one of the three variables.

Since I am interested in the interactions between actors, I needed to create both the dissident and state actors in these data. Further, because the actors involved are case-specific, it will be useful to first explain why I selected the Peruvian and Sri Lankan cases, 1955–91. These two cases were selected in large part because one of the dissident actors in each case—Sendero Luminoso in Peru and the Tamil Tigers in Sri Lanka—are widely recognized as especially violent guerrilla movements. So-called “violent groups” serve as the strongest challenge to Lichbach’s theory (i.e., they would be least likely to substitute nonviolent protest for violent protest). As such, the presence of these actors’ behavior in the data make these two cases strong tests for Lichbach’s explanation.

Because I am interested in a dyadic interaction (i.e., state behavior toward dissidents rather than state behavior toward any and all actors), and the VICDP data identify each actor by the name used in press reports, it is necessary to create “state” and “dissident” actors, and then identify those events where the state acted against the dissidents or vice versa. The VICDP data identifies the following “state” actors:

- Government (i.e., executive, legislative, and judicial)
- Military

I selected only events where either the government or the military took action toward either a dissident group, the population (or a subset such as an ethnic group or a labor union), or a political party. A list of the actors that form the “state to dissident” dyads is provided in Table 3a and 3b.

The population (i.e., nongovernment) is divided into several groups in the VICDP data:

- Ethnic Groups and Population
- Guerrillas
- Social Groups (e.g., students, labor unions, etc.)
- Political Parties
- Organized Crime
- Elites (e.g., business organizations, landowners, etc.)

Again, I am only interested in the “dissident to state” dyad (i.e., “dissident to dissident” interactions are not studied).<sup>15</sup>

#### 4.3 Results

I begin with a discussion of the results from testing Lichbach (1987) and move on to discuss the tests of Gupta, Singh, and Sprague (1993) and Rasler (1996). Lichbach’s model implies two hypotheses that were tested:<sup>16</sup>

H1: When the state responds to nonviolent dissident protest with violence, then the dissidents will increase their use of violence (i.e., substitute violence for nonviolence).

H2: When the state responds to violent dissident protest with violence, then the dissidents will decrease their use of violence (i.e., substitute nonviolence for violence).

To test these hypotheses I isolated the relevant sequence and then conducted a difference of means test between the dissident event preceding the state

<sup>15</sup>The “state to dissident” and “dissident to state” dyads are mirror images of one another conceptually but not necessarily empirically. In other words, there are some dyads where the state may take action against a group or sector of the population, but that group or sector will not respond in kind (or vice versa).

<sup>16</sup>Lichbach (1987, 287) proposes a third hypothesis that I do not have appropriate data to test: “[c]onsistent government accommodative and repressive policies reduce dissent while inconsistent policies increase it.” See Rasler (1996) for an empirical assessment of this hypothesis.



Table 3a. The Peruvian Dyads

State	Dissident
Government, Military, Unspecified Govt. Forces	Indians
Government, Military, Unspecified Govt. Forces	Population
Government, Military, Unspecified Govt. Forces	Unspecified Guerrillas
Government, Military, Unspecified Govt. Forces	Sendero Luminoso
Government, Military, Unspecified Govt. Forces	Communist Guerrillas
Government, Military, Unspecified Govt. Forces	Tupac Amaru
Government, Military, Unspecified Govt. Forces	National Liberation Front
Government, Military, Unspecified Govt. Forces	Jaen
Government, Military, Unspecified Govt. Forces	Revolutionary Vanguard
Government, Military, Unspecified Govt. Forces	Media
Government, Military, Unspecified Govt. Forces	Students
Government, Military, Unspecified Govt. Forces	Government Workers
Government, Military, Unspecified Govt. Forces	Workers
Government, Military, Unspecified Govt. Forces	Educators
Government, Military, Unspecified Govt. Forces	Peasants
Government, Military, Unspecified Govt. Forces	Indian Peasants
Government, Military, Unspecified Govt. Forces	General Confederation of Workers of Peru
Government, Military, Unspecified Govt. Forces	Labor Revolutionary Movement
Government, Military, Unspecified Govt. Forces	Farmers
Government, Military, Unspecified Govt. Forces	Catholic Church
Government, Military, Unspecified Govt. Forces	National Coalition Party
Government, Military, Unspecified Govt. Forces	National Coalition
Government, Military, Unspecified Govt. Forces	APRA
Government, Military, Unspecified Govt. Forces	Christian Democrats
Government, Military, Unspecified Govt. Forces	Communist Party
Government, Military, Unspecified Govt. Forces	Popular Action Party
Government, Military, Unspecified Govt. Forces	Popular Christian Party
Government, Military, Unspecified Govt. Forces	Missing*

\*The "Government, Military, Unspecified Govt. Forces—Missing" dyad was only included when the actor was missing. That way I was able to include anonymous attacks on the government as dissident attacks.

event and the dissident event.<sup>17</sup> The results of the difference of means test are reported in Table 4.<sup>18</sup> In addition to testing the difference between the two dissident events I also created moving average variables and examined

<sup>17</sup>There are 274 "turns" in the Peruvian data and 570 "turns" in the Sri Lankan data. Thus, there are 135 "dissident, state, dissident" sequences in the Peruvian data and 285 in the Sri Lankan data. Table 4 indicates that 83 of the 135 "dissident, state, dissident" sequences in Peru and 167 of the 285 "dissident, state, dissident" sequences in Sri Lanka were relevant to Lichbach's hypotheses.

<sup>18</sup>Because conflict (i.e., violence) is negatively signed when one uses the VICDP weights, I report absolute values in Table 4 to avoid the awkward circumstance of discussing "negative in-

Table 3b. The Sri Lankan Dyads

State	Dissident
Government, Military	Indian Tamils
Government, Military	Sri Lankan Tamils
Government, Military	Moslems
Government, Military	Sinhalese
Government, Military	Indian Tamil Immigrants
Government, Military	Malayalees
Government, Military	Population
Any other Actor	Unspecified Guerrillas*
Any other Actor	Unspecified Tamil Guerrillas*
Any other Actor	Unspecified Sinhalese Guerrillas*
Any other Actor	Liberation Tigers of Eelam*
Any other Actor	Eelam National Liberation Front*
Any other Actor	Che Guevarra Movement*
Government, Military	Media
Government, Military	Students
Government, Military	Government Workers
Government, Military	Unspecified Labor
Government, Military	Buddhist Monks
Government, Military	Communists
Government, Military	Leftists
Government, Military	Rightists
Government, Military	Tamil Federation Party
Government, Military	Sri Lanka Freedom Party
Government, Military	United National Party
Government, Military	JVP—Liberation Front
Government, Military	Tamil United Liberation Front
Government, Military	Ceylon Worker's Party
Government, Military	Lanka Sama Samaj Party
Government, Military	Sinhalese Vigilante Groups
Government, Military	Intellectuals
Government, Military	Business Organization
Government, Military	Missing**

\*The term "Any other Actor" indicates that whenever a guerrilla group was the actor in an event, that event was included (regardless of whether the target was the state, an ethnic group, or other group). However, when guerrillas were the target of an event, the event was only included if the actor was the government or the military. This decision was invoked because I am only interested in studying state repression of guerrillas.

\*\*The "Government, Military—Missing" dyad was only included when the actor was missing. That way I was able to include anonymous attacks on the government as dissident attacks.

creases." I used the STAT command in Shazam! (ver. 7.1) to conduct the analysis of variance (ANOVA) tests reported in Table 4. See Bohrnstedt and Knoke (1982, 197–212) for a discussion of using ANOVA to test for the difference between means.

**Table 4. Test of Lichbach: Difference of Pre- and Post-Repression Means**

	Peru			Sri Lanka		
	Mean	F	N	Mean	F	N
H1: Pre-State						
H1: Post-State		1.06	26		38.06	23
H2: Pre-State						
H2: Post-State		6.68	57		13.40	146

whether differences surfaced when they were used in place of the single event variables. The results did not differ, except where noted.<sup>19</sup>

The test of H1 is mixed across the two cases: in Peru there is no substitution observed (though there is a slight increase in violence, the F-statistic indicates that the difference is not statistically significant), but in Sri Lanka the dissidents respond with a dramatic increase in violence (the score more than doubles and the F-statistic indicates that the difference is statistically significant). Thus, dissidents in Peru did not respond to a “nonviolent protest, repression” sequence with an increase in violence, but dissidents in Sri Lanka did.<sup>20</sup>

The test of H2, however, is unambiguous: in both cases dissidents responded to a repressive response to their own violent action by decreasing their own level of violence. The F-tests indicate that the reduction is statistically significant in both cases, though the drop is not as dramatic as the rise in the Sri Lankan case above. Nevertheless, these two cases provide unqualified support for H2: Peruvian and Sri Lankan dissidents responded to a “violent protest, repression” sequence by substituting nonviolent action for violent action.

What of the tests of the Gupta, Singh, and Sprague (1993) and Rasler (1996) hypotheses? It turns out that neither of these hypotheses was sup-

<sup>19</sup>For the event prior to state action I created a three event moving average (i.e.,  $\frac{Event_{-2} + Event_{-1} + Event_0}{3}$ ). For the event following the state action I also used a three event moving average (i.e.,  $\frac{Event_0 + Event_{+1} + Event_{+2}}{3}$ ). Because I am only interested in dissident events, I skipped the state events when calculating these moving average variables (recall that the data are ordered as a strict sequence).

<sup>20</sup>These results hold across all combinations of the single event and moving average variables, but it is interesting to note that the increase in violence in Sri Lanka drops dramatically—from 3.25 to 1.23—when using both moving average variables, suggesting that these effects have a short-run impact. This finding is consistent with Rasler’s hypothesized short-run versus long-run effects of repression on dissent.

ported by the data from either case. To test the Gupta, Singh, and Sprague contention concerning democracies and nondemocracies I estimated a logit model where dissident behavior toward the state<sup>21</sup> was estimated as a function of its own lagged behavior<sup>22</sup> and state repression.<sup>23</sup> I then used the Polity III data (Jagers and Gurr 1995) to determine whether or not the state was democratic, using a decision rule that when the DEMOC variable (i.e., democracy) was greater than the AUTOC variable (i.e., autocracy), the country was a democracy. This decision rule led me to code Peru as a democracy from 1955 through 1968 and 1980 through 1991, and Sri Lanka as a nondemocracy for the entire (1955–91) period. The Gupta, Singh, and Sprague argument suggests the hypothesis that the state repression variable will produce a positively signed parameter estimate for Peru 1955–68 and 1980–91.<sup>24</sup> It also suggests that the state repression variable will produce a positively signed parameter estimate for the state repression variable in Peru 1969–79 and Sri Lanka, and the squared state repression variable will produce a negatively signed parameter estimate in Peru 1969–79 and Sri Lanka. The results are reported in Table 5.

Turning to Table 5, the parameter estimate for the repression variable for Peru as a democracy is statistically significant, but it has a negative sign and Gupta, Singh, and Sprague contend that the sign should be positive.<sup>25</sup> When estimating the model for Peru as a nondemocracy both repression and repression-squared are positively signed and neither parameter is statistically significant. In the Sri Lankan case the signs are the opposite of their predicted direction (i.e., the repression parameter has a negative sign and the

<sup>21</sup>In creating a dichotomous dependent variable I used two cut-off points in the VICDP scale. I first estimated equations using a variable that was scored 1 when the event had a VICDP score greater than 8 (i.e., was a conflictual event). Because that variable is so skewed (especially in Peru where ninety out of ninety-seven cases were scored 1), I also estimated the same model using a variable that was scored 1 when the event had a VICDP score greater than 11 (i.e., was a violent conflictual event). I used the second variable in the results reported in Table 5. There were no changes in either the sign or significance of any of the variables when I used the first variable.

<sup>22</sup>Including a lagged endogenous variable has the dual virtue of controlling for autocorrelation in the time-series and providing an estimate for what Dixon (1988) and Goldstein (1995) refer to as inertia or bureaucratic politics (i.e., the tendency for organizations to stick to a policy).

<sup>23</sup>The equations used to test the Gupta, Singh, and Sprague hypothesis are: Dissident Behavior toward the State = f(Dissident Behavior toward the State in the previous Dissident “turn,” State Behavior toward the Dissidents in the previous State “turn”) for democratic cases, and Dissident Behavior toward the State = f(Dissident Behavior toward the State in the previous Dissident “turn,” State Behavior toward the Dissidents in the previous State “turn,” the square of State Behavior toward the Dissidents in the previous State “turn”) for nondemocratic cases. The Logit estimator in Shazam! (v. 7.1) was used to estimate the equations.

<sup>24</sup>I pooled these two samples to take advantage of the increased number of cases.

<sup>25</sup>When I used the VICDP event score greater than eight as the cut-off for the dependent variable, the parameter estimate for repression was also negative, but it was not statistically significant.

Table 5. Test of Gupta, Singh, and Sprague: Logit Estimates

	Peru-Democ	Peru-Nondemoc	Sri Lanka
Repression <sub>-1</sub>			
Repression <sub>-1</sub> <sup>2</sup>			
Protest <sub>-1</sub>	-0.026 (0.069)		
Constant	-0.095		
N	97		

*Note:* The parameter estimate is listed above its standard error (in parentheses). Variables that are statistically significant ( $\alpha = .05$ ) are marked with an asterisk. "NA" indicates that the variables are not applicable (i.e., were not estimated).

repression-squared variable has a positive sign), and only the repression-squared variable produced a statistically significant parameter estimate. Thus, the parameter estimates either failed to achieve statistical significance and/or produced the wrong sign, leading me to reject Gupta, Singh, and Sprague as a useful explanation for variations in dissident responses to repression in these two cases.<sup>26</sup>

To test the Rasler (1996) hypotheses concerning short-run v long-run effects and the impact of accommodation, I began with the same action-reaction logit model that I used for the Gupta, Singh, and Sprague test. This time, however, dissident protest<sup>27</sup> is a function of the dissident's previous behavior, previous government action, and a lagged variable of past government action.<sup>28</sup> To capture Rasler's distinction between state repression and state accommodation, I created two new variables: repression, which was coded zero when the VICDP event score was less than eight, but retained its

<sup>26</sup>I should note that Peru (1960–80) is one of the twenty-four countries used in the Gupta, Singh, and Sprague study, though Sri Lanka is not. However, the fact that we used different statistical models, research designs, and data preclude any direct comparison of the different results.

<sup>27</sup>Again, I estimated the equation using both versions of the dependent variable described above and report the estimates obtained using the variable that uses VICDP events with a score greater than 11. As in the Gupta, Singh, and Sprague test, using a different operational indicator did not influence the results.

<sup>28</sup>Several different equations were estimated, and the results can be obtained by contacting the author. The general specification of the equations is: Dissident Behavior toward the State =  $f(\text{Dissident Behavior toward the State in the previous Dissident "turn," State Conflict Behavior toward the Dissidents in the previous State "turn," State Conflict Behavior toward the Dissidents in the preceding State "turns," State Cooperative Behavior toward the Dissidents in the previous State "turn"})$ .

Table 6. Test of Rasler: Logit Estimates

	Peru	Sri Lanka
Repression <sub>-1</sub>		
Repression <sub>-10</sub>		
Accommodation <sub>-1</sub>		
Protest <sub>-1</sub>		
Constant		
N		

*Note:* The parameter estimate is listed above its standard error (in parentheses). Variables that are statistically significant ( $\alpha = .05$ ) are marked with an asterisk.

value otherwise; and accommodation, which was coded zero when the VICDP event score was greater than eight, but retained its value otherwise. In addition, I explored the following lag structures for repression: 2, 3, 4, 5, 10, 15. The results are reported in Table 6 using the 10 event-lag structure. Any differences in parameter estimates when other lag structures were used are explained in footnotes.<sup>29</sup>

Both cases produced similar parameter estimates: the parameter estimates for both immediately previous repression and 10 event-lagged repression are positively signed and, in the Peruvian case, statistically significant. In the Sri Lankan case, only the immediately previous repression variable was statistically significant.<sup>30</sup> Further, in neither case did accommodation produce a statistically significant parameter estimate (though it is positively signed as Rasler argues it should be). Thus, there is little support for Rasler's hypothesized short-run v long-run effects of repression on dissident activity,

<sup>29</sup>In addition, since it is unclear whether either case should be considered revolutionary, I also estimated the equations without the accommodation variable (which failed to produce statistically significant parameter estimates). The results did not differ from those reported here.

<sup>30</sup>In the Peruvian case the signs were both negative (with neither estimate significant) using the 2 event-lagged variable in place of the 10 event-lagged variable. The signs are in the expected direction (with neither estimate significant) using the 3 event-lagged, 4 event-lagged, and 5 event-lagged variable in place of the 10 event-lagged variable. No other deviations from the results reported in Table 6 were found using the Peruvian data. In the Sri Lankan case the 4 event-lagged variable produced a statistically significant and positively signed parameter estimate, but the immediately previous repression variable was also positively signed. No other deviations from the results reported in Table 6 were found using the Sri Lankan data.

and while the accommodation variable parameter estimates were properly signed, the standard errors suggest that they are best interpreted as not having an impact on dissident behavior. As a consequence, I reject Rasler's explanation as useful for trying to understand dissident responses to repression in Peru and Sri Lanka, 1955–91.

To recapitulate, the statistical analyses fail to provide support for either the Gupta, Singh, and Sprague or Rasler explanations for the variance in dissident responses to state repression. However, the Lichbach explanation fares very well when put to the test. As such, I conclude that the Lichbach model provides the best explanation for understanding why Peruvian and Sri Lankan dissidents sometimes respond to repression by lowering their level of conflict and at other times respond by raising their level of conflict. Nevertheless, as many others working in this area of inquiry have remarked, there is a great deal of room for additional inquiry. In the concluding section I turn my attention toward future directions.

### 5. Conclusion

This study reports the findings from empirical tests of three explanations of dissident responses to state repression. Lichbach's model appears to be the most promising. It suggests that repression can be used to shape dissident behavior, but not to "eliminate" it: states can entice dissidents to abandon violent behavior for nonviolent behavior and vice versa.

Future analyses can strengthen this research in at least three ways. First, this study is limited to an analysis of dissident response to state repression and ignores the reciprocal impact of dissent on states' decision to repress. Davenport (1995, 1996), Henderson (1991, 1993), and Moore (1997) examine the impact of dissent on states' decision to repress, and more work on that linkage is needed.

Second, states do not face a choice between repression and nothing. As Tilly (1978) and Ames (1987), among others, remind us, states also co-opt their opponents. Hence, a satisfying theoretical account of state-dissident interaction must account for not only the reciprocal interaction between states and dissidents, but also the co-optive as well as repressive action taken by states. My own future research agenda will hopefully make a contribution in this direction.

Finally, this study is limited by the small number of cases examined. Additional sequential analyses that replicate this study and others that test distinct arguments and hypotheses are warranted.

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