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Author(s): Mark Irving Lichbach

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# Deterrence or Escalation?

## THE PUZZLE OF AGGREGATE STUDIES OF REPRESSION AND DISSENT

MARK IRVING LICHBACH

*Department of Political Science  
University of Illinois at Chicago*

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Aggregate data studies of domestic political conflict have used an Action-Reaction (AR) model that has produced contradictory findings about the repression/dissent nexus: Repression by regimes may either increase or decrease dissent by opposition groups. To clarify these findings I propose an alternative Rational Actor (RA) model from which are derived three propositions. (1) An increase in a government's repression of nonviolence will reduce the nonviolent activities of an opposition group but increase its violent activities. (2) The balance of effects, that is, whether an increase in the regime's repression increases or decreases the opposition group's *total* dissident activities, depends upon the government's accommodative policy to the group. (3) Consistent government accommodative and repressive policies reduce dissent; inconsistent policies increase dissent. The RA model thus accounts for the contradictory findings produced by the AR-based aggregate data studies of repression and dissent.

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### THE PUZZLE IDENTIFIED

This article begins with an observation that current theories cannot explain: deterrence works. And then again, deterrence doesn't work. Repression by regimes may either escalate or deescalate dissent by opposition groups. For example, demonstrations and strikes may be met by police crowd control tactics; bombings and assassinations by antiterrorist campaigns, guerilla wars and national liberation movements by counterinsurgency measures; and military coups by military

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**AUTHOR'S NOTE:** This article is dedicated to the memory of my father, Joseph Lichbach, who died suddenly, before we could enjoy seeing the article appear in print.

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forces. Such government responses may or may not deter an opposition group's dissident activities.<sup>1</sup>

These examples are puzzling because the major model used to explain the repression/dissent nexus, a mechanical Action-Reaction model of government and opposition, cannot account for the contradictory impact of government policies on dissent. As will be explained later, the Action-Reaction model parsimoniously explains either, but not both, possible outcomes of government repression. We therefore have no theoretical guide to understanding the many empirically observed effects of repression on dissent.

This confusion about the repression/dissent nexus has exasperated scholars working in the field of conflict studies. Zimmerman (1980: 191) comments that "there are theoretical arguments for all conceivable basic relationships between government coercion and group protest and rebellion, except for no relationship." Eckstein's (1980: 160) comments on the ambiguities are that "any curve or no curve" can fit the major competing arguments. Thus while the literature displays a "near consensus that government's use of force influences the extent of violence within their boundaries" (Snyder, 1976: 277), and the major theoretical statements of Gurr (1970) and Tilly (1978) identify government coercion as perhaps the most important factor accounting for political dissent, we currently do not know why government coercion produces mixed effects on popular strike.

This article attempts to resolve the apparent indeterminacy in the relationship between government coercion and opposition activities. To do so we must discover the necessary and sufficient conditions under which repression produces both positive and negative effects on dissent. When does repression deter or inflame protesters, rebels, and terrorists?

There are two approaches to resolving the indeterminacy in the linkage between repression and dissent. Eckstein (1980: 156) suggests that "we need here both better data and better reasoning." Thus one could focus on the intricacies of previous empirical tests and suggest that the different conclusions arise from alternative definitions of repression and conflict, whether repression is societywide, group-specific, or tactic-specific, different *ceteris paribus* understandings about the context in which repression is used, and various time-frames in which the effects on conflict are examined. Most modelers have taken this approach and

1. Similar confusions about the efficacy of deterrence exist in the literature on international deterrence (Morgan, 1977) and in the literature on the social psychology of bargaining and negotiation (Bachrach and Lawler, 1981: 130).

hence have tried to explain the repression/dissent nexus with a heavy dose of induction, attributing it to an eclectic set of psychological and systemic factors. Gurr and Lichbach's (1979) econometric and Midlarsky's (1978) stochastic models of conflict are in this tradition. This article will take Eckstein's other tack. I will attempt to provide the better reasoning by offering a very parsimonious "rationalist" model of the activities of an opposition group that resolves the puzzling contrary empirical generalizations associated with the repression/dissent nexus. In offering an analytical model to gain insight into the relationship between repression and dissent the approach is in the spirit of Sandler et al.'s (1983) rational choice model of terrorism.

The principal results support three propositions. (1) An opposition group shifts its tactics in response to government's coercive policy: An increase in government's repression of nonviolence may decrease the nonviolent activities of an opposition group but increase its violent activities. (2) An opposition group alters its activities in the aggregate in response to government's accommodative policy: The balance of effects, and hence whether an increase in the regime's repression increases or decreases the opposition group's *total* conflict activity, depends on government's concessions to the opposition group. (3) Repression can thus produce mixed effects on strife: Consistent government accommodative and repressive policies reduce dissent while inconsistent policies increase it.

The article is divided into five core parts. The following section summarizes the contradictory empirical findings that have emerged in aggregate data studies of repression and dissent. In section three, I elaborate a Rational Actor (RA) model of an opposition group. The fourth section presents the deductions from the model. The fifth section compares our RA model of dissent and repression to the orthodox theory in the field: the mechanical Action-Reaction (AR) model. A brief conclusion discusses what our results imply for the field of conflict studies.

### **AGGREGATE DATA STUDIES OF THE REPRESSION/DISSENT NEXUS**

Aggregate cross-national studies of domestic political conflict have attempted to account for the "nonobservation" that deterrence works and doesn't work. Much systematic and quantitative evidence has been collected, the purpose of which is to discover the "true" relationship

between repression and dissent. The following general argument is proposed:

$$T_c = G(T_r)$$

where  $T_c$  is an opposition group's total conflict activities; and  $T_r$  is a regime's total repressive activities.

Ad hoc justifications and findings (Lichbach and Gurr, 1981; Snyder, 1976; Zimmerman, 1980) exist for all possible specifications of the function.

One argument is that

$$G' < 0.$$

There is, in other words, some support for the deterrent effect of government coercion (Hibbs, 1973: 82-93; Tilly, 1978; Snyder and Tilly, 1972: 527). The rationale for the use of violence in conflict situations is that it compels or deters. Regimes that respond to challengers with deadly force expect to minimize the extent of future challenges.

The counterargument is that

$$G' > 0.$$

There is, in other words, some support for the stimulative effect of government coercion (Eckstein, 1965: 154; Gurr, 1969: 579). The counterargument is that policies of repression on the part of authorities increase the future mobilization of dissidents. This occurs, first of all, because existing conflict groups can retreat and go underground. Supporters are hardened and will continue to struggle in different ways or at some future time, as did Lenin and the Ayatollah Khomeini. Moreover, violence used by a government against its own citizens may be seen as arbitrary, which would tend "to lower the government's legitimacy and raise the society's revolutionary potential" (Greene, 1974: 112). The apathetic become politicized, the reformers become radicalized, and the revolutionaries redouble their efforts. Thus when the government follows a policy of coercion, the policy itself may become the target of dissent by new challenging groups, thereby spreading conflict and engulfing the entire nation. Riots, for example, are often escalated by the "crowd control" tactics of police.

Since arguments and evidence have been offered for the existence of both a direct and inverse relationship between government coercion and opposition dissent, it is not surprising that researchers have tried to resolve the contradiction. Thus some have suggested a convex (U-shaped) relationship (Lichbach and Gurr, 1981):

$$\begin{aligned} G' &< 0; \\ G'' &> 0. \end{aligned}$$

Low levels of repression of opponents, it is argued, initially reduce the opponents' mobilized resources, inhibiting their activities. Restrictions on the political activities of opposition groups will make it more difficult for these groups to attract and hold followers, while police state tactics will frighten away potential opponents. Although grievances will remain unaffected by repression, opposition leaders will nevertheless be less capable of mobilizing their followers into taking coercive actions against a regime. While the initial repression of an opponent is likely to be quite effective, some expect that there is a limitation to this policy. Beyond some threshold, higher and higher levels of repression bring proportionally fewer and fewer rewards to the regime. Repression frustrates demands and fosters a sense of injustice. A hard core of the opposition group might become highly dedicated, organized, and deadly. Furthermore, some latent opponents of the regime will become inflamed by the repression and join the active opposition. Hence, some speculate that repression will eventually become counterproductive and actually stimulate dissent. In this sense, coercive responses by government are self-reinforcing: After a point, they only trigger similar responses by opponents.

And finally, some have suggested a concave (inverted U-shaped) relationship:

$$\begin{aligned} G' &> 0; \\ G'' &< 0. \end{aligned}$$

Gurr (1970: 238) argues that "the threat and severity of coercive violence used by a regime increases the anger of dissidents, thereby intensifying their opposition, up to some high threshold of government violence beyond which anger gives way to fear." Thus, opposition activity reaches some maximum level, a turning point, after which as government coercion increases, opposition activity decreases. Evidence to support

this relationship is provided, among others, by Bwy (1968) and Feierabend and Feierabend (1972).

## THE BASIC MODEL WITH VIOLENCE/NONVIOLENCE AS AN EXAMPLE

Our problem (Polya, 1957) may now be posed as follows: We *know* that regimes engage in repression and that opposition groups engage in dissent. Furthermore, the crucial *condition* of the problem is that regimes and opposition groups interact to produce this outcome. What is *unknown* is how repression both escalates and deters dissent. We must therefore provide a model that can account for *both* the deterrent *and* escalatory impacts of repression on dissent. We seek, in other words, a general formulation that deduces the different empirical outcomes as special cases of the same fundamental process. This model thus explains the confusing and baffling empirical variety of regime/opposition conflict relationships by showing that the diversity is a consequence of the same basic theoretical principle.

What simple process can explain how government repression of opposition dissent produces mixed results? A rational choice theory of the use of dissent by opposition groups provides such a representation. Our goal is therefore to find "rational structures of action in collective behavior which previously have been associated with irrationality" (Tiryakian, 1985: 7). What must a rationalist theory of dissent and coercion look like (Rogowski, 1985)? The theory must embed political actors in the socioeconomic division of labor such that the actors connect their self-interest to social reality. The actors then use their experiences and observations of the world to appraise, accurately, without hysteria or delusion but not necessarily without error, their self-interest, displaying egoistic, but not necessarily greedy, behavior. It is thus assumed that the actors make decisions about how to use their various costly inputs to produce various valued outputs. Political actors, in other words, mobilize their costly political resources to achieve their desired political ends.<sup>2</sup> In order to make the model operational, five sets of factors must therefore be specified: the social division of labor, the actors, and the actors' inputs (tactics), outputs (goals), and costs (prices). We then employ these precisely stated

2. Rational choice reasoning and formal modeling have often been applied to political conflict (Lichbach, 1985).

assumptions about an opposition group's motivations and environment to develop a behavioral rule for the opposition group; under certain conditions, when government represses an opposition group, it responds in a specified manner. The assumptions produce, in other words, a purposive explanation of an opposition group's behaviors: "We can impute to the actor a rule which leads logically to most or all of the choices we observe the actor making" (Tilly, 1978: 6).

We therefore propose a Rational Actor (RA) model to represent that repression/dissent nexus. A problem here is that no model of regime/opposition conflict can apply to all incidents of dissent. Many specific conflicts between regimes and opposition groups manifest the repression/dissent puzzle. But we do not wish to become bogged down in the details unique to each conflict. We thus need a simple way to represent what is general in all these incidents that gives rise to the indeterminacy in the repression/dissent linkage. We require, in other words, a basic or bare-bones model of a common or average conflict situation to highlight any conflict's logic. The model developed here is thus general enough to apply to a diverse set of conflicts. This generality, however, will be deemphasized here. In order to permit a more detailed presentation of the basic model we will make some assumptions that will somewhat restrict the applicability of the model but render it tractable.

Thus we need to perform a "thought experiment" to imagine the simplest possible conflict situation. Assume a regime is faced by a single opposition group. The regime regulates the participatory activities of the group. Assume further that the opposition group is a hierarchical organization in which the group's leader or entrepreneur sets tactics by dictatorship, custom, or by discerning the general will, and can enforce these tactics on the group. What is then involved in the leader's decision calculus when the group confronts government repression of each of its activities? We further assume that the leader of the opposition group has a fixed number of followers in the group. The leader can, however, control the number of days in which the members engage in various dissident activities. He or she does so in order to maximize the group's obtaining a government policy output with some monetary value subject to a government-imposed cost constraint. Dissident entrepreneurs therefore mix levels of activities of the group in the face of the fixed benefits and costs offered by the regime. This basic structure of our RA model captures some key features of conflict situations by allowing decision making and price taking by the opposition group. Some collective action extensions, relating to the cost and benefit conditions, are possible but are not made here (Lichbach, 1985). I now lay out in



greater detail the assumptions of the RA model of dissent, which are similar to Sandler et al.'s (1983) rational choice model of terrorism.

## THE ACTORS

Buchanan and Tullock (1965: 14) ask, "What kind of individuals inhabit our model of society?" We divide the political world into a single regime faced by a single opposition group. The notion of regime versus opposition is obviously a simplification of a complex reality. Furthermore, not all conflict in a nation can be described as "regime versus opposition." Regimes are not monolithic; regime elites may identify with one or more factions. They fight, for example, during coups and mutinies. Opposition groups are not monolithic either; a nation may have several competing and cooperating opponents. Opposition groups fight; for example, Protestants versus Catholics in Northern Ireland; black extremists versus white extremists in the United States; Hindus versus Moslems in India. This complexity is particularly evident in revolutionary situations, where both the regime and the opposition are divided and intertwined.<sup>3</sup>

What is the source of the conflict between the regime and the opposition? We assume that government faces a regulation problem (Axelrod, 1984: 155-158). That is, the government regulates political participation, just as it regulates crime (Becker, 1968), antitrust (Block et al., 1981), and the minimum wage (Ashenfelter and Smith, 1979). Policies that establish the legality of certain types of influence mechanisms by opposition groups are thus made in the polity by some collective choice method. These rules or standards may be tough or permissive (e.g., no sit-ins). Opposition groups then face the problem of either evading or obeying (or some mix thereof) a particular regulation, while governments face the problems of either enforcing or ignoring (or some mix thereof) the law. Both actors have goals and receive payoffs as a result of their actions. We model the tactical choices, involving modes of political participation, made by an opposition group given the enforcement penalties levied by the regime for violating its regulations concerning participation.

## THE TACTICS

Opposition groups choose among the forms (tactics) available to them. The group may choose tactics that government regulation

3. On problems of distinguishing between incumbents and insurgents, see Wilkinson (1975: 150).

declares legal, or it may evade the laws. Thus, Tilly argues for a focus on "repertoires" of collective action: "Collective action usually takes well-defined forms already familiar to the participants in the same sense that most of an era's art takes on a small number of established forms" (Tilly, 1978: 143). Similarly, Eckstein (1980) argues for a study of "alternative channels" of political participation. Common forms of dissent include protest, terrorism, and guerilla war.

We focus on a particular tactical choice. Assume that an opposition group<sup>4</sup> can employ two tactics: nonviolent protest (which is legal) and political violence (which is illegal).<sup>5</sup> This choice is faced by dissident movements in Western democracies, which balance peaceful demonstrations with terrorism, and by guerilla movements in Third World nations, who balance political work among peasants with aggressive military operations against government forces. Both violent and nonviolent tactics contribute additively to the opposition group's overall conflict activities:

$$T_c = T_n + T_v \quad [1]$$

where  $T_c$  is an opposition group's total conflict activities;

$T_n$  is an opposition group's total nonviolent activities; and

$T_v$  is an opposition group's total violent activities.

Nonviolent and violent<sup>6</sup> conflict activities may be assessed with respect to person-days of effort that occur during some time period. Thus:

$$T_n = PD_n \quad [2]$$

$$T_v = PD_v \quad [3]$$

where  $D_n$  is an opposition group's days of nonviolent activity;

4. Note that the RA model applies to activities carried out by organized groups and not to all possible political dissent within a nation. Following Coser (1956: 48-55) some dissent is realistic (means/ends oriented, e.g., sit-ins) and some is "nonrealistic" (tension releasing, e.g., brawls). An "organization" is often defined as a unit, the actions of which are planned, disciplined, and controlled so that it may obtain some goal (Hage, 1980), hence the focus here on conflict organizations.

5. The focus is on two common tactics of an opposition group to make the argument more contextually relevant to students of domestic political conflict. The RA model could just as easily have focused on two general tactics, T1 and T2. Thus other typical tactical dichotomies in conflict studies, such as exit or voice, protest or rebellion, legal or illegal, conventional or nonconventional, as well as such "continuous" choices as weapons, battles, allies, bases, and targets (people and property), may be analyzed similarly.

6. On definitions of political violence, see Gurr and Bishop (1976).

$D_v$  is an opposition group's days of violent activity; and  
 $P$  is the number of people in an opposition group.

The total number of days of effort expended by an opposition group therefore is:

$$D_c = D_n + D_v \quad [4]$$

where  $D_c$  is an opposition group's total days of conflict activities.

The problem to solve may now be posed as follows: How to  $T_c$  and  $D_c$  change with respect to changes in repression? Note that changes in overall conflict ( $T_c$ ) and overall days of effort ( $D_c$ ) are composed of changes in both violent and in nonviolent tactics. Thus a model of how opponents "select" levels of  $P$ ,  $D_n$ , and  $D_v$  is needed.<sup>7</sup>

## THE GOALS

The benefit component, or the goals opposition groups seek, is the next part of that model. What are the typical goals or desired outputs of political opposition groups? Citizens gain "utility income from government activity" (Downs, 1957: 36). Therefore opposition groups, like other social actors, "revenue or rent seek" (Colander, 1984). In other words, they seek the revenue benefits for the members of the group that come from some government policy or output ( $G$ ). Such public sector policies are desired by reformist opposition groups, who wish to modify the existing government, and by revolutionary opposition groups, who wish to become the government. They are desired by groups who feel discriminated against because they face either too much government regulation (e.g., of ethnic activities) or too few government benefits (e.g., of education services—Mason, 1984: 1043). In either case, the added revenues coming from the government's policy increase the group's pecuniary resources, as well as the intangible power and prestige of the group's leaders and followers, and hence increase the group's utility or welfare (Sandler et al., 1983; Kirk, 1983: 44).

7. The focus is on one particular aspect of an opposition group's strategy: choosing tactics. Other strategic considerations that face opponents include the organization of dissidents and the group's relationships to dissident populations and to external actors. For a discussion of the many aspects of an opposition group's strategy, see Wilkinson (1975), Rejai (1977), and Bell (1976).

It is thus assumed that the opposition group seeks some desired government policy that accommodates its interests and yields revenue benefits as a collective good to all members of the group. Specific examples of revenue benefits to members of an opposition group that flow from government accommodative policies are the transfer payments from the provision of welfare services, the pecuniary gains from public works such as roads, the financial advantages from government services such as police and fire, and the less tangible gains in the autonomy of the members of the group that come from less government regulation of, and discrimination against, the group.

Whichever government policy output the opposition group desires, it is further assumed that opponents obtain the monetary value of the output (measuring all hidden government subsidies, accommodations, benefits, and concessions to the group) from the regime via a production function that includes the group's two available tactics:<sup>8</sup>

$$O = O(T_n, T_v) \quad [5]$$

where  $O$  is the level of obtainable government revenue benefits for an opposition group.

## THE COSTS

The next assumptions involve the cost components of the model. There is a "price" attached to the tactics that the opposition group uses to obtain the government policy it seeks and the group has an "income," which it uses to obtain the output. For specificity, assume<sup>9</sup> that the costs incurred by an opposition group are a simple linear function of the tactics it employs:

$$C = nT_n + vT_v + F \quad [6]$$

where  $C$  is the total costs of an opposition group;  
 $n$  is the price per unit of an opposition group's nonviolent activities;

8. Production is also influenced by exogenous factors, such as technology, over which an opposition group has no control. This formulation of an opponent's goal may be generalized (Lichbach, 1985).

9. This formulation of the costs facing opponents may be generalized (Lichbach, 1985).

$v$  is the price per unit of an opposition group's violent activities; and  $F$  is fixed costs.

The operative question now becomes how to determine the fixed costs and prices of the violent and nonviolent tactics used by an opposition group, that is, of  $F$ ,  $n$ , and  $v$ . Any serious study of dissident groups as goal-seeking organizations must consider how these are formed.

An opposition group's fixed costs,  $F$ , are a function, first of all, of the general level of government repression. Second, both violence and nonviolence impose organizational costs on an opposition group, and such costs are also factors in accounting for the level of the group's fixed costs,  $F$ .

An opposition group's direct costs coming respectively from its nonviolent and violent activities,  $n$  and  $v$ , result from the repression of the group's dissident activities. Both violence and nonviolence beget government repression and the greater the repression, the greater the cost to the group. For example, police "crowd control" and "counter-insurgency" tactics are often used to contain protest demonstrations, terrorism, and guerilla wars. The  $n$  and  $v$  variables may therefore result from the number of injuries or deaths among opponents that the regime brings about during its response to an opposition group's activities. Prices are thus paid by an opposition group in terms of the repression that the opponent's tactics (inputs to its production function) induce from the regime.

The opposition's "budget" constraint is therefore really in part a political constraint—the amount of repression it is willing to incur to obtain the government output it desires. Whatever the source, we assume that  $F$ ,  $n$ , and  $v$  reflect the monetary value of all costs (measuring all hidden government penalties, costs, taxes, and fines) imposed on the group.

## THE DECISION RULE

Given the assumptions of the model made so far, that is, given well-defined and limited objectives, tactics, and costs, an opposition group's decision calculus may be specified.<sup>10</sup> It is assumed, in other

10. I thus avoid the question of how a repertoire of tactics comes into being and how it changes. The focus is on how an opposition group selects from among a given repertoire of tactics (Tilly, 1978: 158), or as Gamson (1975: 130) puts it, "Should the party take action A or B?"

words, that dissident groups are capable of continuous, calculating pursuit of their interests in conflict situations. A regime's opponents are not merely subject to irrational impulses and virulent affect (Tilly, 1978: 14). An opposition group that did not pursue government outputs in a reasoned manner would last no longer than the consumer who didn't minimize expenditures, the entrepreneur who didn't maximize profits, the bureaucrat who didn't maximize budgets, and the politician who didn't maximize votes.

But how does the group pursue group goals? We assume that the opposition group is a hierarchical organization. As such, it is led by a dissident entrepreneur who engages in strategic decision making for the group. The leader makes choices by dictatorship, custom, or by discerning the general will, and is able to make his or her choices the group's choices.

Following Downs, we avoid the issue of internal power struggles within this hierarchical group by not thinking of the opposition group as a coalition:

By coalition we mean a group of individuals who have certain ends in common and cooperate with each other to achieve them . . . a coalition does not possess a unique, consistent preference ordering. Its members agree on some goals, but they disagree on many others. Hence, the actions taken by the party as a whole are likely to form a hodgepodge of compromises—the results of an internal power struggle rather than any rational decision-making [1957: 24-26].

Rather, we think of the opposition group as a team:

By team we mean a coalition whose members agree on their goals instead of just part of them. Thus every member of the team has exactly the same goals as every other member of the team. Since we assume all members are rational, their goals can be viewed as a single, consistent preference ordering [Downs, 1957: 25].

This approach, using leaders as choosers for a hierarchical team, avoids treating the opposition group with false personification, as an organic suprahuman entity. We thus treat both the regime and the opposition group as unitary rational actors bent on pursuing their separate interests. Collective action issues may be introduced later as a complication of the basic model (Lichbach, 1985).

But what specific optimization problem faces the leader of the opposition group? A particular decision rule is adopted here. We assume that an opposition group is a goal-seeking organization that

minimizes its costs subject to a given level of desired government revenue benefits. A model of constrained cost minimization is therefore required.<sup>11</sup> Form the Lagrangian:<sup>12</sup>

$$L = nT_n + vT_v + F + \lambda[O_0 - O(T_n, T_v)] \quad [7]$$

where  $O_0$  is a fixed level of desired government revenue benefits, and  $\lambda$  is a Lagrangian multiplier.

## THE FUNDAMENTAL DEDUCTIONS FROM THE BASIC MODEL

### THE OPTIMIZATION OF EQUILIBRIUM

The assumptions are now complete. If we employ some standard mathematical machinery, deductions may be made. Substitute 2 and 3 into 7 to yield:

$$L = nPD_n + vPD_v + F + \lambda[O_0 - O(PD_n, PD_v)] \quad [8]$$

In the short run, opposition leaders can choose how many days on which to be active, such as making protest a daily, weekly, or monthly occurrence, but are constrained by a fixed number of personnel. This constant number of "dissenters" in the opposition group is due to many structural factors that produce grievance against a regime. The opposition's two decision variables are therefore  $D_n$  and  $D_v$ . The first order conditions<sup>13</sup> for minimizing  $L$  are:

11. An opposition group might adopt other nonequivalent decision rules, such as profit maximization or constrained output maximization. Any good text on microeconomics shows how these optimization problems yield different results.

12. For simplicity we approach the optimization problem via classical calculus techniques, and hence assume differentiable functions and equality constraints. Modern topological methods use set theory and make less restrictive assumptions, such as compactness and continuity, and thus produce more robust results. Modeling in a field evolves, and a starting point should be found. The few social choice models of dissent that exist (Sandler et al., 1983; Kirk, 1983) make similar assumptions.

13. The second order condition for a minimum is explored in Lichbach (1985) and in an appendix available upon request from the author.

$$L_{D_n} = nP - \lambda O_{T_n}P = 0 \quad [9]$$

$$L_{D_v} = vP - \lambda O_{T_v}P = 0 \quad [10]$$

$$L\lambda = O_0 - O(PD_n, PD_v) = 0 \quad [11]$$

These conditions may be expressed in three equivalent ways. Rearranging [9] and [10] yields:

$$nP = \lambda O_{T_n}P \quad [12]$$

$$vP = \lambda O_{T_v}P \quad [13]$$

Factoring out  $P$  yields:

$$n = \lambda O_{T_n} \quad [14]$$

$$v = \lambda O_{T_v} \quad [15]$$

Equations 14 and 15 reveal the marginal costs and benefits to an opposition group that come from its activities. The marginal costs,  $n$  and  $v$ , from the duration of the group's activities,  $D_n$  and  $D_v$ , are due to the repression of the group's activities. It has been assumed that these costs are constant regardless of the levels of  $D_n$  and  $D_v$ . The marginal benefits,  $O_{T_n}$  and  $O_{T_v}$ , from the levels of  $D_n$  and  $D_v$ , occur because the activities help the group obtain a government policy output. Diminishing marginal productivity is assumed, although this is not strictly necessary to minimize 7 (convexity or diminishing marginal substitutability is required).  $\lambda$  is the marginal cost to an opposition group of producing an extra unit of output ( $O_0$ ) in the optimum state. Taken together the terms in equations 14 and 15 thus indicate that the duration of an opposition group's activities,  $D_n$  and  $D_v$ , increase until the marginal costs from the repression of its activities ( $n$  and  $v$ ) are equivalent to the marginal gains in obtaining a government policy output from those activities ( $O_{T_n}$  and  $O_{T_v}$ ) weighted by the marginal cost of that output ( $\lambda$ ). The situation for nonviolence is shown in 1.

Equations 14 and 15 may be rewritten as:

$$O_{T_n}/O_{T_v} = n/v = RTS \quad [16]$$

The optimum levels of the group's activities, in other words, occur when the ratio of the marginal productivities of its two tactics equal the ratio of the prices of the tactics. These ratios are also equivalent to the rate of substitution of violence for nonviolence (RTS) along an isoquant of the



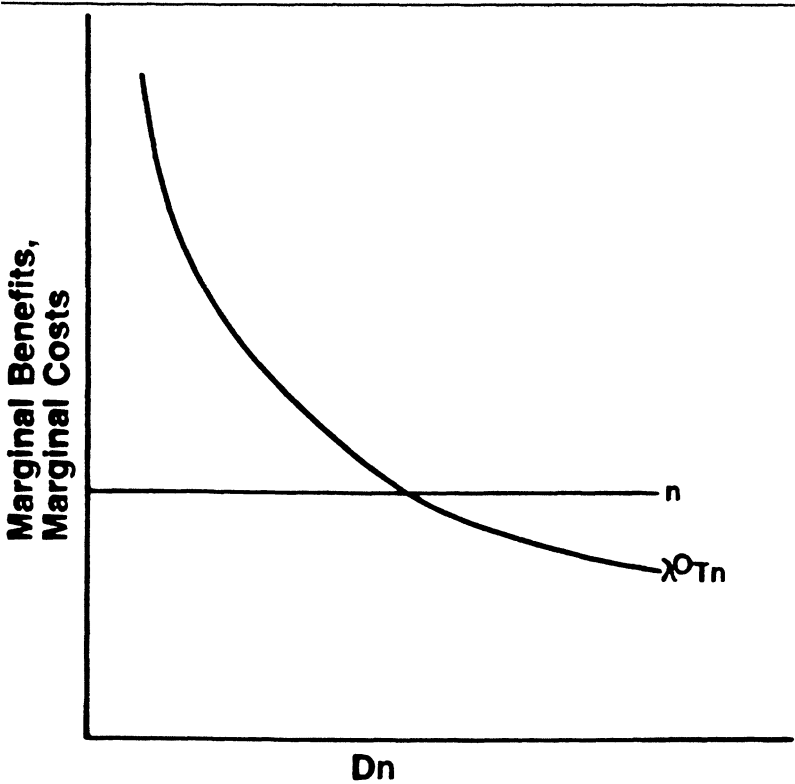


Figure 1: First-Order Optimality Condition, I

group's production curve. This may be demonstrated by taking differentials of 5:

$$dO = O_{T_n}dT_n + O_{T_v}dT_v \quad [17]$$

Setting  $dO = 0$  and rearranging:

$$-dT_v/dT_n = O_{T_n}/O_{T_v} = RTS \quad [18]$$

Thus, to minimize costs, an opposition group divides its time between violent and nonviolent activities such that the slope of its cost constraint is equal to the slope of an isoquant of its production function, while remaining on its fixed production curve. Condition 16 is therefore met

at a point E where the group's cost curve and an isoquant of its production function are tangent to one another. This situation is shown in Figure 2.

Equations 14 and 15 may also be rewritten as:

$$O_{T_n}/n = O_{T_v}/v = 1/\lambda \quad [19]$$

The marginal productivity of each tactic divided by the unit price of that tactic must therefore be the same for all the tactics of the opposition group. The ratios shown in 19 thus give the rate at which an opposition group's costs would increase if an additional unit of a government policy output were obtained by the group. If the marginal product per unit cost of, say, nonviolence was greater than for violence ( $O_{T_n}/O > O_{T_v}/v$ ), then an extra marginal expenditure on nonviolence adds more government revenue benefits to the group than the same expenditure on violence. An opposition group would not be minimizing its costs subject to a fixed policy output and it therefore "pays" for the opposition group to adopt a program that is more oriented toward nonviolence. If we assume diminishing marginal productivities of both tactics, the use of more nonviolence reduces  $O_{T_n}$ , while the use of less violence increases  $O_{T_v}$ , so that we move toward the equality depicted in 19. If we assume diminishing marginal substitutability between both tactics, the use of more nonviolence and less violence reduces the  $O_{T_n}/O_{T_v}$  ratio, so that we also move toward the equality depicted in 19.

Opposition groups thus select their tactics by balancing the relative repressive costs and accommodative benefits that come from governmental responses to their tactics. The notion of a "balance" of forces as a strategic dilemma is common in rational choice models: Costs and benefits, risks and returns, sanctions and rewards, failure and success are all familiar deductions. Such a notion is also common in conflict studies. Gurr (1970), for example, hypothesizes that the probability of violence is a function of the balance of "coercive forces" and of the balance of "institutional support" for opponents and supporters of the regime. We have shown how such "balance" propositions may be derived from a rational choice model of conflict.

## THE COMPARATIVE STATICS OF THE OPTIMIZATION EQUILIBRIUM

*The basic second-order condition.* The optimality conditions thus indicate that an opposition group balances the costs and benefits of its

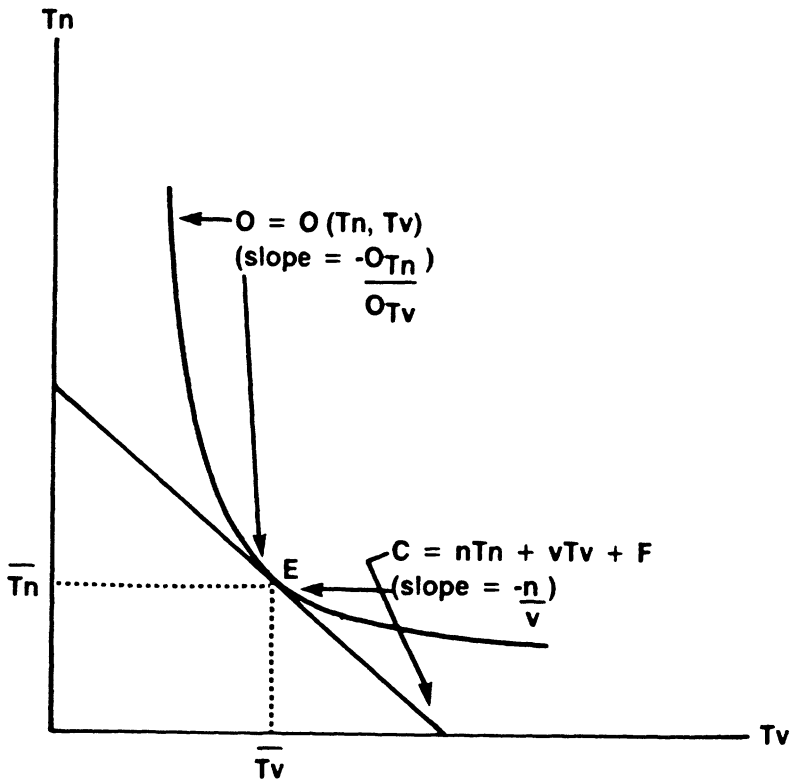


Figure 2: First-Order Optimality Condition, II

various tactics. That is, the group substitutes among activities depending on the tactics' relative prices and effects. Given this finding, why may repression either increase or decrease an opposition group's total activity? In light of the model in the previous section, this question may be put as follows: How are variations in an opposition group's tactics ( $D_n$  and  $D_v$ ) a function of variation in government's responses ( $n$  and  $v$ ) to its activities?

Our problem relates, in other words, to what economists call the comparative statics of the optimization equilibrium. The presumption is that an opposition group does not operate in a vacuum. Political systems differ among themselves and over time, and their political, social, economic, or international differences affect the costs and

benefits of the alternative tactics that opposition groups employ. A change in an opposition group's tactics is therefore a function of a change in the exogenous factors it confronts, such as an increase in governmental repression. An opposition group will thus adopt tactics in response to factors or conditions that affect the costs and benefits of its various tactics and not in reaction to a tactic's "intrinsic" desirability. The rational choice perspective thus focuses on fixed interests or preferences and the changing opportunities or constraints to act upon those interests. Tilly (1978), for example, focuses on the positive factors ("opportunities") and the negative factors ("threats") that raise and lower the costs and benefits of collective action. And Eckstein (1980: 143) refers to the "conditions that influence calculations of cost-benefit ratios in choosing modes of political goal-seeking (especially intrinsically high-cost channels)."

Regimes often increase their repression of one opposition tactic. For example, most Western governments cracked down on urban terrorism in the 1970s by strengthening antiterrorist laws and forces. Thus consider first the impact of an increase in the repression of an opposition group's nonviolent activities on the overall<sup>14</sup> number of days the group is active. Taking the derivative of 4 with respect to  $n$  yields:

$$dD_c/dn = dD_n/dn + dD_v/dn \quad [20]$$

We demonstrate in an appendix (Lichbach, 1985) that:

$$dD_n/dn = P^3 O_{T_v}^2/[H] < 0 \quad [21]$$

That is, an increase in the repression of nonviolence reduces the nonviolent activities of an opposition group. Also from the appendix:

$$dD_v/dn = -P^3 O_{T_n} O_{T_v}/[H] > 0 \quad [22]$$

That is, an increase in the repression of nonviolence increases the violent activities of an opposition group.

Equations 21 and 22 thus produce the first proposition, that the opposition group substitutes violent activities for nonviolent activities:

14. The RA model is therefore different from the conventional microeconomic model of choice. We are concerned with the sum of the two chosen quantities, days of violent and nonviolent activities, because such a total quantity has great political meaning. Economists do not add these two quantities, as they would not add numbers of apples and oranges purchased, because such a total quantity has no economic meaning.

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.

Whether the increase in the repression of nonviolence increases or decreases the overall conflict activities of an opposition group depends upon the balance of effects—that is, upon the deescalatory impact on the group's nonviolence and the escalatory impact on the group's violence.

Substituting 21 and 22 into 20 and rearranging yields:

$$dD_c/dn = P^3 O_{T_v} [O_{T_v} - O_{T_n}] / [H] \geq 0 \quad [23]$$

The balance of effects, as 23 shows, is contingent upon the relative efficacy of both tactics in producing the government revenue benefits desired by an opposition group. If nonviolence is more effective than violence in obtaining a government output for the opposition group, that is, if  $O_{T_n} > O_{T_v}$ , then  $O_{T_v} - O_{T_n}$  is negative, the numerator of 23 is negative, and since the denominator is also negative, the overall impact is positive. Thus if nonviolence is more effective than violence in achieving the group's goals, and if the repression on nonviolence is increased, then (a) the nonviolent activities of the opposition group will decrease and its violent activities will increase, but (b) the increase in the group's violent activities will more than offset the decrease in the group's nonviolent activities and hence the opposition group's total conflict activities will increase.

Now consider the impact of an increase in the repression of an opposition group's nonviolent activities on the group's total conflict activities. Using 2 and 3 rewrite 1 as:

$$T_c = PD_n + PD_v \quad [24]$$

Taking derivatives with respect to  $n$ :

$$dT_c/dn = P(dD_n/dn + dD_v/dn) \quad [25]$$

Substituting 23 into 25 yields:

$$dT_c/dn = P^4 O_{T_v} (O_{T_v} - O_{T_n}) / [H] \geq 0 \quad [26]$$

The same reasoning thus holds for an opposition group's total conflict activities. Similar results may thus be obtained for the impact of a

change in the repression of violence on both the opposition group's days of activity and its total conflict activity.

*The paradox.* These results support our second proposition:

P.2: If government increases its repression of the opposition group's tactic that is more effective at obtaining a desired government policy for the group, then the group's total conflict activities will increase.

The implication to the regime is therefore quite paradoxical: To *reduce* an opposition group's overall days of conflict activities repress its *less* effective tactic. What explains this paradox?

The solution is simple: If government increases its repression of the opposition group's tactic that is more effective at producing a desired government policy for the group, then the opposition group will have to substitute relatively more of its less effective tactic to make up for relatively less of its more effective tactic to keep the group at the same level of its desired government policy.

The RA model has thus shown analytically how opposition groups may either increase or decrease their activities in response to government repression. Two qualitatively different patterns, increase or decrease of activities, are thus possible. The relative efficacy of the opposition group's tactics at inducing government policy concessions enables us to predict which repression/dissent outcome results. The contradictory empirical results of aggregate studies of repression and dissent may thus be explained by this condition. This deduction from the RA model, moreover, can resolve four other puzzles in the conflict literature.

First, the RA model explains how government concessions influence dissent (Gurr, 1980). Government accommodation of opposition dissent influences an opposition group's choice of tactics and hence the overall level of its conflict activities. Hence, changes in government accommodation, just like changes in government repression, influence the overall level of opposition group's activities. In fact, the crucial factor that determines whether increases in government repression increase or decrease an opposition group's activities in the aggregate turns out to be the relative efficacy of an opposition group's tactics at obtaining government accommodation. Thus, the balance of effects of regime coercion on opposition dissent is contingent upon the relative efficacy of the group's tactics at winning government benefits.

Second, the RA model explains how consistent government response strategies reduce dissent (Gurr, 1970: 256). If government increases its repression of the opposition group's tactic so that it also yields to the

most, that is, the tactic that is relatively more effective at generating government benefits for the group, then government's policies are inconsistent. Government would be providing relative accommodation and repression to the same opposition tactic. Since opposition groups are concerned with the fungibility of costs and benefits, the consequence is that dissident activities increase. When considering the impact of changes in repression on changes in dissent, government must therefore consider its accommodative response strategy because it is the combination that is decisive for dissent. The following proposition therefore holds:

P.3: Consistent government accommodative and repressive policies reduce dissent while inconsistent policies increase it.

The RA model thus explains how to mix government accommodative and repressive response strategies, or how to alternate reward and punishment, to reduce an opposition group's activities. What mix of accommodative and repressive response strategies leads to low levels of dissident activities? The rule for government is: Don't reward and punish the same tactic; reward one and punish the other. Since governmental accommodative and repressive policies cover so wide a range of activities, this is a formidable task.

Third, the RA model explains why "revolution" follows reform and repression (Hagopian, 1974). Many prerevolutionary regimes incoherently mix reform (accommodation) and reaction (repression), and pursue these policies in fits and starts, thereby weakening the regime and facilitating revolution. A pattern of the relaxation of sanctions and the beginning of social, economic, and political reform has been noted before the French Revolution of 1789, the Russian Revolution of 1917, the Mexican Revolution of 1912, and the uprisings in East Germany in 1953 and Hungary in 1956.

And finally, the RA model explains why "revolution" is a consequence of the quality of political elites (Hagopian, 1974: 162-163). Inept ones produce ineffective governance (political instability), adept ones produce effective governance (political stability). This is because smart elites are able to determine the content of accommodative and repressive policies cleverly, the actors to which the policies are applied, as well as the policies' timing and even-handedness. If the model proposed here is accurate, then the mutual coherence of the government's accommodative and repressive response policies is what political elites should be most concerned about.<sup>15</sup>

15. The analysis assumes that government's utility or loss function involves the overall

## A COMPARISON WITH THE ORTHODOX MODEL OF REPRESSION AND DISSENT

What is the competitor to the RA model? The aggregate cross-sectional studies cited earlier<sup>16</sup> offer a mechanical Action-Reaction (AR) model of governments and their opponents who engage in repression and dissent. Each actor is treated as a black box, either increasing or decreasing its output in reaction to the other's output. Empirically one is, therefore, forever correlating the total aggregate level of one output (government repression) with the total aggregate level of the other output (opposition activity).

This unidimensional treatment of both coercion by government (Snyder, 1976) and dissent by opposition groups, modelling the level of one decision variable for each actor but not modelling the strategic choices that both actors face, is the reason why previous studies of repression and dissent are flawed. The AR model thus ignores a key feature of the strategic interaction between both actors: that opponents choose among various tactics and that governments choose among various response strategies. Repressed oppositions do not go away nor do they necessarily redouble their efforts. They do, however, change their tactics.

Our RA model is superior to such mechanical AR models because it clarifies the repression/dissent puzzle. The issue is no longer: Does

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number of days of conflict activities. If violence were more effective than nonviolence, then repression of violence may lead to the opposition to substitute  $1 + s$  days of nonviolence for 1 day of violence. Assume, for example, that a government was indifferent between  $1 + s + k$  days of nonviolence and 1 day of violence ( $s, k > 0$ ). Then the government would be better off after the repression of violence even though the total number of days of conflict had increased. Moreover, the externalities here are strong: Does repression deter an opposition's hard-core supporters, its sympathizers, its allies, or even other unrelated opposition groups? For a fuller consideration of the regime's decision calculus, which argues that regimes wish to minimize the opposition's support (numbers) and its success (revolution), see Lichbach (1984).

16. This approach is also used in difference equation formulations of government and opposition. It appears, for example, in Salert and Sprague's (1980) model of police-rioter conflict. It also appears in Jackson et al.'s (1978) model of conflict and coercion, though they specifically deny the problem: "What we have done, in short, is to put forward an action-reaction model, rather than a strategic one—the former emphasizes the reaction of each one to the others' action: the latter concentrates on the goals underlying those reactions. We would anticipate, moreover, that our model would yield consistent results, though distinct, from a strategic model" (Jackson et al., 1978: 654-655). At initio, it is strange to believe that purposive and non-goal oriented explanations will yield similar deductions. (For an attempt to combine both explanations, see Likens and Kohfeld, 1983.) In any event, this article demonstrates how the selection of a model does matter.



repression deter or encourage violence? Our analysis reveals that this question inappropriately aggregates the choices of opponents and regimes. The appropriate question is: How does repression influence an opposition group's choice among its tactics? The RA model thus avoids a black box approach and thereby can account for the mixed impact of government coercion on an opposition group's activities, whereas a mechanical AR model cannot.

What the RA model provided was therefore an elaboration of the interaction between opposition groups and regimes in terms of "the tactics of contenders and the repressive tactics of government" (Gamson, 1975: 139; emphasis added). Distinguishing among types of opposition activity and types of government response was needed to clarify the puzzle of the mixed success of government coercion. A rational choice model was therefore offered here because it focuses on both the choices made by the government and by an opposition group. The RA model adopted here, moreover, emphasizes two specific themes that are different from the mechanical AR model.

*The relative prices of tactics.* The RA model demonstrates that the choice of an opposition group's tactics is partly a function of their relative prices. The regime thus turns out to be the key factor that influences opposition activity because it alters the costs of an opponent's tactics. Government is the key agent of "social control," and the reason why opposition groups turn to, say, violence, is therefore sought in the conflict situation rather than within the opposition group itself.

*The relative efficacy of tactics.* The RA model also demonstrates that the choice of an opposition group's tactics is partly a function of their relative efficacy at achieving a desired government policy. This implies that studies of the causes and consequences of dissent should be integrated. Some studies have explored the relative efficacy of various political tactics (violence, nonviolent protest, voting, and so on) in obtaining dissidents' goals through government policy responses; other studies have focused more generally on the outcomes of dissent (Gurr, 1980, 1983). Information about the outcomes of various types of opposition tactics will provide clues as to why the tactics were chosen in the first place. And such information will elaborate the counterintuitive deduction that governments that attack an opposition group's more effective tactic invite greater levels of dissident activity.

Much of the literature on domestic political conflict, based on

mechanical AR models, pulls in a different direction. It has tended to focus on absolute prices and absolute efficacy, or, in other words, the overall level of government coercion and concession. However, those in conflict studies who adopt a "resource mobilization" perspective have argued that an opposition group employs an optimizing decision calculus when it selects among its tactics (Lipsky, 1968: 1145; Zald and Berger, 1978: 851; Snyder, 1978: 505; Gamson, 1975: 81; Himes, 1980: 166; Obershall, 1973: 29; Nieberg, 1969). The strategic nature of political opposition is, moreover, also a principal concern of practitioners of dissent. Gurr (1970: 352-355), for example, has focused on strategies for revolutionaries and for the discontented, and Himes (1980: 179) has pointed out the strategies pursued by groups seeking welfare rights, racial change, and the relief of rural poverty in America. Some key revolutionary leaders have described their strategies for particular types of conflict in formal statements or in speeches (Springer and Truzzi, 1977). Such classic statements include Marx on class revolution, Lenin on a conspiratorial elite, Mao Tse Tung on guerilla warfare, Bill Haywood on the general strike, Cohn-Bendit on mass spontaneity, Kautsky on parliamentary gradualism, Kropotkin on anarchist (terrorist) tactics, Gandhi on nonviolence, and Sadat on military coups.

#### PROPOSED TESTS OF THE COMPETING MODELS

The merit of a rationalist theory of dissent and coercion is an open question to be settled, at least partially, by the empirical verity of its deductions. The RA model adopted here has important test implications. Eckstein has argued that correlations between repression and violence are not a critical test of "relative deprivation" and "resource mobilization" perspectives. As he puts it, "repression is used and violent action stops; a routine channel is blocked or abhorrent anger is suppressed" (1980: 159). In other words, the two major theories of conflict cannot distinguish the successful from the unsuccessful government response strategies. Simple theories of "relative deprivation" predict that deterrence does not work because repression makes angry dissidents, who then strike back at regimes. Simple theories of "resource mobilization" predict that deterrence works because repression raises the costs to individuals who participate in conflict, which makes them less willing to strike back at regimes. Each simplified theory can account for one, but not both, possible outcomes. The RA model suggests why: Such a test is based on a black box approach to regimes and oppositions that inappropriately aggregates their choices.

The RA model elaborates resource mobilization theory so as to account for both possible outcomes, thus contributing to this important debate. It also suggests how an empirical test may be constructed that directly probes the "rational choice" perspective on dissent. As in economics, an appropriate test involves making comparative static deductions from optimizing models. These deductions state that a change in an exogenous variable produces a change in an endogenous choice variable, in which is an observable, refutable hypothesis (Silberberg, 1978: chap. 1).

To test the RA model of repression and dissent, therefore, appropriately derived and estimated demand functions for the various tactics of an opposition group are needed. Ideally, this should be done for both the violent and nonviolent activities of a particular opposition group. Rather than estimating the aggregate functions introduced earlier on page 3, we should estimate:

$$D_v = D_v(n, v) \quad [37]$$

$$D_n = D_n(n, v) \quad [38]$$

Where we predict:

$$\partial D_v / \partial n > 0, \partial D_v / \partial v < 0; \text{ and} \quad [39]$$

$$\partial D_n / \partial n < 0, \partial D_n / \partial v > 0 \quad [40]$$

One could use these equations to determine if the repression of violence decreases the extent of the group's violent activities and increases the extent of its nonviolent activities; and if the repression of nonviolence decreases the extent of the group's nonviolent activities and increases the extent of its violent activities. If these predictions are incorrect, then the RA model can be rejected. If they are only partially correct, then more complicated political, social, and economic factors may be introduced into the RA model. As in other applications in the social sciences, a rational choice model serves as a very parsimonious baseline theory against which more complex theories may be compared.

The results presented here thus reflect on the utility of existing global data sets that might be adapted for such a test. Gurr and Associates (1978) and Taylor and Jodice (1983) are two examples of well-known cross-sectional and longitudinal data sets on dissent for a global sample of nations. But neither collects the information needed to estimate 39 and 40: data on the activities on particular opposition groups and on government responses to these groups. These data sets and their

associated AR model are actually aggregate simplifications of the more complex but appropriate representation of the conflict processes identified here as the RA model. Once such a process is identified and a theoretical argument laid out for it, the simplifying nature of the aggregate AR model is made clear. Hence, dissecting an opposition group's choice into two tactics and a government's choice into two responses is sufficient to show how aggregate models of repression and dissent mask key theoretical issues in the etiology of violence. In this sense the RA model formalizes DeNardo's (1985) and others' suspicions about the overly aggregate nature of cross-sectional models and data sets of conflict. The implication of the arguments presented here, however, is that such disaggregated data are needed to probe some key arguments in the conflict literature.

Another test of the RA model, which might be done less formally with existing comparative studies, is to explore instances when opposition groups changed their tactics. Two types of tactical shifts by opposition groups that often occur as part of the "stages" in the development of a conflict movement can be deduced from our model. First, the RA model predicts that opposition groups will change their tactics after defeats, or in other words, after experimentation with their production function. For example, the Chinese CCP tried rural insurgency after a defeat with urban insurgency. Fidel Castro's attack at Las Coloradas on December 2, 1956 was a military failure that led Castro to try guerilla war in the countryside. The Algerian ALN attempted urban insurrection toward the end of 1956 after a large contingent of French troops arrived and squashed their rural insurrection (Wolf, 1969). Second, the RA model predicts that opposition groups will change their tactics after changes in government repression. For example, on "bloody Sunday," January 30, 1972, British troops fired on Catholic protesters, which turned a demonstration into a riot and led the IRA terrorist attacks throughout England. The repression of rural-based insurgency in the early 1960s in Brazil, Uruguay, and Argentina led to an upsurge in urban insurgency in the late 1960s in these states (Miller, 1980: 142). The African National Congress (ANC) was outlawed in 1960 after the Sharpeville massacre and the ANC then turned to sabotage and terrorism.

In sum, our RA model is different from and better than the existing AR model and thus represents theoretical progress in the field of conflict studies in the sense of Lakatos (1974). First, the RA model predicts more facts than the AR model: It points to the demand functions. This notion

of suggesting “novel content,” something hitherto unknown in a field, is what modelers mean by “counterintuitive.” Second, the RA model can account for the prior predictions of the AR model: The overall relationship between repression and dissent, as assumed in the AR model, may be deduced as a consequence of the RA model. This notion of explaining what is already known in a field is what modelers mean by “subsumption.” Third, if some of the excess predictions were verified, as was done anecdotally in the last paragraph, then we would have progress in theory development in conflict studies in all three senses of Lakatos.

### **SOME CONCLUSIONS ABOUT THE REPRESSION/DISSENT NEXUS**

This article has attempted to resolve a puzzle posed by the political repression/civil strife nexus: Why have scholars theorized and reported that all possible curves fit the impact of repression on dissent? It did so by proposing a rational actor (RA) model that led to three propositions. First, it showed that changes in government repression affect an opposition group’s choice between violent and nonviolent tactics. For example, an increase in government’s repression of nonviolent activities may reduce the level of nonviolent activities of an opposition group but increase the level of its violent activities. This occurs because the relative costs of nonviolent activities to the opposition group have been raised. Second, we showed that the balance of effects, and hence whether an increase in the regime’s repression increases or decreases the level of the opposition group’s overall conflict activity, depends upon the relative efficacy of the tactics of the opposition group in producing its goal of a government policy. The paradox here was that an increase in the government’s repression of the opposition group’s tactic that is more (less) effective at producing the government policy will increase (decrease) the opposition group’s overall conflict activities. Third, it showed that government accommodative and repressive policies that are consistent (inconsistent) decrease (increase) dissent. Hence, depending on this factor, governmental repression may either deter or stimulate overall opposition activities.

Repression therefore changes an opposition group’s tactics directly and its aggregate level of conflict activities indirectly. The RA model

thus demonstrates how an opposition group's choice between violent and nonviolent tactics, as well as the resulting level of its overall activities, are a function of both government's accommodative and coercive policies. The RA model thereby accounts for the reason why government repression produces mixed results and hence the reason why "any curve" can fit the relationship between government coercion, taken in the aggregate, and an opposition group's conflict activities, again taken in the aggregate. Existing aggregate data studies of coercion and dissent, based on mechanical AR models that ignore both the government's and the opposition group's choices are thus woefully inadequate and fatally flawed. The RA model has, finally, pointed to two crucial avenues for future work in conflict studies.

We need, first of all, more specific data about how changes in repression influence changes in dissent. Dissidents certainly choose and refine their strategies in response to governmental accommodation and repression, but they do so in complex ways. We currently do not have much empirical evidence on a global basis about the actual decision-making processes in dissident organizations. And regimes also certainly choose and refine their strategies in response to dissident activities in complex ways. But we currently do not have much evidence on a global basis about the actual decision-making processes in regimes faced by dissent. Therefore, the extent, intensity, duration, location, and form of both actors' conflict strategies must be studied in greater depth. The net we cast over the strategies and tactics of both actors should thus be widened.

We need, second, more specific modeling about how changes in repression influence changes in dissent. The analytical focus on rational choice models adopted here is a methodologically important corrective to the state of our modeling of domestic political conflict. Students of conflict who adopt a "resource mobilization" perspective tend to produce vague and unfalsifiable general formulations of rational choice arguments. This article has shown how a precisely formulated argument about an opposition group's decision calculus can yield a penetrating analysis of a key problem in the conventional literature: the mixed success of government coercion. More problem-oriented applications that formally model "resource mobilization" arguments are needed.

DeNardo (1985) argues that over the nineteenth and twentieth centuries radical organizations have grown in their capacity to exploit unfavorable situations and hence to influence the course of revolution. Is there any doubt that both practitioners of revolution, regimes and

oppositions, know more about revolution than they did two centuries ago? Can we say the same about theorists and theories of revolution? One of the goals of conflict researchers is to use such theories to save lives. Violent conflict, moreover, destroys resources that could be used to better everyone. By studying the repression/dissent nexus, we hope to discover how both conflict and cooperation emerge between regimes and oppositions. If students of conflict extended the RA model we have offered, perhaps the state of our knowledge about conflict processes would be improved. And perhaps our knowledge would contribute to strengthening the positive and constructive forces in society.

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