

Peace by Piece:

Towards an Understanding of Exactly How Democracy Reduces State Repression

by

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Abstract

Development of democracy is one of the most empirically supported and normatively appealing methods for reducing state repressive behavior. Until this point, scholars have generally examined this relationship using aggregate indicators of democracy, suggesting that no component is more important than the others for determining a state's level of repression. Rummel (1997), for one, posits a hierarchy of democratic pacification – stipulating that punishment, blockage and exchange will have respectively increasing negative effects on repression. In this study of 144 countries from 1976 to 1996, we use diverse statistical methodologies (including binary decomposition and the Generalized Additive Model [GAM]) to gain a richer understanding of the democracy-repression nexus. Specifically, we use the components from Polity IV and Vanhanen's Polyarchy dataset as well as data from Freedom House to test Rummel's argument. From the results we find that competitiveness of participation is the single most important indicator of repressive behavior, that blockages do better than punishment or exchange, and that no one institution, by itself, can decrease state repressive activity in any meaningful manner.

Thirty years worth of statistical research has revealed that only two variables decrease human rights violations: political democracy and economic development (e.g., Davenport 1995; 1996b; 1999; Henderson 1991; Hibbs 1973; Mitchell and McCormick 1988; Poe and Tate 1994; Poe et al. 1999; Zanger 2000). Although similar in causal impact, however, there are some important differences between these two explanatory variables. First, throughout this research the impact of democracy has been far greater in magnitude than that of economic development; democracy is simply a more powerful determinant of state repression than the condition of the economy. Secondly, throughout the post World War II period, the “impossibility” of democracy around the world appears to have been far more successful than international encouragement to economically development; democratic systems of government are simply more easily created, sustained, and modified than economically developed societies. These findings are important because when one thinks about decreasing human rights violations and what can be done to facilitate such an occurrence, it is clear that they are essentially talking about the development of political democracy. This follows a relatively long tradition in political science but also a relatively long tradition within policymaking and NGO communities as well; indeed, it is only recently that such thinking has been challenged (e.g., Carothers 2002, Diamond 2002, Levitsky and Way 2002).

Despite the sheer wealth of empirical and popular support for the pacifying influence of democracy on state repression, the explanation for this causal relationship and a detailed examination of this influence has been somewhat limited. For example, while conventional wisdom holds that democracy increases the constraints on political leaders and presents governing authorities with an alternative form of social control, it is not exactly clear whether or not specific democratic components contribute to this end or if all components are equally

capable of reducing state coercive practices. Within existing literature, numerous analyses have been conducted on different indices of democracy (where various components are placed together [e.g., Davenport 1995; 1999; Poe and Tate 1994]) but this obscures the identification of exactly which components wield causal significance. Now, it is clear that there have been investigations of individual components, which could potentially address the question about the pacifying effects of democratic institutions and behavior. Unfortunately, these studies are exclusively directed toward the examination of only one aspect of democracy at a time ignoring the consideration of others (e.g., elections [Davenport 1996a], constitutional structure [Davenport 1996b], executive constraints [Davenport 2003]). This has provided only little insight into the problem.

Drawing upon the work of the democratic peace literature in international relations, we maintain that certain institutions and behaviors associated with democracy are better able to decrease repression when compared to others. This is attributed to the fact that they represent distinct constraints on and incentives to political authorities. Specifically, three types of influences exist: *punishment* (potential sanctions that can be used against authorities for “inappropriate” behavior), *blockage* (potential and actual constraints placed on authority’s activities) and *exchange* (existing norms of communication and compromise which undermine authority’s interest with engaging in repressive activity). These are enacted by two mechanisms: institutions (e.g., constraints on the executive) and behavior (e.g., the vote).

Within the analysis of 144 countries from 1976 to 1996, we competitively investigate the influence of distinct components of democracy. Results disclose that competitiveness of participation (Polity’s PARCOMP variable) is the best in terms of predictive capacity. Additionally, after the examination of individual components we re-aggregate these influences in

new and innovative ways in order to assess which combinations yield the greatest influence on human rights violations. Here, results disclose that no one component of democracy can be given attention in the absence of all others. However, competitiveness of participation does offer more relief from repression than executive constraints. This significantly advances our understanding of what is involved with democratic domestic peace and also what individuals should spend their time and resources on when they wish to decrease repressive behavior.

Our study is composed of six parts. The first section discusses state repression and our understanding (a mix of structuralism and rationalism) of how leaders consider using repressive behavior. Section two sets forth the logic of democratic pacification. In this section, we discuss previous work linking repression and democracy. Here we also lay out the theoretical framework, taken from Rummel (1997), from which we derive our hypotheses. In section three we discuss the methodological techniques used in this study. The next section (section four) holds a discussion of the measurement and operationalization of our variables of interest – democracy and repression. Here we discuss specifically the different variables used to test Rummel’s three-fold hierarchy of democratic pacification. Section five of the manuscript implements the methodology discussed earlier and discusses the results of the methodological investigation. We conclude in section six with an overview of our findings and their significance for those who study democracy and repression in an order decrease the amount of torture, extrajudicial imprisonment and murder employed by political leaders as means of social control.

Everything You Ever Wanted to Know About State Repression

The role of state coercive activity in political life has been somewhat contentious in social science research. Harking back to the early 1900’s, individuals have long argued about whether or not conflict or consensus underlies political existence. This division is significant

because in the view of the former, repression is intricately connected with what states are and what they do; in the latter, repression is some infrequent anomaly of state-societal interactions that can either be generally ignored or merely considered to be representative of something else (such as economic inequality or psychological distress). Regardless of the side on which one comes down in this debate, two things are clear from a review of history: 1) the 20th century was by far the bloodiest ever with regard to the toll of domestic conflict on human life (deaths resulting from genocide, civil war, revolution and human rights violation), and 2) repressive behavior appears to be something that many (if not all states) engage in at some point.

Reviewing the literature, the explanations for human rights violations have essentially come in two varieties – structuralist and rationalist. These are important as one attempts to assess our knowledge about the topic.

First, there are those arguments that adopt a structuralist orientation (e.g., Davenport 1995; 1999; Harff 2003; Hibbs 1973; Krain 1997; Mitchell and McCormick 1988; Poe and Tate 1994) - a position taken by the majority of scholars in this area of study. Here, certain macro, aggregate “forces” move political authorities toward repression or tolerance. Caught within a matrix of international (e.g., trade-dependent relationships and colonial experiences) and domestic forces (e.g., population growth, dissent, democracy, military preparedness, ideological orientation and economic development) authorities use repressive behavior mechanistically in an effort to establish, maintain and extend their power. In this case, there is little to no agency on behalf of political leaders; these actors merely respond to the context within which they are found.¹

¹ Within this tradition some exert effort to divide explanatory factors into “constraints” and “facilitators”. This assists individuals with understanding exactly what factors influences and why. By and large, however, the matrix of forces is left as an undifferentiated mass (more or less a “garbage can” model; inelegant but comprehensive).

The adoption of this tradition has left this work open to criticisms that are commonly levied against structuralist arguments. For example, it is possible to make a strong case that while the existing framework is useful in highlighting the context within which repression takes place; it basically ignores exactly who engages in this behavior. Related to this Lichbach (1995, 18) states that,

(s)tructuralist arguments are strong on why people (repress) and tend to miss how they do so. Theories of (repression) ... therefore need process arguments if they are to explain mobilization into (torture and mass killing). All macro theories, in other words, need microfoundations: they must make assumptions about group action. Similarly, rational actor arguments are strong on how people (repress) and tend to miss why they do so. Theories of (repression) therefore need structures if they are to explain the (conciliatory and coercive behavior of institutions). All micro theories, in other words, need macro structures: they must make assumptions about the origin of preferences, beliefs, and endowments... Both types of theories therefore contribute to the explanation of collective (repression): structure without action has no mechanism; action without structure has no cause.

In an effort to address these limitations and acknowledging many of the insights provided by more anecdotal research (e.g., Donner 1990; Franks 1989; Goldstein 1978; 1983; Lopez and Stohl 1989), the second theoretical tradition used within the literature to account for repressive behavior combines elements of structuralism (context) with those of rationalism (agency); e.g., Dahl 1966; Dallin and Breslauer 1970; Duvall and Stohl 1983; Gurr 1986a,b; Lichbach 1995; Peterson and Karklins 1993; Simon 1994; Walter 1969. From this view, repressive action is the result of a decision reached and enacted by specific political authorities. These leaders do not

observe the matrix of forces that exists around them as some undifferentiated mass as in the structuralist perspective (devoid of weight and prioritization); rather, they view the diverse political-economic factors through the prism of “costs” (factors that drain political and material resources) and “benefits” (factors that enhance political and material resources). Here, it is maintained that if the value of benefits exceed that of the costs, then repression will be employed. If the value of benefits is exceeded by costs, however, then repression will not be used.

While this structuralist-rationalist hybrid significantly improves upon the approach identified above (highlighting the importance of political authorities and their decision calculus as the core element of repressive behavior), it is somewhat limited in that there is rarely any discussion of exactly what constitutes “benefits” and “costs”. When such matters are addressed, only costs are mentioned. For example, Duvall and Stohl (1983, 254-255) provide a rather detailed accounting of the decision calculus and the context that influences this process. In line with the argument outlined above, they state that

the probability that (a state) will engage in (repression), i , increases monotonically with increases in U_i relative to U_j , where (U =expected utility) and j are all alternative actions, including inaction. The greater the relative expected utility of (repressive) action for an actor, the greater the probability that the actor will engage in (repression).

They continue,

in order to explain or predict (the likelihood of) state (repression) as a means of governance, we should attempt to determine those preconditions or factors which account for contextual variation in the expected utility from (repression) relative

to the expected utility from other means of governance. When will $p_r B - C_r$ (where r is repressive action) be high relative to $p_j B - C_j$ for other means of governance j (where p =probability, B =benefits and C =costs)? The answer (they suggest), obviously, rests with the magnitudes of p_r , C_r , p_j and C_j (Duvall and Stohl 1983, 254-255).

In short, while the model suggests that there are benefits to repression that can accrue, they give no instruction as to what these benefits may be. This perspective is not unique to Duvall and Stohl but appears to be something found across studies within this area.

In thinking about this problem, it appears that part of the difficulty in specifying costs and especially benefits lies in the fact that researchers have generally ignored the topic. As John McCamant (1984,11) once commented

(o)ne searches in vain through the thousands of articles and books written by political scientists, political sociologists, economists, and anthropologists for references to the awful and bloody deeds of governments and for explanations of how and why these deeds are done.

While the sheer volume of research conducted on the topic has increased markedly since McCamant's remark, it is not the case that this has improved our theoretical understanding of the topic. Most researchers have simply been engaged in investigating the same causal relationships in more sophisticated ways across diverse databases. Part of the difficulty with understanding benefits and costs might also reside in the fact that researchers have never really addressed some rather fundamental questions about state repression (reflecting a victory of the consensus school in political science). For example, we have not been particularly good at figuring out exactly what coercion is and what is the best way to think about it? Nor, have we been able to

understand what government needs are served repressive action? One answer to these questions has emerged from the rather extensive literature on democracy and the democratic peace. It is to this literature that we now turn.

The Logic of Democratic Pacification

To understand repression and the impact of democracy, one must first understand non-democratic rule. Within the core literature on democracy (e.g., Dahl 1966; Schumpeter 1962; Lijphart 1984; Powell 1982), coercion is portrayed as being more than an action; it is a way of governance infused with system type. As repression is employed by political authorities against individuals and groups within their territorial jurisdiction for the expressed purpose of controlling behavior and attitudes, it simultaneously limits citizens by demarcating the boundaries of acceptability, punishes citizens for actual or potential transgressions, directs citizens in a manner preferred by authorities and instills fear within citizens as they come to understand exactly what the state is capable of. For much of this research repression is the preferred mechanism of social control being used in large amounts and seemingly against every target. As noted by Linz (2000, 102)

(c)oercion in (non-democratic) societies (especially totalitarian systems) has shown the following characteristics: (1) its unprecedented scale, (2) its use against social categories without consideration of guilt for specific acts, (3) the disregard for even the appearance of legal procedures, the formalities of the trial, and the opportunity for some kind of defense, in imposing penalties, (4) the moral self-righteousness and often publicity surrounding it, (5) the extension of the terror to members of the elite, (6) the extension to members of the family of the accused not involved in the crime, (7) the emphasis on the intent and social characteristics

of the accused rather than on his actions, (8) the use of organizations of the state and/or the party rather than of so-called uncontrolled elements, and the size and complexity of those organizations, (9) the continuing and sometimes growing terror after the consolidation of the regime in power, and (10) the nonexclusion of the leadership of the armed forces from the repressive policy.

Why do non-democratic authorities use coercive behavior? The reasons are somewhat complex. First, it is believed that these political leaders *need* to use repression. Within non-democratic contexts, there are essentially no alternatives that authorities can employ (e.g., Dallin and Breslauer 1970). Some normative influence may exist (principally based upon some form of paternalism) but little (to no) material influence can generally be found.² This usually leaves non-democratic political leaders with no options but repression. Additionally, many individuals make the argument that non-democratic political systems are inherently unstable (seething with resistance and waiting for an opportunity to rebel [e.g., Franks 1989]). As a result, the leaders of these political systems are constantly in fear of being overthrown by those who want to gain entry into the political system. In such a context, repression is “needed” because it allows authorities to stay in power.

Second, it is believed that non-democratic political leaders *prefer* to use repression when compared to other mechanisms of influence. Being generally closed off from the rest of society and insulated from other political actors, it is commonly believed that non-democratic authorities prefer to command their societies through directives (both verbally as well as physically). There

² We do not accept that economic development and system type are completely collinear, but rather seek to accurately portray what is conveyed within this literature. As Linz (2000, 57) suggests, “in spite of the significant relationship discovered between the stability of democracy in economically developed countries and the higher probability that those having reached a certain level of economic and social development would be democracies, there is a sufficient number of deviant cases to warrant a separate analysis of types of political systems, social systems and economic systems.”

are numerous reasons for this: 1) they believe that most individuals should follow what their leaders direct them toward, 2) they are actively engaged with building the social, political and economic systems frequently amidst traditional societies that are somewhat resistant to change, and/or 3) they cannot withstand a direct challenge for the foundation upon which such governments stand is somewhat limited in the degree to which it is actively supported by the populace. As directing a population is easier in many respects than negotiating or convincing them, such a position makes sense. One may also look at this command issue in another way as well within autocratic political systems. Repression appears to be intricately connected with the identity of authorities as these individuals frequently emerge from military backgrounds. Use of repression thus draws upon the training and beliefs instilled during these historical experiences and it allows political leaders to fulfill a need to employ what they have learned as well as how they have come to understand the world.³

Now, exactly what is it about democracy that decreases political repression? The key to answering this question appears to reside in decreasing the need and preference for repression. While there are numerous ways to make such adjustments within the relevant decision calculus (e.g., decreasing the benefits, altering the probabilities of success or increasing the costs), most focus upon influencing the cost structure. We continue in this tradition, especially drawing upon the work of Rummel (1997) who provides the most detailed discussion on the topic, but add a small twist. Although almost all of the literature on repression makes the claim that diverse combinations of institutions and behaviors associated with democracy yield similar impacts on

³ Why focus on non-democratic political systems as the base from which all discussion about repression takes place? The answer is straightforward. Non-democracies are where the majority of political systems began and the point from which democracies evolved. In typical developmental fashion, non-democratic governments serve as the foil against which one can understand the opposite end of the spectrum that is designed to be democracy. As a result, non-democracy becomes the backdrop against which the field of study of domestic democratic peace was born (e.g., Russell 1938 [1993]; Dahl 1966; De Jouvenal 1945; Rummel 1997). To move away from repression (and by definition non-democratic governance) one must move toward democracy.

needs and preferences, we suggest that a more careful examination of various democratic components will reveal that this is not the case; some aspects are likely to be more effective than others in influencing repressive activity as they influence needs and preferences differently. This is discussed below.

Disaggregating Democracy

As discussed within the literature, democratic political systems increase the costs associated with repression. How does this happen? As Davenport (2003) states,

it is expected that democracy alters the priorities of political leaders by making them (re)consider the implications of their actions for their tenure in office...

Here, governments carefully weigh the implications of their actions as they must be wary of damaging other interests that might intersect with their own or those of their associates and constituency.

Clearly, however, it is possible that different components of democracy (e.g., elections, the representation of diverse political parties within government and constraints on the executive) vary in their level of effectiveness in altering costs. Current research ignores this point, aggregating different elements together (see Davenport 1996a as the exception), but when one thinks about which components exist within a democracy and what influences they might have, then they can see the validity of this point. These different influences and elements are discussed below.

Punishment

Within democracies, it is clear that political leaders fear being removed from office for engaging in activities that are deemed antithetical to popular interest. As Rummel suggests (modified accordingly to fit the domestic context),

where there is a government by elected representatives who can be run out of office if they oppose the will of the people, it will be most reluctant to start costly and lethal (repressive campaigns), or to bear the continuing costs of such (activities)... (1997, 143)

Morgan and Campbell (1991, 195) are even more direct when they argue that

the only constraints that should operate on ... decisions (about state repression) are those that operate through the leaders perception of how the decision will affect his ability to remain in power.

This potential cost proves to be important because it alters the state's preferences away from repression and toward another option that is less costly. Additionally, by funneling claims and discontents into mainstream political engagement, it offers an alternative, less contentious mechanism for social control. From this, we derive our first hypothesis,

H1: As the likelihood of punishment increases, expected state repression will be decreased.

The “popular-will-as-cost” argument is not without its problems. As Rummel (1997, 133) suggests

the explanation (of) popular will (used to account for participation in interstate conflict) is not easily applicable to internal collective violence. Often such (behavior) is provoked and launched by some domestic group, either seeking to overthrow the political leadership, change the system of rule (as by Marxist or Maoist guerilla war), or alter public policy. The decision of such groups to fight the government is not one made by elected representatives, and indeed, were the representatives not to approve responding with force to such violence they might

be turned out of office for not maintaining order, or for cravenly submitting to violent demands. And where government itself violently attacks one group or another, or carries out a democidal campaign against a minority, this could be well argued to reflect the will of the majority.

This leads to an additional hypothesis,

H2: As the likelihood of punishment increases, expected state repression will only decrease when domestic and international threats do not exist.

What is the principal mechanism for punishment? As discussed within this work, democratic authorities do not just fix upon anything as they decide whether or not to use repression. Rather, their conception of costs directly focuses upon those instances when they are most vulnerable to the mandates of their constituency (e.g., when they are up for and subject to elections). Comparatively, public opinion polls, surveys and focus groups are not as costly to political authorities, although they also present something of a cost for political authorities who engage in undesirable behavior; indeed, while presidential approval may be important, it does not automatically result in the officials removal from office (it could always go up later). After a politician loses an election, however, there is no other recourse except contestation and/or resistance – imposing yet further costs on the political leader.

Blockage

Drawing upon the same democratic peace literature, it is also maintained that

in order to carry out the functions of government and respond to national issues and problems there must be a give and take among representatives of different constituencies, regions and ideologies (Rummel 1997, 138).

This is important because within democratic political systems authorities are constrained in their ability to use repression to the extent that they have to deal with, confront and frequently

override other political authorities that may be against this particular policy. If authorities are insulated and isolated (like in an autocratic political system), then they are better able to do what they wish and impose whatever policy preferences they wish; in a sense, isolation facilitates discretion. If political authorities are countered by rival organizations and cross-pressured by multiple group's interests, however, then they are less able to do what they wish and they are more inclined to prefer strategies that do not incite resistance as well as large-scale backlash.

This leads to the following hypothesis,

H3: Greater blockages in the political system will lower the expected use of state repression.

Now, just because multiple parties/groups exist does not mean that governments will perceive repression to be costly. It is possible that diverse groups could all agree to the repression of another group (e.g., the persecution of communists in the United States during the Cold War). This suggests the following hypothesis,

H4: Increased blockages will only decrease a state's expected use of repression when domestic and international threats are not present.

What is the principal mechanism for blockage? Again, it seems straightforward that democratic institutions would be involved in operationalizing this concept but it is also clear that behavior would be relevant as well. Here, the existence of elections is deemed important, as are the allowance of diverse political parties and the degree to which political authorities are subject to the oversight of other political actors. It also seems important that diverse interests in the society actually obtain representation. This acknowledges the point that repression will likely be used only when diverse interests (across ideological orientation, constituents and objectives) are represented and when these interests can use state machinery to hinder coercive behavior.

It is believed that authorities are less likely to prefer repression when the ease with which

this behavior can be used is diminished; preference thus shifts with the ease of use. Additionally, repression also decreases need for it is likely the case that when diverse groups receive some measure of “voice” within the political systems they are less inclined to try and repress them.

Exchange

The third explanation for how democracy decreases repression is perhaps the most complex. While the first explanation highlights the costs imposed by potential electoral activity and the second highlights the costs imposed by the countervailing capabilities of diverse interests, the third highlights the costs imposed by cultural norms and societal dynamics.

The basic argument here is somewhat detailed (and somewhat confusing within Rummel). As discussed, there is something believed to exist within individuals who live in democracy. These people are expected to believe in and essentially live through discussion, negotiation and compromise; losing some of the time and winning at others. Such an approach to political, economic and cultural existence is important for this is the belief that pervades democratic society. A society based on exchange imposes a constraint on political authorities that might consider using repression by this form of state behavior violates the norms upon which this type of society is built. As Rummel (1997, 143) suggests

(a) virtue of the culture argument is that it can accept that people by themselves are prone to violence and can even kill for what they desire; that all of us can be both angels and devils. And that democratic people by themselves are genetically and psychological no more nor less prone to genocide, mass murder, and war than any other people. But the nature of a democratic system and exchange society is that it disciplines our dispositions; it requires that we learn the ways of nonviolent conflict resolution if we are to get along and prosper. Significantly, in such an

exchange society one generally is neither forced to behave in a certain way or given a road map of desirable behavior by tradition, but through trial and error, interaction, and conflict with others, one learns to adjust, negotiate and compromise.

As a result, the following hypothesis has been developed:

H5: the presence of an exchange culture decreases state repression.

Now, by what mechanism are such constraints imposed? This is also somewhat complex (and, again, somewhat confusing in Rummel). Although the relevant norms of exchange are housed within individuals, the impetus for such beliefs emerge from the activities and institutions established by the authorities. Political leaders initially decide to allow individuals to act in particular ways, deciding not to interfere and if they are currently engaged with the monitoring of/interference with such activities then they withdraw. Through some form of habituation and social diffusion, all individuals within democracies come to recognize that exchange is acceptable and preferred. In this context, the dynamics of societal interaction (initiated and facilitated by the state) establish and later reinforce the norms and practices outlined above. Being selected from and subject to these contexts, authorities contemplating repression are constrained by these cultural forces. Table 1 summarizes the prior discussion:

[Table 1 about here]

The literature above not only provides us with a basic understanding of what factors are involved with democratic pacification and specifically how they influence political authorities, but it also provides us with a general assessment of the causal significance attached to these explanatory factors. For example, Rummel (1997) suggests that the importance of exchange outweighs that of both blockage and punishment. According to his argument, lying beneath

electoral institutions and countervailing behavioral efforts are the beliefs of individuals, which are the very building blocks of democratic peacefulness. As exchange and the values associated with it are crucial in altering political leaders and their perception of costs, it is this factor that should elicit the greatest impact on repression. In this argument, blockage is second in terms of causal significance because this factor explicitly invokes the principals of accountability, compromise, negotiation and peaceful coexistence. Punishment is the most removed from citizens for it generally does not maintain as close a connection with freely associating, complex interactions between individuals – the lynchpin of Rummel’s theory. Additionally, the principal mechanism of punishment (election) tends to be a highly structured as well as infrequent state activity that follows clearly defined rules of engagement. The other two influences (blockage and exchange) are much less rigid in nature and are more likely to invoke negotiation as a norm. As a result, they are more likely to transform authorities on a more enduring basis.

A different take on the importance of the different influences is provided by democratic theory itself. Many scholars within the elite theory of democracy maintain that it is the leadership within a political system that exhibits the greatest influence on state behavior and in this context the greatest constraint with reference to state repressiveness. Here, elites are the key actors in determining what takes place, they are the most educated and the ones least likely to be swept away by the dangerous impulses that frequently engage the mass populace. As such, constraints that involve other elites/authorities (blockages) should be much more important than the other two explanatory factors (punishment and exchange), which tend to inflate the importance of the mass public.

We now turn to the empirical investigation that will allow us to investigate the relevant hypotheses.

Methodology

This study uses a number of different methodological techniques (namely binary decomposition and the generalized additive model [GAM]) to try to untangle the independent influences of different component measures of democracy on repression. We do this in an effort to address the extent to which each is “important” for decreasing the use of state repression. The techniques we use allow for the non-linear influence that we discovered within earlier work (Davenport and Armstrong 2002). Here, we found that “(b)elow certain values, democracy has no discernable impact on human rights violations, but after a threshold has been passed, ... the level of democracy reduces state repression.” Binary decomposition is used because it operates within the OLS regression framework, an estimation technique that is familiar to a broad audience. We augment this analysis with the GAM for two reasons: 1) it is often more efficient than binary decomposition, requiring fewer degrees of freedom to properly model the non-linearity and 2) it allows a more nuanced, graphically oriented, flexible investigation of interactive effects than in linear regression.

Binary Decomposition

The first technique that we employ is a parametric method that uses OLS regression. This approach allows for a different effect of each level of an ordinal/nominal variable on some dependent variable (Wooldridge, 2003). While a name such as “binary decomposition” is rarely attached to this technique in the public domain, it should be one familiar to anyone that has taken an introductory course in methodology. As designed, this technique begins with creating a dichotomous (0, 1) variable for each level (value) of the explanatory factor in question. In a regression equation, all but one of

these is included and the regression coefficients are then computed (the excluded variable being the reference category). If the coefficients for each level of the original ordinal variable are all increasing or decreasing in roughly equal intervals, then one would conclude that the relevant variable is linearly related to the dependent variable. In this case (where explanatory factors are found to be linearly related), the interpretation of the given ordinal variable as being on a continuum has been validated and the measure can be used as an interval-level variable in regression analysis. In contrast, when the coefficients are neither uniformly increasing nor decreasing, non-linearities are said to exist. Exactly what one does with this information varies: one may either try to model the non-linearity or try to retain the original binary decomposition equation in estimation.

Although flexible in identifying diverse relationships, there are some limitations with binary decomposition. First, this may not be a particularly good method for final estimation because including $m-1$ binary variables (to represent a single m -category variable) decreases the efficiency of the model and may not gain much explanatory power; this is one of the many reasons why modeling the non-linearity might be worthwhile (option 1 above). Furthermore, if there are some categories of the variable being decomposed that contain relatively few observations, the standard errors will likely be large for these dichotomous variables, resulting in a finding of statistical insignificance. In this context, re-operationalization and the collapsing of variables might be necessary.

Generalized Additive Models

Generalized additive models (GAMs) also address the issue of non-linear influences in an additive model, but do so by incorporating non-parametric smoothing

functions of the relationship between the independent and dependent variables. (Hastie and Tibshirani 1995).⁴ In general, GAMs let researchers “fit each independent variable with arbitrary nonparametric functions, but subject to the constraint that the nonparametric effects combine additively” (Beck and Jackman 1998, 596). These models are of much greater flexibility than other models allowing non-linear effects (e.g., polynomial regression or log-models) because the nature of the non-linearity is not assumed a priori. The non-linearities can be modeled with either LOESS or spline smoothing algorithms. We choose to specify the nonparametric function using a smoothing spline as neither method is necessarily superior and the software we use (R 1.6.2) only allows the spline smooth (Venables and Ripley 1999).

Specifically, we will employ a semi-parametric model that has both linear and nonparametric additive components. The reason for this semi-parametric specification is that many of the independent variables are binary, leaving open no other possible relationship than a linear one. Trying to impose a smoothing spline would be impossible and unproductive. Furthermore, other variables in the equation have been found to be linearly related to repression in previous work. The general form is the following:

$$y_i = \alpha + \sum_{i=1}^m \beta Z_{i,l} + \sum_{j=1}^k m_j(X_{i,j}) + \varepsilon_i$$

where $\beta Z_{i,l}$ are regular OLS estimates and $m_j(X_{i,j})$ represents a nonparametric function of $X_{i,j}$ term (in our case a smoothing spline).

Measurement and Operationalization

⁴ Specifically, the assumption $E(y | \mathbf{X}) = \mathbf{X}\beta$ often stands on shaky ground at best. GAMs provide a way to test this assumption and properly model the conditional mean of y if the assumption of linearity does not hold (Fox 2002). Beck and Jackman (1998) suggest that it is more important to properly model the conditional mean, than the error variance.

Punishment

We employ two different measures, one institutional and one behavioral, to investigate the relationship between punishment and repression (hypotheses 1 and 2). The institutional measure is coded 1 if a country has an election and zero otherwise. This indicator is derived from the Vanhanen's (2000) participation variable whose value represents the percentage of the total population that voted. If more than 10% of the population voted, then the country is coded as having an election.⁵ The behavioral component is Vanhanen's participation measure in total lagged one year.⁶ This indicator ranges from "0" (e.g., Chile 1979-1988, China) to 74.2 (Bulgaria 1986-1989).

Blockages

Components from both the Polity IV⁷ (Gurr 1974, Gurr et al 1990, Marshall et al 2002) and Vanhanen Polyarchy datasets are used to address the extent to which blockages reduce state repressive activity (hypotheses 3 and 4). First, institutional indicators of blockage are executive constraints and competitiveness of participation. Executive constraints refer to the "extent of institutionalized constraints on the decision making powers of chief executives, whether individuals or collectives" (Marshall and Jagers 2001, 21). This variable ranges from "unlimited authority" (e.g., Guatemala 1976-1996) to "executive parity" (e.g., Botswana 1976-1996). The second institutional variable is Polity's competitiveness of participation measure. According to Marshall and Jagers (2001, 23) "competitiveness of participation refers to the extent to which

⁵ Inherent in the use of election here is that elections are free and fair. It is unlikely that elections in which only 10% of the total population votes are either free or fair.

⁶ We use percent of the population voting in the previous election because the concept of interest is not punishment itself, but the threat of punishment on which authorities will condition their behavior. If many people voted in the previous election, this shows the potential for mass electoral mobilization that could result in the removal of the leader from office.

⁷ See Appendix 1 for the coding rules for the Polity variables in this study.

alternative preferences for policy leadership can be pursued in the political arena.” This indicator ranges from “unregulated/transitional” (e.g., Afghanistan 1976-1996) to “competitive” (e.g., Australia 1976-1996). These two measures, taken together, address the extent to which authorities are institutionally constrained by other governmental authorities on the one hand and citizens on the other. Vanhanen’s competition variable is used as a measure of behavioral blockage. Competition is the percentage of seats in the legislative body won by all but the largest party. As this number increases, the number of differing ideological positions represented within and incorporated into the government is likely to increase. Competition ranges from 0 (e.g., Angola 1979-1990) to 70 (e.g., Belgium 1981-1996).

Exchange

The Freedom House measure of civil liberties serves as our measure of both institutional and behavioral exchange. Only within an institutional framework of inclusion can the civil liberties of individuals be guaranteed but it is clearly the case that one can observe civil liberties only in action – as individuals and groups attempt to use them. Thus we use this measure to test hypothesis 5.

As designed, Freedom House has developed a 7-point indicator for civil liberties. A score of “1” represents those countries that “come closest to the ideals expressed in the civil liberties checklist, including freedom of expression, assembly, association and religion” (Karatnycky 1999, 551); Examples include: the United States, Trinidad between 1987 and 1993, and Japan from 1976 to 1990. The score of “2” represents a situation where the country has “deficiencies in three of four aspects of civil liberties, but are still relatively free” (Karatnycky 1999, 551). “Countries ... which have received a rating of

3, 4 and 5 range from those that are in at least partial compliance with virtually all checklist standards to those with a combination of high or medium scores for some questions and low or very low scores on other questions” (Karatnycky 1999, 551); Respectively, examples include: Nigeria 1978-1983, Guatemala 1977-1978, and Hungary from 1977 to 1986. Finally, the score of “6” denotes a situation where there are few rights and a score of “7” denotes a situation where there is “virtually no freedom” (Karatnycky 1999, 552). Respectively, examples include: Haiti 1976-1985 and Congo (Kinshasa) 1982-1988. Table 2 shows the variables that will represent the concepts identified above.

[Table 2 about here]

State Repression

The term “human rights” has been used as a guarantee of everything from freedom from extrajudicial imprisonment, torture and killing to economic, social and cultural rights. While all of these tell us something about the freedom and the ease with which citizens live their lives, this study is particularly concerned with that subset of human rights called “personal integrity rights.” Governments who violate these rights engage in torture, extrajudicial imprisonment, forced disappearance and killing of their citizens.

To measure respect for personal integrity rights, we use codings of State Department Country Reports along the “Political Terror Scale” (PTS) guidelines. Michael Stohl originally developed the PTS measure used here. Regarding the indicator itself, Poe, Tate and Keith (1999, 297) state that, “(t)he application of the criteria to information about ... the coding categories and their criteria are: `1' - Countries (within

this category are) under a secure rule of law, people are not imprisoned for their views, torture is rare or exceptional... (and) political murders are extremely infrequent" - Examples include: the US, Venezuela 1977 and 1981, and Senegal 1976-1981; ``2" - (Within this category) ``(t)here is a limited amount of imprisonment for nonviolent political activity. However, few persons are affected, torture and beating are exceptional... political murder is rare" – Examples include: Mexico 1976 and 1983 as well as Gambia 1982; ``3" - (Within this category) ``(t)here is extensive political imprisonment, or a recent history of such imprisonment. Execution or other political murders and brutality may be common. Unlimited detention, with or without trial, for political views is accepted" - Examples include: Cuba 1976, Cameroon 1979, and Poland 1976-1977; `4' - (Within this category) ``(t)he practices of (Level 3) are expanded to larger numbers. Murders, disappearances are a common part of life... In spite of its generality, on this level terror affects primarily those who interest themselves in politics or ideas" - Examples include: El Salvador 1978-1992 and Rwanda 1990-1991; and, ``5" - (Within this category) ``(t)he terrors of (Level 4) have been expanded to the whole population... The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals" - Examples include: Haiti 1991, Sudan 1988, Rwanda 1994-1996 and China 1989.

This indicator stands as the most prominent standards-based measure of integrity rights violations used in the literature. We use this operationalization for three reasons. First and foremost, this is the set of rights whose violation is most heinous and most in need of reduction. Secondly, we focus on this set of rights because most discussions

about pacifying state power reference this form of activity as the most in need of reform. Third, these rights are the least conflated with democracy, our main explanatory concept.

Contextual Factors

Numerous scholars have investigated the relationship between human rights violation and democracy each with a set of explanatory variables (e.g., Davenport 1995; 1996a,b; 1997; Fein 1995; Poe and Tate 1994; Poe Tate and Keith 1999; Regan and Henderson 2002). The variables included within such an investigation are now quite standard across researchers. In line with this work, we utilize the database and model developed by Poe and Tate (1994) and Poe Tate and Keith (1999); this research (along with Davenport [1995; 1996a,b; 1999] in the events-based tradition) has become the standard by which most research in this area is currently judged.

Within these studies, the impact of numerous variables on human rights violation are examined: civil war (a measure of domestic threat), international war (a measure of international threat), military control, log of population, log of per-capita GNP, the lag of human rights violations and (of course) democracy. In previous estimations, all show a statistically significant, linear impact on the level of human rights violations and in ways that are consistent with expectations. The basic model is as follows.⁸

$$\text{repression}_{it} = \beta_0 + \beta_1 \text{repression}_{it-1} + \beta_2 \text{international war}_{it} + \beta_3 \text{civil war}_{it} + \beta_4 \text{military control}_{it} + \beta_5 \ln(\text{population})_{it} + \beta_6 \ln(\text{GNP/capita})_{it} + m_1 \text{democracy}_{it} + \varepsilon_{it}$$

⁸ Since population growth and economic growth in the Poe and Tate models and British colonial influence and leftist government control in our models - all failed to reach conventional levels of statistical significance, they were excluded from our analysis.

Here, the β 's are simply OLS coefficient estimates and the m represents a non-parametric function of democracy. Initially, there will be 6 different models, each containing a different democracy variable.

As designed, state repression (i.e., "political terror" or "personal integrity abuse"), the lag of this indicator and the diverse components of democracy are measured as stated above. Military Regimes are, "those which had come to power, as a consequence of a successful coup d'etat, led by the army, navy or air force, that remained in power with a military person as the chief executive, for at least six months in a given year" (Poe and Tate (1994, 858)). This is measured dichotomously. Measures for population and GNP per capita were taken from Poe and Tate's data as well. International and civil war experience (conventional measures of international and domestic threats respectively) are both binary variables coded by Small and Singer's Correlates of War (COW) database (1982).

Empirical Findings

The results are organized in the following manner. First, we provide some insight into which of the various components of democracy provide the best explanation of human rights violations. While the best measure of explanatory power would be to put them all in a single model, these variables are so highly correlated that using all of them in a model would produce potentially odd results.⁹ Therefore, we first put each component in a generalized additive model allowing each component to have a non-linear effect on the dependent variable. Next, we investigate the combination of these influences, not by creating an index, but by allowing for a smoothed interaction term

⁹ One of the side effects estimating models with highly collinear variables is that occasionally (in cases like this) where the magnitude of the correlation is very high, signs on coefficients will "change" revealing the opposite relationship to the one that actually exists in the sample.

between the variables involved in each of our three solutions – punishment (elections and participation), blockages (executive constraints, competitiveness of participation, and actual participation) and exchange (civil liberties). This facilitates the identification of the most important combination of individual democratic components, perhaps the most relevant information for those who wish to decrease human rights violations.

The Components of Democracy: An Assessment of Distinct Influences

To conduct our analysis, we first employ the generalized additive model (listed in the table above) including each democracy component in its own regression equation and comparing across models. Table 3 shows the regression coefficients for the linear terms in the GAMs for the democracy variables. Since we allow democracy to have a non-linear influence on repression, there is no numerical analog to the β for the linear terms. As a result, the best way to see how the different measures of democracy impact repression is to plot the nonparametric function of each variable. This is shown in figure 1.

[Insert Table3 and Figure 1 about here]

From the analysis, it is clear that all of these variables have a significant impact on state repression. Comparable to Davenport and Armstrong (2002), the measures for competitiveness of participation and civil liberties both exhibit a threshold effect where “(b)elow certain values, democracy has no discernable impact on human rights violations, but after a threshold has been passed, ... the level of democracy reduces state repression”. Differing from this earlier work, however, executive constraints exhibit an unfamiliar functional form. Specifically, it seems to have an “M” shape relationship in a downward trend where repression is influenced in a somewhat decreasing but oscillating

pattern. While statistically significant, the confidence bounds around this variable are very wide and thus do not preclude a number of other possible relationships, such as the threshold effect. We are not wholly convinced about this relationship.

While instructive about statistical significance, causal direction and functional form, this analysis tells us essentially nothing about which model is “better” – our ultimate interest. Consulting the adjusted R^2 from each equation, the results suggest that the competitiveness of participation variable is the best single predictor of state repression of all the single predictors tested. This provides evidence that, institutional blockages are the most effective means of reducing state repression. This is not to say that other means will not work, but just that this is the strongest relationship.

Concatenating Components: Toward an Analysis of System Combinations

Now that we have established a baseline, we can move on to more rigorously test whether it is punishment, blockage or exchange that best decreases repressive behavior. The GAMs, with smoothed interaction terms, will allow a different level of evaluation of the hypotheses derived above. Instead of looking at institutional and behavioral factors separately, however, we can look at them together in a single model. With this, we can test our previously stated hypotheses 1, 3 and 5 that punishment, blockages and exchange (respectively) will lower expected state repressive activity.

[Insert Table 4 about here]

Table 4 presents the different models for the punishment and blockage measures.¹⁰ Since we only have one variable representing both institutions and behavior for the exchange model, it is the same as the civil liberties model presented in Table 3

¹⁰ There are two blockage models, each having a smoothed interaction term between the institutional and behavioral blockage measures.

and thus its graph is the same as that presented in figure 1; we need not represent this relationship in three dimensions as we must do with the others. The graphs of the interaction terms are represented in three-dimensions. The two axes on “the floor” represent the two independent variables. The arrow (axis) pointing southeast represents the institutional variable, and the one pointing northeast represents the behavioral variable. The axis pointing north represents repression. To interpret these graphs it is easiest to think of them as a bunch of cross-sections. For the institutional model, for every possible value of participation, there is a line representing the relationship for elections. In this case, the line is almost flat meaning that elections have only a minor impact. The interpretation can be done similarly for the other axis.

When this model is estimated, the graph for democratic institutions (Fig 2A) shows that elections have only a minor negative effect on repression. Repression is lowest in the middle-high level of participation. This is probably due to the fact that there are a number of repressive regimes with mandatory or essentially mandatory electoral participation, but where no other viable candidates oppose the incumbent.

[Insert Figure 2 about here]

The first blockage graph (Fig 2B) shows that at the lowest levels of competition, executive constraints actually increase repressive activity, but at higher levels of competition, the opposite is true. The relationship across competition seems relatively stable. Repressive activity is high in the middling ranges of competition, then this behavior becomes much less used. This spike in repressive behavior can be explained by the fact that at the highest levels of competition (i.e., when no party holds a majority in parliament), the likelihood of engaging in repressive behavior with potential opposition to

this behavior is diminished. At middle-ranges, however, where such constraints are less apparent, repression is much more likely.

The second blockage model (Fig 2C) implies that as the competitiveness of participation increases, state repression is diminished and the rate is greater at higher levels of competition. Furthermore, competition seems to increase repression then rapidly decrease it as it moves from its middle to high range. This can be explained in a similar way to the blockage model above.

In many respects, the ultimate question is exactly which of the variables identified above performs the best. As Rummel states, the exchange model should be the most powerful, but we find just the opposite. In our investigation, this variable is the worst of all the models at predicting human rights violations. Both blockage models (i.e., executive constraints and competitiveness of participation, each coupled with competition) provide more predictive power than either of the competition and exchange models, with the model including competitiveness of participation and participation being superior (Figure 2C). Furthermore, the second blockage model (i.e., competitiveness of participation and competition) performs better than the best single component model.

We also hypothesized that the effects of punishment and blockages would only be seen in the absence of internal and external threats (civil war and international war). These were hypotheses 2 and 4 respectively. We found no evidence to support either of these hypotheses. In fact, the effects in the full sample and when no threats were present were nearly identical and substantively equivalent.¹¹

¹¹ In the interest of space these results have been omitted from the paper, but are available from the author upon request.

At the beginning of our journey through the democracy-repression nexus, we voiced a concern about discussing solutions to state repression that were “imposable” as many NGO’s and foreign governments often try to “impose”, “institute” or otherwise develop democracy in undemocratic contexts. We realize the futility of trying to impose behavior; democratic behavior and true respect for civil liberties is likely something that comes only with time and only after a certain level of trust and efficacy has been built. However, institutions, for better or worse, can be imposed upon a country. The following section considers how the imposition of the three institutions in question – executive constraints, competitiveness of participation and elections can help reduce repressive behavior.

First, in an effort to reduce the number of combinations to those exerting a unique influence on repression, we use the information provided in graphical form in Figure 1 to collapse categories where necessary. For example, consider the indicator of executive constraints within Polity. Though the functional form of this variable on repression does not look easy to model directly, it does look as though the first two and second two levels can be collapsed, creating a variable that ranges from 0-2 instead of 0-5. A new variable was created along these lines and then placed in an additive, linear model. The difference in deviance between the linear model with the new variable and the GAM with the original variable (-1.12) based on the degrees of freedom (2.69) is not a statistically significant difference (p-value=0.27). We are confident that each level of this new variable has a unique effect on repression. A similar procedure is undertaken with respect to the competitiveness of participation indicator. In this case, we were required to create a new variable that collapsed the first two categories into one. We then use these variables

to create a variable that has a unique combination of executive constraints, competitiveness of participation and elections.¹² Table 5 presents these combinations.

[Insert Table 5 about here]

We take the newly combined variables and place them in a binary decomposition model. The results of this analysis are shown in Table 6. When looking at the coefficients, there are four that significantly reduce repression. Furthermore, there are only 2 real effects on repression as there are two pairs of coefficients where there is no significant difference between the pair (i.e., one pair with matching executive constraints and elections values and another pair with matching competitiveness of participation and election values). This is much more easily presented in tabular form (see table 7):

[Insert Tables 6 and 7 about here]

From this table, we see an institutional structure emerge. One of the most notable things is that elections are needed in order for repression to be reduced. Every combination that decreases repression does so in part because it has an election. Another interesting finding is that either executive constraints or competitiveness of participation have to be at their highest levels for state behavior to be pacified. If executive constraints are at their highest level, in the presence of elections, with lower levels of competitiveness of participation, there will be a drop in expected repression of about 5% (this may seem trivial but when one is considering a measure of torture disappearances and mass killing every percentage decrease represents human lives). Similarly, if competitiveness of participation is at its highest values in conjunction with elections, expected repression is decreased by about 10%. Notice, too, that nothing is gained by increasing executive constraints, once competitiveness of participation has reached its maximum level.

¹² Combinations with fewer than 15 observations were dropped as we want to be as sure as possible that our comparisons between combinations are robust.

Conclusion

Our study was motivated by an under-explored 30-year trend within the domestic conflict literature: consistently democracy was identified as a factor that decreased human rights violations. At the same time, it was clear that the reason for this impact and a detailed understanding of the relevant components of democracy was missing from this discussion. For example, from this work one could not tell whether or not all institutions and behaviors associated with democracy were responsible for pacification or merely certain institutions and behaviors. Such information is extremely important for those interested in decreasing state repression because it is likely the case that modifications to fewer components would be easier than those directed toward numerous components at once.

Investigating the importance of diverse institutions and behaviors, we find that certain democratic components are necessary, but not sufficient for decreasing human rights (e.g., elections) while others decrease repression once these conditions are in place (e.g., executive constraints and competitiveness of participation). We also find that certain combinations of components are more important than others (e.g., competitiveness of participation and elections produce a greater decrease in repression than executive constraints and elections). From these results, we conclude that while the development of elections is crucial, the development of blockages on the power of authorities are required to reduce repression. There are numerous implications of this research.

- **All democratic components are not alike.** We need to explore and try to improve particular elements of democracy if we are interested in decreasing human rights violations because the constraints/costs imposed by the different components elicits distinct influences.

- **All combinations of democratic components are not alike.** Similar to the comment made above, we need to explore different combinations of democratic components for it is clear that different combinations represent distinct contexts within which authorities are placed.
- **All examinations of democracy should not be alike.** In order to better assess causal relationships we need to move between indices of democracy and individual components more frequently. Typically individuals adopt and thereby accept the measurement package that they receive from some other researcher. As Munck and Verhuilen (2002) identify, however, there is no reason why we should accept the particular measurement scheme provided by different researchers and, indeed, given the fact that different reasons are created for diverse reasons, it is important that we reconfigure these as necessary.

Within this context, future directions for research are fairly clear. We need to further refine our understanding of the underlying theoretical model connecting the diverse constraints with better operationalizations. For example, we are not completely satisfied with our measure for exchange and believe that we will need to experiment with some public opinion data in order to better investigate this causal influence. Such an operationalization is better in the sense that it deals with individual attitudes but it is clear that surveys do not generally include the sheer number of countries that we are examining within this study. Indeed, most take place in fully democratic and economically advanced contexts, biasing the sample.

Regardless of where such an investigation takes us, it is clear that Bertrand Russell was correct when he stated that “(t)o anyone who studies history or human

nature, it must be evident that democracy, while not a complete solution (to abuses of state power), is an essential part of the solution (Russell 1993, 186-7). We continue in this trajectory of thinking and enjoin others to follow.

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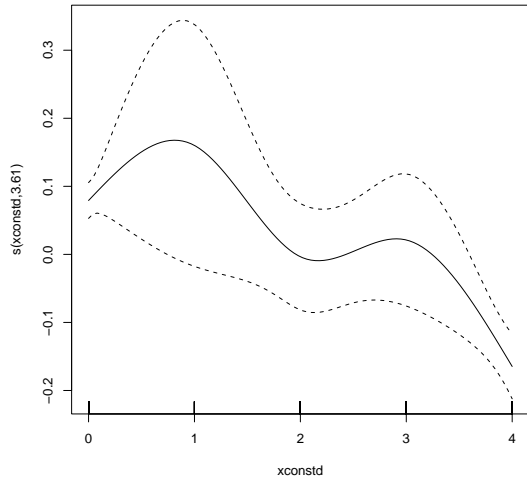
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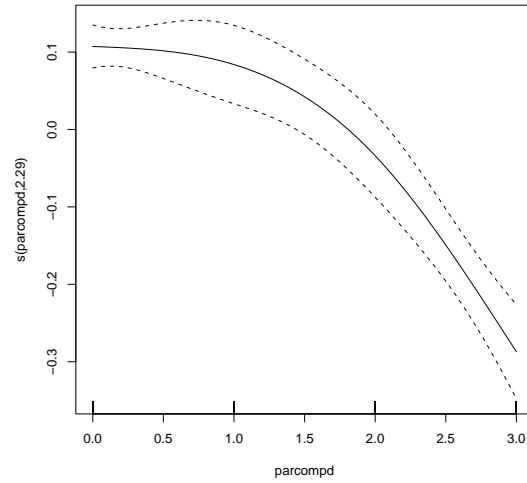
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Figure 1: Generalized Additive Models of Repression on Democracy Measures.

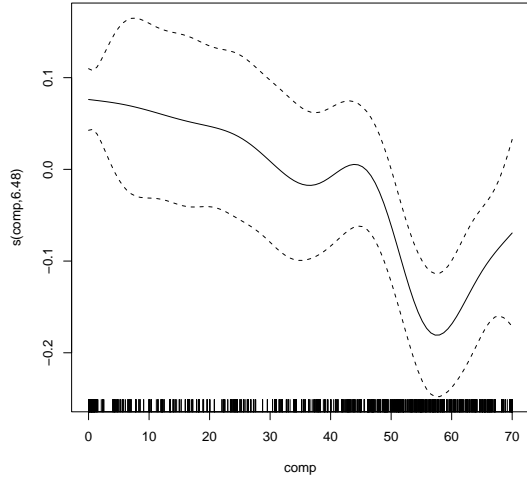
A) XCONST



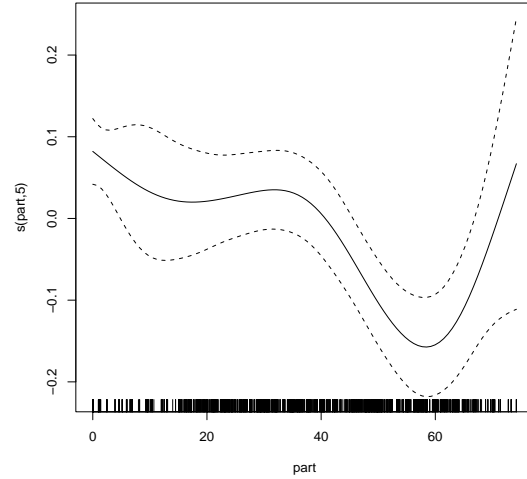
B) PARCOMP



C) Competition



D) Participation



E) Civil Liberties

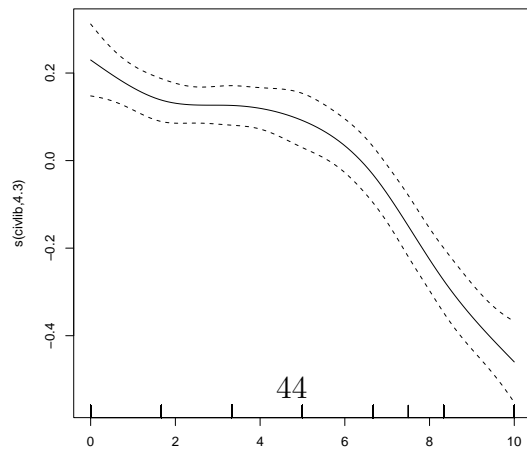
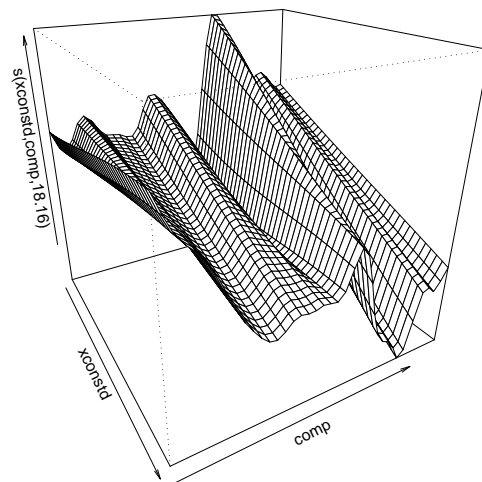
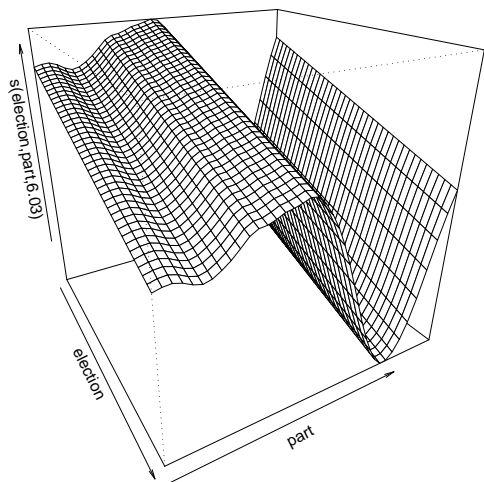


Figure 2: Generalized Additive Models of Institutional and Blockage Solutions

A) Institutions

B) Blockage A



C) Blockage B

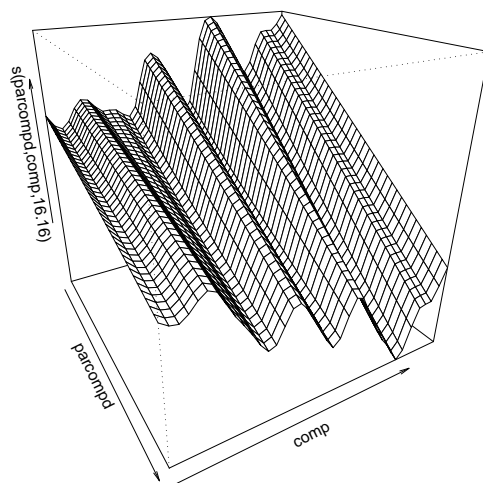


Table 1: The Diverse Paths to Democratic Pacification

	Institutions	Behavior	Nature of Cost
Punishment	Election	Vote	Fear of Punishment
Blockage	Division of Powers	Counter-balance	Difficulty Enacting Policy
Exchange	Liberalism	Exchange	Tolerance / Empathy

Table 2: Operationalizing Democratic Costs

	Institutions	Behavior
Punishment	Election	Vote
Blockage	Executive Constraints	Competition
Exchange	Competitiveness of Participation Civil Liberties	

Table 3: Generalized Additive Models

	XCONST		PARCOMP		Competition		Participation		Elections		Civil Liberties	
	Estimate	P > Z	Estimate	P > Z	Estimate	P > Z	Estimate	P > Z	Estimate	P > Z	Estimate	P > Z
(Intercept)	0.230	0.118	0.058	0.692	0.164	0.278	0.295	0.040	0.469	0.001	-0.181	0.311
Regression $_{t-1}$	0.686	0.000	0.659	0.000	0.699	0.000	0.697	0.000	0.711	0.000	0.607	0.000
Civil War	0.504	0.000	0.517	0.000	0.493	0.000	0.476	0.000	0.461	0.000	0.506	0.000
Int'l War	0.106	0.053	0.119	0.029	0.103	0.062	0.124	0.024	0.109	0.048	0.149	0.014
Military	0.068	0.027	0.078	0.009	0.078	0.010	0.111	0.000	0.095	0.001	0.062	0.065
ln(Population)	0.052	0.000	0.056	0.000	0.055	0.000	0.048	0.000	0.047	0.000	0.067	0.000
ln(GNP/capita)	-0.051	0.000	-0.029	0.005	-0.054	0.000	-0.057	0.000	-0.072	0.000	-0.006	0.645
Democracy	Fig 1A	0.000	Fig 1B	0.000	Fig 1C	0.000	Fig 1D	0.000	-0.103	0.000	Fig 1E	0.000
R^2_{adi}	0.749		0.753		0.747		0.748		0.745		0.734	

Dependent Variable is Regression, Coefficients are standard OLS regression coefficients

Table 4: Generalized Additive Modes of Institutions and Blockage

	Institutions		Blockage A		Blockage B	
	Estimate	P> Z	Estimate	P> Z	Estimate	P> Z
(Intercept)	0.299	0.038	0.045	0.770	0.008	0.958
Repression _{t-1}	0.699	0.000	0.676	0.000	0.655	0.000
Civil War	0.473	0.000	0.510	0.000	0.510	0.000
Int'l War	0.121	0.028	0.103	0.060	0.114	0.036
Military	0.110	0.000	0.073	0.016	0.080	0.008
ln(Population)	0.048	0.000	0.062	0.000	0.061	0.000
ln(GNP/capita)	-0.058	0.000	-0.046	0.000	-0.033	0.002
Democracy	Fig 2A	0.000	Fig 2B	0.000	Fig 2C	0.000
R^2_{adj}	0.747		0.752		0.754	
Dependent Variable is Repression						
Coefficients are standard OLS regression coefficients						

Table 5: Combinations of Democratic Components

Combination	Exec. Constraints	Comp. Participation	Elections	N
1	0	0	0	694
2	0	0	1	662
3	0	1	1	18
4	1	0	1	144
5	1	1	1	108
6	1	2	1	60
7	2	0	0	15
8	2	0	1	74
9	2	1	1	122
0	2	2	1	472

Table 6: Deviance Comparisons between Democracy Variables

Variable	Estimate	$P > z $
(Intercept)	0.246	0.190
Repression _{$t-1$}	0.651	0.000***
Civil War	0.538	0.000***
Int'l War	0.122	0.025*
Military Control	0.080	0.009**
ln(Population)	0.059	0.000***
ln(GNP/capita)	-0.028	0.009**
Institutional Combination 000	-0.116	0.345
Institutional Combination 001	-0.116	0.346
Institutional Combination 011	-0.308	0.086
Institutional Combination 101	-0.127	0.328
Institutional Combination 111	-0.208	0.116
Institutional Combination 121	-0.516	0.000***
Institutional Combination 200	0.182	0.339
Institutional Combination 201	-0.294	0.033***
Institutional Combination 211	-0.274	0.036*
Institutional Combination 221	-0.536	0.000**
R^2_{adj}		0.754

Institutional Combinations are of executive constraints,
competitiveness of participation and elections

Dependent Variable is Repression

Coefficients are standard OLS regression coefficients

Table 7: Components and Causal Effects

Executive Constraints	Comp Participation	Election	\approx Coef.
2	0	1	-0.25
2	1	1	-0.25
2	2	1	-0.50
1	2	1	-0.50

Appendix 1. Polity Component Coding

Component of Democracy	Coding
Constraints on the Chief Executive (XCONST)	1 (Intermediate Category) 2 (Substantial Limitations) 3 (Intermediate Category) 4 (Executive Parity)
Competitiveness of Participation (PARCOMP)	1 (Factional) 2 (Transitional) 3 (Competitive)