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An Ambition-Theoretic Approach to Legislative Organizational Choice

Understanding legislative organization requires that we understand internal institutional choice; we must be able to describe and predict variation in internal structures across legislatures rather than simply explain a given structure. Currently, models that would enable us to do so are largely unavailable. This article offers a more general model, based on a variant of ambition theory, with the explicit purpose of examining variation in internal organization rather than a particular structure. Theoretical results indicate that legislators' strategic preferences over structures will fall into distinct and opposed types. This finding implies that legislatures themselves should fall into the same types and that structures, rules, and norms should appear in organized, relatively coherent bundles linked to varying legislator types.

Introduction

Why do different legislatures choose different internal institutions?¹ Why do we see one legislature giving itself a higher level of staff support than another? Interest in legislative organization and structures has generally expressed itself through analyses of specific structures, explaining their existence by describing their effects on the legislative process. For example, the recent work on legislative committees argues that committees are chosen because they help solve vote-trading problems (Shepsle and Weingast 1987; Weingast and Marshall 1988), informational problems (Gilligan and Krehbiel 1987; Krehbiel 1991), or a variety of collective-action problems for the majority party (Cox and McCubbins 1993), to list a few theories.

This pattern of offering competing rationales for an observed structure has sharpened the inferences in the congressional internal institutions literature by focusing scholars' attention on how well each theory matches with the observed set of congressional (usually House) structures. It does not really address, however, the fundamental question of why that organizational device was chosen by that legislature.

The choice for a given observed internal structure is almost certain to be massively overdetermined—there are many reasons why a rational actor might prefer a committee system to an unstructured majority-rule environment. Why, though, would a rational actor choose an informational committee (system) over a distributive one, given that both systems might be (differently) preferable to not having committees? Or rather, *under what conditions* would a rational actor prefer one kind of internal structure over another?

To understand legislative organizational choice, we need models that directly examine structural variation as an object of choice, in addition to the extant models that explain particular structures. In this article, I offer a simple formal model of general structural choice in legislatures. This model takes standard ambition theory and exchanges the choice and nonchoice variables—how would differently ambitious legislators prefer to organize their chamber to the extent that their governing constitution allows them? The model's results predict legislatures that are essentially monocultural. We should expect legislators to sort themselves into behavioral types and for the legislatures themselves to then sort into rough types as well.

In the next section, I review the relevant literatures. I then lay out the model and describe its parts and the utility functions of all actors. I next provide formal results and discuss possible applications of the model. I conclude with a recapitulation of the main findings and suggestions for integrating the article into a larger legislative politics setting.

Structural Choice and Ambition Theory

Structural Effects

The majority of the theoretical literature on legislative structures centers on their effects. The general pattern is to derive the effects of a particular structure or organizational choice or set and then show that because of these effects, rational legislators would prefer the structure(s) over an unstructured majority-rule environment.

One tactic that has proven fruitful is to assert one particular goal and to show how various organizational choices can serve this goal. For example, Mayhew (1974) argues that we can “derive” many congressional structures from a simple reelection motive. Parker (1992) expands on this analysis by offering a more concrete reason for members to seek reelection: maximizing the exercise of personal discretion. His argument is that rules, norms, and more concrete internal structures have a dual purpose of creating barriers to entry (thus making discretion

safer) and increasing the abilities of individual members to have discretion in a given area. Here, I want to ask what legislatures populated by members with differing preferences might look like and how one chamber ought to differ from another if they have different mixes of legislators.

Another successful approach has been to examine a particular structure and infer the rationale behind it from its effects on the legislative process. Arguably the best-known examples of this approach are the various theories of congressional committees. In the state legislative arena, Rosenthal (1974) explores which internal institutions contribute to “high performance,” finding links between committees and the larger institutional environment. Since Rosenthal’s writing, other works have explored structural correlates of high performance in state legislatures. See Moncrief, Thompson, and Cassie (1996) for a review essay of this burgeoning research stream.

Structural Variation

A much smaller literature attempts to explain variation in legislative structures across chambers. Francis (1989) uses a rational-choice framework to explore comparative questions about legislative committees and legislatures more generally. For example, Francis forms a model of committee size that is based on internal decision-making costs and external principal-agency costs (Francis 1989, 107). He finds that larger committees have more members wishing the committee were smaller and that optimal committee size seems to track the size of the chamber (Francis 1989, 107–16). I offer a more abstracted and integrative model of generic legislative structures rather than using a specific model of a particular internal institution.

Hamm and Hedlund (1990; Hedlund and Hamm 1996) examine the number of committees that state legislatures use and the partisan balance on committees. They find that a “committee system model” focusing on structural characteristics of committees works best in explaining changes in the number of committees [Hamm and Hedlund 1990, 209–10, 217 (Table 3)]. They also find that legislative parties at greater risk of factional splits or with slim majorities are more likely to pad their committee majorities and that this pattern is heightened for control committees (Hamm and Hedlund 1996).

Finally, Squire (1988, 1992b) approaches the question of legislative organizational choice using ambition theory. Squire argues that legislative organizational choices create opportunity structures that attract members who will favor the realized choices (Squire 1988, 726–27). Looking at the lower chambers of the California, Connecticut, and New

York legislatures, he finds that the roles of seniority, committee assignments, and the stability of committee membership vary in line with the different “primary” ambition he assigns to each chamber. Squire (1992b) expands on this analysis by comparing the structural trajectories of the California Assembly and the U.S. House, finding that California’s Assembly “institutionalized” in a pattern different from that of the U.S. House. California legislators used their positions as springboards for higher office rather than as the culmination of their careers.

I expand on Squire’s analysis in three ways. First, I offer a specific formal model of how legislators form preferences over structures. Second, I explore how a legislature divided into factions with different ambitions might play out. Third, I present a model that considers a wider array of structures and can conceivably deal with any.

Ambition Theory

The basic statement of ambition theory as first articulated by Schlesinger (1966) “is that a politician’s behavior is a response to his office goals.” We can understand politicians’ behavior as rational responses to the opportunity structures in which they find themselves. Gordon Black (1972) refines and formalizes this approach, offering the now-familiar expression of the expected utility of a given office:

$$u(O) = (PB) - C,$$

where PB is the expected benefit of holding the office and C the cost of running for that office (G. Black 1972, 146). According to this theory, a politician will run for an office O if $u(O) > u(A_1)$, where A_1 is the next-highest-valued use of the politician’s time or the opportunity cost of that office. If we normalize $u(A_1) = 0$, then we get the classic concept that a politician will run for an office if $PB > C$ (or sometimes $PB \geq C$).

A critical point is that the politician’s environment—the benefits of holding an office, the costs of running for it, the probability of attaining it—is taken as exogenous. The question is not why an office has a particular benefit level attached to holding it, but how ambitious candidates respond to that benefit level.

Gordon Black’s and Schlesinger’s models can be reversed. At least for some offices, the environment is, to varying degrees, under the control of the officeholders themselves. The position of an office in the opportunity structure is partially a product of the decisions of the holders of that office. The benefits accruing to an office are also partially the results of decisions made by the current officeholders.

This is particularly true of legislatures. American legislatures choose for themselves their own internal structures and therefore dramatically affect their own benefits of officeholding and their place in the opportunity structure. They also can pass laws that affect the benefits of holding other offices and their place in the opportunity structure.

This is not to say that legislatures have complete control over their organization or their place in the opportunity structure. Legislatures can only act within a set of constraints imposed directly by the federal or state constitution (such as restrictions on session length and term limits) and indirectly by the governing constitution as it delineates the legislature's relations with the executive (such as the extent to which the chief executive may veto). Also, some aspects of the legislature's place in the opportunity structure are under the control of other strategic actors, insofar as the opportunity structure is relative and zero-sum—make one office more attractive, and the other offices become relatively less attractive.

Still, much of the organizational structure of American state legislatures is theirs to determine, if only within broad limits. From here, we can construct an ambition theory of internal institutions that explores how varyingly ambitious officeholders will mold their offices to their own benefit. This approach is not unprecedented: it recalls Mayhew's theory of congressional structures as designed to serve members' electoral interests. It also recalls Squire's examination of state legislatures; Squire finds that some legislatures attract members whose office ambitions will be best satisfied by their existing internal power distributions.

This simple fact—that legislatures can partially control their own benefits of officeholding and their place in the opportunity structure—can be relatively easily integrated into a modified and expanded version of Gordon Black's formal approach by introducing a legislative stage where B is the choice variable rather than the decision of whether or not to run. This choice of benefit levels is equivalent to a choice of structures; when a legislature collectively chooses its own organization, its own rules, practices, stature, and other internal structures, it is choosing benefits. This is also true when some of the benefits of officeholding are decided for them. Francis and Kenny (2000) note that the imposition of term limits on state legislatures reduced the value of the office, as is seen in Daniel and Lott's (1997) work showing that campaign spending fell in California following the passage of Proposition 138, which established term limits, stripped the legislature of its pension plan, and reduced its staff support.

The problem from the point of view of an incumbent is that P , B , and C are related. If the legislature increases B , then this increase might draw higher-quality challengers out of the political woodwork, either reducing P or increasing C to deal with the tougher candidate, or both. The problem is to find the level of *absolute* benefits that provides the highest *expected* benefits in equilibrium. Francis and Kenny note that as the value attached to an office increases, it will draw out more competition for that office, and that politicians will gravitate to the position with the highest expected value (2000, 13).

An Organizational Choice Game

Consider the equation $U = PB - C$, but with B as the choice variable. Different people might assign different benefits to holding office. To simplify the model, assume only two kinds of benefits. First, there are the standard set of benefits that accrue to any profession—there is some level of respect, pay, interaction with others in stimulating ways, and so on. These are nonpolicy or Downsian benefits (Downs 1957). In addition to these nonpolicy Downsian benefits, legislative structures can also supply policy benefits. That is, a given internal institution, such as a program review committee, might prove useful to a member who, in addition to his or her nonpolicy goals, also seeks to promulgate what he or she perceives to be good public policy. We can look at these two types of benefits as, on the one hand, the benefits that any job provides and, on the other, as the nearly unique opportunity to make law that legislative service provides. Francis (1989, 80–81) makes a similar distinction when he considers how a legislature populated with professional legislators versus amateur or citizen legislators would decide questions of session length and pay, given that the different legislators' indifference curves over these goods could be radically different.

The difference in benefit types that I am describing is *not* the standard difference between policy and reelection—here, all actors seek reelection as a necessary step to their ultimate goals. Rather, the difference is one of motivation for seeking reelection. Different legislators have different degrees to which they are motivated by making law: some might be narrowly focused on achieving a given policy goal; others might view the ability to make law as merely an additional benefit to their more important purpose of networking in preparation for a lobbying career.

It is important to note that, analytically, the content of the benefits is irrelevant. The model would proceed apace with generic benefits b_1 and b_2 . The basic idea is that there exists a vector of benefits, and

simplifying it to two dimensions is analytically convenient. The difference between policy and Downsian benefits that I use is merely one that I find interesting and empirically plausible. In any case, whatever the different benefit types are, assume that a legislator weights each kind of organizational benefit.

The game proceeds in two stages. First, the sitting legislators choose a mix of internal structures, foreseeing the consequences for the upcoming election. Second, an election takes place with each candidate choosing an optimal level of effort in the campaign. After the game proper concludes, the winner of the election enjoys the benefits of being a legislator while the loser enjoys no recompense for his or her campaign effort.²

Although temporally second, the election game is logically primary; structural benefit choices will depend in part on their electoral consequences. A game-theoretic model of campaigning informed by ambition theory is not unique (see Aldrich and Bianco 1991 and Banks and Kiewiet 1989). First, assume a sitting legislator who will face a challenger of known characteristics in the next election. Second, assume that the election will be decided by candidate effort and by voter reactions to the benefit levels chosen by the legislature.³ As one candidate expends more effort, he or she has a greater probability of winning the election. Additionally, assume that the incumbent faces an electoral penalty to higher benefit levels that reflects voter ire at the increased costs that may result from them. When the election game equilibrates, each candidate will expend an optimal level of effort given the mix of structural benefits and the opponent's electoral effort. This Nash equilibrium over campaign effort will give an equilibrium probability of winning for both the incumbent and the challenger and determine the incumbent legislator's strategic preferences over structures.

The organizational-choice phase of the game logically proceeds in a straightforward fashion from the election game. Each incumbent legislator considers his or her sincere preferences over structural benefits and considers the consequences of a given level of benefits for the next election game. From this, the legislator determines a set of strategic preferences over structures.

Utility Functions

Assume the following utility functions for players 1 and 2, where player 1 will, throughout, be an incumbent legislator. The over- and underbraces indicate which portion of the utility function corresponds to the P , B , and C in Black's formulation:

$$U_1 = \overbrace{\left(\frac{c_1}{c_1 + c_2} \right) \left(\frac{1}{k^{b_p + b_D}} \right)}^P \overbrace{(ab_p + (1-\alpha)b_D)}^B - \frac{c_1}{C} \quad (1)$$

$$U_2 = \underbrace{\left\{ \frac{c_2}{c_1 + c_2} + \left(1 - \frac{1}{k^{b_p + b_D}} \right) \left(\frac{c_1}{c_1 + c_2} \right) \right\}}_P \underbrace{(\delta b_p + (1-\delta)b_D)}_B - \frac{c_2}{C} \quad (2)$$

The terms of the utility functions are summarized in Table 1. c_1 and c_2 are the campaign costs chosen by the incumbent and the challenger respectively. It is important to remember that these are total costs and are meant to include factors such as the opportunity cost of time, strife in the candidate's family, having one's name dragged through the mud, and so on. Taken together, these costs partially determine each player's probability of winning the election, as Black notes (G. Black 1972, 146 n. 10, 148 n. 14).

The incumbent's probability of winning depends not only on the campaign costs chosen by the candidates but also on the level of benefits provided to him or her—a sitting legislator faces a penalty for high benefits. The rationale behind this penalty is that legislative benefits are ultimately provided by the constituents, who prefer a lower-cost legislature. Some structural benefits, such as staff support, impose a cost directly upon the taxpayers. Others, such as an unrepresentative committee system, might result in policies or programs of which voters disapprove. We know that constituents do pay attention to internal legislative institutions, or at least can be induced to do so sometimes. For example, voters in Colorado approved the GAVEL (Give A Vote to Every Legislator) initiative, which made various “good-government” changes in the legislative process (Rosenthal 1996). In California, voters passed Proposition 140, which instituted term limits, required a 38% cut in legislative operating expenses (in turn necessitating staff cutbacks of 600), and divested the legislature of its retirement system (Rosenthal 1996, 192).

Here, the incumbent loses a fraction of his or her vote share to the opponent, expressed by dividing this vote share by $k^{b_p + b_D}$ and granting this loss of probability mass to the challenger, where $k > 1$ is a constant. Expressing this penalty as a fraction of the incumbent's vote share keeps election probabilities bounded between zero and one. b_p and b_D represent the policy and Downsian benefits respectively. Each player applies a weight to these benefits, α for the incumbent ($0 \leq \alpha \leq 1$) and δ for the challenger ($0 \leq \delta \leq 1$).

TABLE 1
Variables and Parameters of the Model

Term	Description
b_p	Policy benefits of officeholding
b_D	Downsian/nonpolicy benefits of officeholding
α	Sitting legislator's weight between b_p and b_D
δ	Challenger's weight between b_p and b_D
c_i	Total campaign effort from player i
$\frac{1}{k^{b_p + b_D}}$	Electoral penalty: as $k \rightarrow \infty$, the penalty increases

Results

There are four primary results of the election and organizational choice games. First, members' strategic preferences over internal institutions will fall into three types: members who behave as if they were pure Downsians, members who behave as if they were concerned only with policy benefits, and a third group of any members lying exactly on the curve separating the Downsians from the policy wonks, the probability of which should approach nil. This three-way division will manifest no matter how wildly varied the sincere preferences over structures. Electoral pressures drive incumbent legislators to prefer only a few types of organizational bundles and are very likely to boil members down to exactly two opposing camps.

The second result concerns the actual realized organizational choices of a legislature. The election game creates strategic preferences over structures such that all ideal points fall along a line segment. Indeed, if the borderline case is suppressed, all ideal points will be located at the endpoints of that line segment. This scenario transforms a two-dimensional voting game, with all its attendant complications, into the much more tractable unidimensional case, implying that legislatures, like their members, will fall into types.

Third, this collective-choice process leads to the conclusion that legislatures providing higher equilibrium levels of structural goods will also have incumbents and challengers engaged in greater electoral effort for the greater reward. In practice, legislatures facing a smaller electoral penalty to structural benefits will provide more benefits and exhibit higher electoral effort.

Finally, the fourth result comprises the probabilities of incumbents of varying types being reelected under differing organizational schemes. Not surprisingly, under a high-policy-benefits scheme, all candidates (both incumbent and challenger) do better in the election game as the weight that they assign to policy benefits increases, and the reverse is true under a high-Downsian-benefits regime. This trend implies that the organizational choices should be self-reinforcing—a legislature providing Downsian benefits would attract and elect those who prefer Downsian benefits, who would then have every incentive to maintain the current organizational structure.

Strategic Preferences over Organization

This section proceeds in three parts. First, I determine the reaction functions of each player in the election game. In equilibrium, each player's actions will be a best response to the political environment and to the opponent's actions. Second, this set-up implies an equilibrium where these reaction functions hold simultaneously. This equilibrium statement leads the sitting legislator's strategic preferences over organizational choices. In this third part, I determine what kinds of structures the sitting legislator most prefers, knowing in advance what probability he or she will have of winning them.

Proposition 1 The reaction functions for each player are:

$$c_1^* = \sqrt{\frac{Ac_2}{k^{b_p+b_D}}} - c_2 \quad (3)$$

$$c_2^* = \sqrt{\frac{\Delta c_1}{k^{b_p+b_D}}} - c_1 \quad (4)$$

where $A = \alpha b_p + (1 - \alpha)b_D$ and $\Delta = \delta b_p + (1 - \delta)b_D$.

Proof: in technical appendix (http://www.uiowa.edu/~lsq/Battista_proof.pdf)

The properties of these reaction functions are, for the most part, intuitive. A candidate's optimal campaign cost rises as the weighted benefits rise, as expected. As the electoral penalty of higher benefits becomes more severe, each player engages in less costly campaigning. A candidate's reaction to increasing campaign effort by the other candidate is more complex, rising to a peak and then declining.

Proposition 2 The equilibrium for the election game is:

$$c_1^* = \frac{A^2 \Delta}{(A + \Delta)^2 k^{b_p + b_D}} \quad (5)$$

$$c_2^* = \frac{A \Delta^2}{(A + \Delta)^2 k^{b_p + b_D}} \quad (6)$$

Proof: in technical appendix (http://www.uiowa.edu/~lsq/Battista_proof.pdf)

Strategic Preferences

Proposition 3 A sitting legislator's preferences over structural benefits are given by:

$$U_1 = \frac{(ab_p + (1 - \alpha)b_D)^3}{((ab_p + (1 - \alpha)b_D) + (\delta b_p + (1 - \delta)b_D)^2 k^{b_p + b_D}} \quad (7)$$

Proof: in technical appendix (http://www.uiowa.edu/~lsq/Battista_proof.pdf)

Normally, one could then move to maximize the utility function and thereby find a legislator's preferences. There does not generally exist, however, a "peak" interior to the feasible range of b_p and b_D such that $\frac{\partial U_1}{\partial b_p} = 0$ and $\frac{\partial U_1}{\partial b_D} = 0$. Still, there will be a maximum of U_1 on the border of the feasible space.⁴

Proposition 4 Preferences over structures will fall into three types:

Type 1: An ideal point of $b_p^* = \frac{1}{\ln(k)}$, $b_D^* = 0$.

Type 2: An ideal point of $b_p^* = 0$, $b_D^* = \frac{1}{\ln(k)}$.

Type 3: Indifferent along an ideal line segment connecting the ideal points of Type 1 and Type 2 legislators.

Proof: in technical appendix (http://www.uiowa.edu/~lsq/Battista_proof.pdf)

The incumbent's preference between $b_p = \frac{1}{\ln(k)}, b_D = 0$ and $b_p = 0, b_D = \frac{1}{\ln(k)}$ can be determined by comparing his or her utility at each point. Simplified, this preference is determined by the terms $\frac{\alpha^3}{(\alpha + \delta)^2}$ and $\frac{(1-\alpha)^3}{((1-\alpha) + (1-\delta))^2}$ as follows:

$$\frac{\alpha^3}{(\alpha + \delta)^2} > \frac{(1-\alpha)^3}{((1-\alpha) + (1-\delta))^2} : \quad \text{Legislator prefers } b_p = \frac{1}{\ln(k)}, b_D = 0 .$$

$$\frac{\alpha^3}{(\alpha + \delta)^2} = \frac{(1-\alpha)^3}{((1-\alpha) + (1-\delta))^2} : \quad \text{Legislator is indifferent along ideal line}$$

$$b_p + b_D = \frac{1}{\ln(k)} .$$

$$\frac{\alpha^3}{(\alpha + \delta)^2} < \frac{(1-\alpha)^3}{((1-\alpha) + (1-\delta))^2} : \quad \text{Legislator prefers } b_p = 0, b_D = \frac{1}{\ln(k)} .$$

Figure 1 shows this relationship graphically. The ideal points along each border vary in response to the electoral penalty k , with a smaller electoral penalty inducing ideal points farther from the origin.

A legislator's indifference contours vary according to α and δ . Different legislators, with different weights over the benefits of legislative officeholding, have differently shaped indifference contours. A legislator's indifference contours also vary in response to his or her opponent's weighting. Figure 2 illustrates a legislator's indifference contours for $k = e$ and with opposed weights on policy benefits of officeholding as the opponent holds. Figure 3 shows it is possible for a legislator's strategic preferences to be opposed to his or her sincere preferences (the legislator places higher weight on B_p but strategically prefers B_D) and also that indifference contours may be nonconvex.

These results are, at first blush, rather counterintuitive. Legislators, allowed to place any weight on the two benefits, will collapse themselves into three behavioral types, each typified by an ideal point (or line segment): pure policy wonks, pure Downsian goods-seekers, and, perhaps, those indifferent between them. The essential finding of strategic types is not as impenetrable as it might first appear, however. The core concept is that accepting increases in benefit levels will sometimes cause a reduction in *expected* benefits depending on how the incumbent and challenger respond to the increase.

FIGURE 1
Separating Curve Between Ideal Points

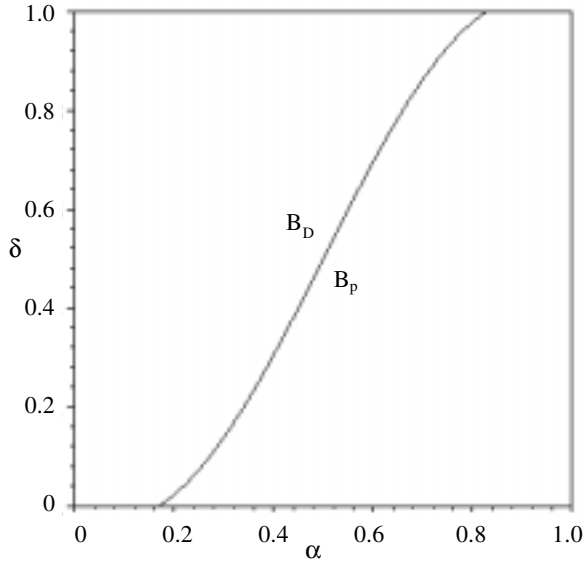


FIGURE 2
Legislator's Indifference Contours, $\alpha = 3/4, \delta = 1/4$

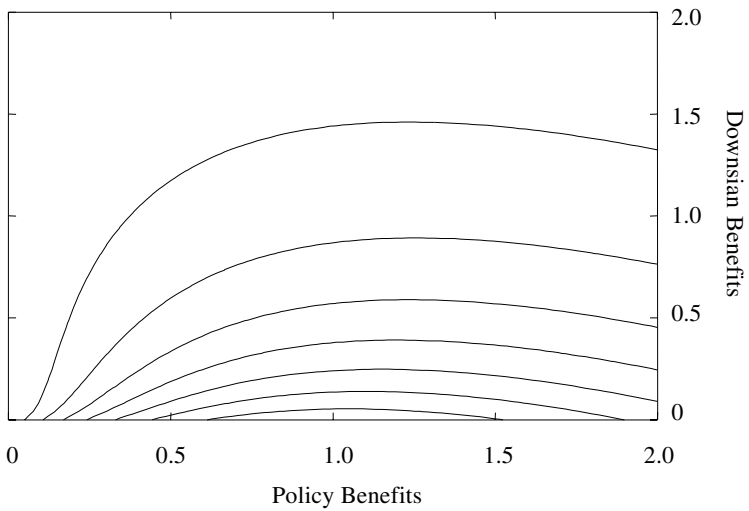
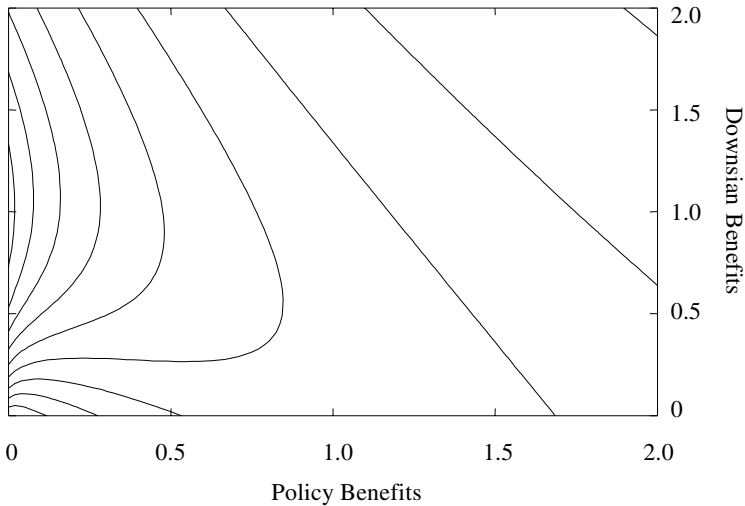


FIGURE 3
 Legislator's Indifference Contours, $\alpha = 6/10$, $\delta = 9/10$



Further, note that preferences over structures are, at least in this model, self-limiting. Even legislators who have boundless sincere preferences over structural benefits will restrain their demands for them in order both to forestall competition and to avoid arousing the ire of the voters.

Collective Choice of Organizational Devices

The problem of how even well-defined sets of individual preferences will sort themselves out into a collective choice is one of the thorniest to social-choice theory. The one-dimensional, single-peaked preferences equilibrium of the median voter is well known (D. Black 1958; Downs 1957). The median voter theorem provides a true equilibrium: any move from the median voter's ideal point will be rejected by a majority of voters. Equally well known, however, are the results of Plott (1967) and McKelvey (1976) that illustrate the fragility of equilibria in the multi-dimensional case and the dire consequences of the lack of an equilibrium.

The model presented here takes place in a two-dimensional space, implying that the problems associated with multidimensional voting models should affect it as well. Nevertheless, three simplifying assumptions generate a clear equilibrium outcome: (1) all legislators face the same electoral penalty, (2) there are no indifferent-type

legislators, and (3) there are an odd number of legislators. The first restriction states that the electoral penalty does not vary from legislator to legislator and that all legislators of a given type therefore share the same ideal point. The second restriction simply disallows that borderline class of possible preferences. In practice, this is a mild restriction because if a legislator or challenger departs from the separating curve by even ϵ , the legislator will become non-indifferent. Finally, the third restriction simply rules out ties.

Proposition 5 If these conditions are met, then there will be an equilibrium at either

$$b_p = \frac{1}{\ln(k)}, b_D = 0 \text{ or } b_p = 0, b_D = \frac{1}{\ln(k)}.$$

Proof: follows in text

There are two ways to prove this proposition. First, note that all ideal points over structures will be concentrated into two points. Since two points define a line segment, the model collapses into a unidimensional voting model. We know that legislator preferences will be single-peaked since all legislators have an ideal point at the border of the feasible space with utility falling smoothly away from that point. Therefore, we can apply the median voter theorem and, trivially, whichever ideal point has more legislators located atop it will also have the median voter.

A second way to consider this problem is provided by Plott's (1967) definition of an equilibrium in majority-rule games: a point in the space is an equilibrium if its win-set is empty. When there are no indifferent members, every member will have one of these two ideal points. Because there are an odd number of legislators split between only two ideal points, one or the other of these points must be the ideal point of a majority of legislators. This situation creates a definitive equilibrium at the majority-supported point—trivially, any shift away from this point will harm a majority of members and be voted down. Either of these approaches proves the proposition.

Admittedly, this set of conditions is unlikely to be met. It seems more plausible that parameters such as sensitivity to structural benefits vary across legislators. When these conditions are not all met simultaneously, the only recourse is to weaker solution concepts. Yet the complex nature of the indifference contours renders this solution difficult. A legislator's indifference contours over structures will generally be nonseparable or even nonconvex, as shown in Figure 3.

It is still possible to say something about likely outcomes. First, assume again that there are no indifferent legislators to complicate the scenario and that the number of legislators is odd. Therefore, there will be a minority of legislators strung across a range of one kind of benefits and a majority of them across the other. The essential result of a monocultural legislature will still hold as long as the majority side bargains within itself rather than with those who favor the other kind of structural benefit. As long as Downsians bargain with other Downsians to determine the organization of the legislature rather than with the opposing policy wonks, the legislature will still select only one kind of structural benefit.

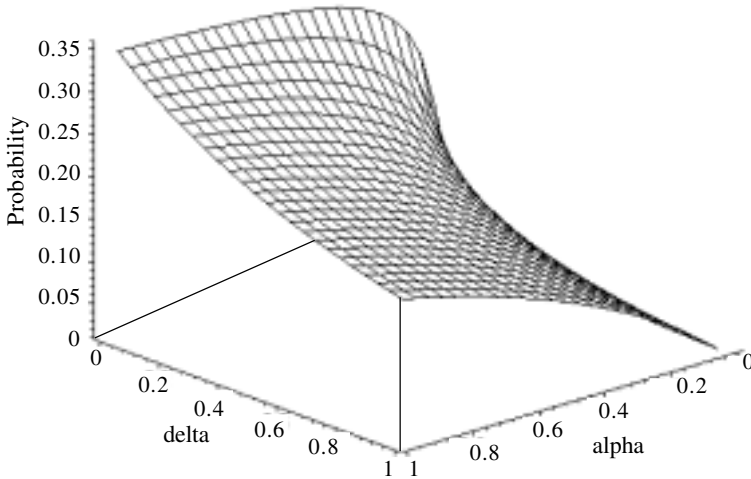
The important question is whether or not it is likely that legislators will bargain within their own camp. This scenario seems probable if we consider the general shapes of the indifference contours. For all of them, the first indifference contour away from their ideal point gives great weight to the strategically favored benefit, with the contour pulled in tightly to the axis and encompassing a fairly wide range of the favored benefit. This result implies that legislators will have greater room to bargain *on* their favored dimension than *across* dimensions, indicating a strong incentive to bargain among legislators of the same type. This effect will be stronger as the range of k declines and the constellation of ideal points along each border contracts. This effect will also be stronger as the membership of the legislature skews to one type. As a legislature skews to one side, the number of majority-type members who must be won over to obtain an outcome more favorable to the minority-type will increase. This effect is heightened by the tendency of a legislature of one type to reward electorally candidates of that type, as the next section describes. Finally, even if some members of the majority-type successfully made concessions to the minority-type to achieve a desirable outcome, it is unlikely that they would be willing to offer more than a small concession and they would likely require a large compensation in return. So, even when legislatures do not choose completely lopsided sets of structures, they are likely still to choose considerably biased structures.

From these collective choices, we may derive another of the classic results of the ambition theory literature: benefits B and costs C (or risk R) are directly related (G. Black 1972, 147, 150).

Proposition 6 When the model is in equilibrium, collective choices that provide greater structural benefits will induce higher electoral effort.

Proof: in technical appendix (http://www.uiowa.edu/~lsq/Battista_proof.pdf)

FIGURE 4
Probability of Incumbent's Reelection for $b_p = \frac{1}{\ln(k)}$, $b_D = 0$



This is not to say that incumbents and challengers will simply and directly run harder for an increase in benefits. If we hold k constant, then we see the electoral effort induced by the structural benefits rise to a peak and then decline sharply. Higher benefits will only be provided when the electoral penalty k is lower, and reducing k increases each player's optimal electoral effort.

Stability of Organizational Choices

Even when there is not an equilibrium, there must still be some choice of structural benefits, if only the reversion point resulting from legislative inactivity. One question that arises is whether or not the organizational choices are stable and self-reinforcing—what sorts of members do the electorate send to a Downsian legislature? Is a now-Downsian legislature likely to be filled with Downsian legislators after the election?

In this model, organizational choices are self-reinforcing. Increasing weight on the provided structural benefits increases the probability of an incumbent being reelected. Figure 4 shows this trend for legislatures providing policy benefits; the graph for legislatures providing Downsian benefits is essentially a mirror-image. Note that incumbents always do better, irrespective of their opponent's weight on the provided benefit, when they place more weight on the provided benefit.

This result hints that most extreme-weighting members ought to remain while the more-moderate members depart for parts unknown, increasing the preference bias toward the provided structural benefit.

Discussion and Applications

What, then, does all this analysis mean? What can be usefully extracted from this model? The model makes five primary predictions: first, legislators ought at least to behave as if they fell into types. Second, we receive the kinds of legislatures that sitting legislators want, unless voters alter the structural mix directly. Third, if legislators come in types and legislatures are molded by their members, then it follows that legislatures should sort themselves into types as well. Fourth, legislatures seen to be providing higher levels of benefits should have more intensive electoral effort. Fifth, organizational schemes should be stable and self-reinforcing.

Additionally, this model can consider other questions. If we can classify structures as being primarily policy oriented or not (or another distinction, if desired), then we can start placing structures into the packages or bundles that the collective-choice model predicts. This method can illuminate the question (among others) of which committee forms a legislature might choose: representative or unrepresentative, joint- or single-chamber.

Legislators Fall into Types

The most directly derived theoretical finding here is that, even if legislators are drawn from a wide-ranging distribution of sorts of preferences over internal institutions, strategic concerns will drive them to behave as if they were of a pure type—indeed, sometimes of the pure type opposed to their sincere preferences, as shown in Figure 3. We can take some comfort here, finding a theoretical reason to believe that using typologies of legislators might actually make some sense beyond being merely a useful simplification, which would also lend credence to analytical frameworks that make use of other strategic typologies, such as those in Squire 1988 and Barber 1965.

Legislatures that Legislators Want

A second and more important implication of the model is that we have the legislatures that the legislators want. Tentatively, existing empirical evidence seems to bear this theory out. For example, Squire finds that

the proportion of members who report no extra-legislative occupation in their chamber's roll is strongly positively related to a composite index of pay, staff support, and session length (Squire 1992a, 75). This is, at best, a *very* rough proxy for differing legislator types, and this result should at present be considered only a mere verification of plausibility.

Legislatures Fall into Types

If legislative structures are linked to member preferences and members come in types, then legislatures themselves ought to come in types as well. In practice, this result might be difficult to achieve. Legislatures cannot choose quantities of abstract goods; they can only choose from real structures, and it may well happen that it is infeasible for legislatures totally to avoid supplying majority-nonfavored structural benefits in some quantity. Or, to put it differently, real organizational schemes are likely to come only in bundles with positive amounts of all types of benefits.

A real-world approach to this implication of the model is to say that legislative structures ought to hang together in predictable bundles. Using the specifics I present here, we should sort legislatures into stronger and weaker orientations toward policy—although, again, any other distinction would work in the model. For instance, the use of strong audit and review committees should be associated with higher levels of committee staffing, since both of these organizational choices are strongly biased toward policy benefits. This schema begins linking theories of specific structures into a more coherent whole, describing and predicting not simply why a given structure might exist but what legislators who choose that structure might also choose. Having a schema also means that we need not directly observe legislator type—all we need observe is that legislators' choices are consistent. Again, the empirics tentatively support this hypothesis. For example, there is a common finding that legislative session length, staff support, and salaries are all strongly correlated (Mooney 1995; Squire 1992a, 1993). As in the previous case, this evidence should be considered only an initial plausibility probe.

Higher Benefits Command More Intensive Electoral Effort

The model predicts that electoral effort should be positively related to the level of benefits actually provided. Again, this is not to say that if a given legislature were to increase its benefits levels we would observe greater electoral effort. Rather, the legislatures in places that will accept higher levels of structural benefits should also have greater electoral effort from their legislators. Empirical data easily support this theoretical

finding. For example, Carey, Niemi, and Powell (1998) find that a composite measure of professionalization is strongly related to several variables that reflect the electoral effort of legislators.

Stability of Organizational Schemes

The model also hints that structures under a given regime, those with heavier weightings on the supplied benefit, will be more likely to return to office. It is important to remember, however, that this is only a “soft” implication of the model and that a formal derivation of a result like this would require a fully dynamic model.

Still, this hint indicates that we should not expect to see organizational choices changing often, since those legislators who most support them are most likely to be returned to office. Likewise, challengers favoring the supplied structural benefits will be most likely to beat their incumbents. In any case, we do not see structural changes on a frequent basis. I do not mean to imply that other theories of structural stickiness are necessarily incorrect, but this bias may be an additional factor keeping organizational change below the legislative horizon.

Our finding also implies that we ought to see large-scale organizational changes in legislatures only when they are accompanied or preceded by large shifts in the membership. This prediction comports nicely with recent political history. We have seen two relatively sweeping changes in the internal structure of Congress: one immediately after the Watergate class took office and the other after the Republicans took the House in 1995. Likewise, it is probably no coincidence that the measures urged by advocates of state legislative modernization began to take effect after the influx of urban legislators at the conclusion of the malapportionment era.

This linkage between membership changes and structural changes should be particularly strong when legislative structures or the benefits of holding legislative office are set into the constitution rather than into ordinary law. In many state legislatures, the constitution might place explicit or implicit limits on the length of sessions or other facets of legislative life. Thus, legislatures will not have perfect control over their own organization or the benefits of officeholding. In addition to some facets being set in a constitution, which would require, minimally, some sort of supermajority to obtain, it is possible for other actors unilaterally to alter the legislature’s place in a given opportunity ladder. For example, if the federal government in the United States devolves powers to the states or switches from programmatic grants-in-aid to more flexible block grants, then that change shifts the state legislatures up the oppor-

tunity structure, irrespective of the wishes of the legislators themselves. Given these areas of legislative life that are not under the legislature's control, we see two possibilities. First, the legislature might be able to work around these areas by increasing or decreasing benefits in the aspects of its own continual construction that it does control. The other likely possibility is that these difficult-to-change elements would percolate through the rest of the legislature's structure by attracting those players who find the elements desirable.

Conclusions

The ultimate goal of this project is to have a functioning theory that can explain variation in legislative organizational choices. As a first step in this direction, I use a game-theoretic model to derive legislators' preferences over internal institutions, knowing that an increase in benefits (which legislators would otherwise prefer) might lead to lower expected benefits, either through a direct electoral penalty or through inducing a challenger to run harder. The results of the model indicate that, despite possibly wide variation in preferences at the outset, legislators' strategic preferences fall into two tightly-bound camps of pure types, with the possibility of a (probably insignificant) group of legislators indifferent between the types.

In the end, this model links structures and organizational choices. The model is intended to serve as a lens through which many structural choices can be understood at the same time, although the highly-abstracted nature of the model certainly makes operationalization a tricky affair. The kind of legislature that this model predicts is monocultural, providing a lopsided set of structural benefits that track the preferences of its members. Hence, rules, norms, and the structures that embody them should follow predictably from member preferences and should be provided in relatively distinct bundles. By examining the interrelationships between different structures—using, in large part, existing theories of particular structures—we can begin to gain some leverage on the issue of why different legislatures choose to organize themselves in different (but similar) manners. Further, the model provides some additional clues as to why major organizational changes are both rare and tend to occur with sudden and largely exogenous changes in the membership of the legislature.

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NOTES

1. To a neo-institutionalist, an “institution” is an internal structure that constrains behavior; to most other readers, it would refer to an entire legislature. Unless it is otherwise clear from immediate context, I use “institution” for the legislature and “structure,” “organization,” or similar terms for internal organizational devices.

2. Allowing legislators to reap the benefits of organizational changes without an intervening election would transform the model into one providing the stunning insight that people with shorter time-horizons will act to secure benefits now even at a later cost.

3. This scenario might occur because both candidates choose to mimic the district’s median voter or choose some other very similar positions close to the centroid of the policy hyperspace.

4. It is possible to build a model so that strategic preferences are not border solutions. Cobb-Douglas utility “production” functions, for example, will generate ideal points that are slightly off the axes. The divergence is slight to the eye, however, and the linear-utility model, although admittedly restrictive, allows for more observable implications.

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