Party and Policy in Lineland:

A Theory of Conditional Party Cartels

by

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We have two goals in this paper. The specific one is to provide a unified account of several prominent institutional theories of the Congress, but especially to present a model that is consistent with both the Cox-McCubbins theory of party cartels (2005; 2007) and the Aldrich-Rohde theory of conditional party government (1997; 2000; Aldrich, 2011; Rohde, 1991). We hope to demonstrate that, while these two theories might have developed independently and with differing emphases, they are theoretically compatible and, at least in an important special case, two sides of the same coin, that is, together they offer a unified account. That unified account is what happens when a political party seeks to use its majority status to achieve the shared, collective interests of the party, rather than fall victim to a collective action dilemma or otherwise fail to act in the interest of its majority party affiliates. This account begins with the assumption that in the absence of successful collective action by the majority party, the unicameral, House-like chamber would be governed by what scholars like Krehbiel (1991; 1998) and Mayhew (1974; 2005) offer as the "majoritarian" theory of Congress. From there, features, particularly that developed by Romer and Rosenthal (1978; 1979), and employed in the congressional committee context by Shepsle (1979), enable the majority party to use its majority status, should they so choose.[1] If they do so choose, we hope to show, policies chosen by Congress are systematically different from those under the majoritarian account.

This first goal of the paper begs the second major question, which is under what conditions might there be a collective interest the majority party might consider expending its resources to achieve? In most accounts (especially flowing from Mayhew, 1974 and Fenno,

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[1] Cox and McCubbins (2005; 2007), and Aldrich, (1983; Aldrich and McGinnis, 1989) develop their models from the perspective of Shepsle's committee structures, and the account presented here should be able to be generalized to that setting easily.

1973), the central idea is that MCs have policy goals that are, at least in part, induced by the pressure of election and reelection, in addition to possibly having personal policy preferences (among other goals).[2] Mayhew, of course, traced out the implications of a Congress that is exclusively concerned with reelection, but reelection is a major imperative even under Fenno's more expansive explanation of congressional ambitions, if for no other reason than MCs cannot achieve their goals if they are no longer MCs. Perhaps surprisingly, there are few institutional theories of the American Congress which feature both policy-making and elections in a unified account. And so, we move in that direction, pointing the way about how one might approach models, especially those with electorally consequential political parties, and, perhaps, those without.

Putting multiple institutional theories of policy-making together under a common set of assumptions requires employing strong additional assumptions someplace else in the account to yield any substantial results. In the formal part of the effort we make two strong assumptions. One is that preferences of all actors can be considered single-peaked along a single dimension. This one is so commonly made in formal models of the Congress that it might seem (to modelers at least) fairly innocuous. We recognize that it is not,[3] but we need to start somewhere, and this is where formal versions of majoritarian models all start (and as far as we can tell, this is where they mostly end as well). And, thus, we present here a model of the Congress of that well-known democratic nation, Lineland (Abbott, 1884 and with apologies to the more general account of Flatland in McCubbins and Schwartz, 1985[4]). The second is that, while the party

accounts all assume multiple goals for Members of Congress (hereinafter MCs), we build the model assuming that MCs are single-minded seekers of reelection.

Preliminaries:

We here set out some basic assumptions alluded to above. First, we assume that all actors have well-defined utility functions. Few actors value the content of a piece of legislation in and of itself. Rather, and as we assume here, for all actors, whatever their ultimate goals are with respect to the political decisions they face (for citizens that is voting, while for MCs it is reelection), the ultimate ends induce preferences over the policy space, indeed, over the same policy space. For all actors, i, there exists a utility function, U_i, which has as its argument a policy space, say, $X \subseteq R^1$. We further assume that $U_i:X \rightarrow R^1$. The last means that all i share the same policy space and can evaluate any point therein. We go one step farther, which is to assume that all i, whether MCs, candidates, or citizens, have strictly single-peaked preferences (SPP) in X, that is in R^1, with single-peaked meant specifically in the sense of Black (1948; 1958). But with all sharing the same set of logically possible policies, X, that suggests that there may be some external (if not actually exogenous) definition of what the elements of X stand for, such as liberal-conservative ideology or, in the case of Downs whose electoral model we begin with here (1957), degree of government involvement in the economy. The result is that SPP in a Downsian world is a stronger assumption than Black's original theorem uses.

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The Majoritarian Theory of the US House:

With two more assumptions, we have the full set of conditions for Black's median voter theorem. The first assumption is that voting is always by pairs and decided by simple majority rule. This holds empirically in the U.S. House, for the most part, and so will not be considered here.[5] The second is that all possible alternatives (that is, every element of X) can enter the voting at some point. In congressional parlance, that would be an "open agenda." The variations on the theme of congressional institutions are, essentially, variations on ways in which this assumption is not satisfied, usually employing, as here, variations on the Romer-Rosenthal model of agenda control. The median voter theorem, or the central result in the theory of majoritarianism, then, rests on these three assumptions: unidimensional single-peakedness, pairwise round robin voting with simple majority rule, and a fully open agenda.

Black's theorem has two major consequences. First, the ideal point of the median voter will always be chosen, because, by the open-agenda assumption, it enters the voting at some point, and by the SPP assumption every voter has single-peaked preferences (in one dimension). With these two assumptions, Black showed that the ideal point of the median voter along X is the alternative that defeats all others by simple majority voting, and is thus also unbeatable as soon as it enters the voting. Further, by the open agenda assumption, at the very least the median voter herself will be able to enter her ideal point into the voting (and by $U_i(X)$ will want to do so). Thus, the median voter's ideal point will always be proposed and then win.

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[5] The rare exception to the assumed binary choice is voting for Speaker when there are several serious contenders, such as in 1854 (Jenkins and Nokken, 2000). We also assume away super-majority votes, such as for amendments, veto overrides, and suspension of the rules votes. The last illustration is increasingly commonly used to pass (quickly and with little discussion and modification) substantive legislation. These will be taken up in later papers (e.g., Aldrich, Ramjug, and Whyman, forthcoming).

The second result of his theorem is that, in addition, all elements of X, that is all policies, form an order based on voting, that is form a social order, as if the society were a single person. By order we mean that the results of round-robin, pair-wise voting satisfy reflexivity, completeness, and transitivity with respect to each other. In this case, the result is that each element fits in a specific spot in the social ordering of alternatives, such that it is defeated by every element higher than it in the ordering and it defeats every element in X that stands lower in the order (and ties with any other at the same spot in the order). [6]

Majoritarian theory argues that Black's theorem holds in Congress. A common point to make is that, whatever alternatives to the dominance of the floor that may exist, whether that is parties, committees, oligarchies (of, e.g., committee chairs), or whatever else, the last vote in the chamber is a binary choice between the bill, however amended, and the status quo.[7] Because that final vote is binary, MCs vote sincerely (that is, for the more preferred alternative). That binary choice can then be substituted in the next branch of the voting order preceding the final vote. It too is therefore binary and decided by sincere preferences, and so on back the voting order. Thus, in the more recent game theoretic parlance, Black's theorem implies a unique sub-game perfect equilibrium in floor voting on each bill taken one at a time.

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[6] A helpful corollary is that the alternatives on one side of the median stand with respect to each other in strict order by distance from the median voter's ideal point itself.

[7] Or whatever is the reversion outcome if no (possibly amended) bill passes.

Theories of Political Parties in the House

When applied to the unidimensional case, both the Cox and McCubbins and the Aldrich and Rohde accounts have assumptions that are fully compatible with all but the open agenda assumptions of Black's theorem and thus majoritarianism. The majority political party can then be understood as looking for instances in which it would want to use its powers to see if they can do better for its MCs than the floor median. There are two ways this can happen. The majority party could prefer the status quo (or reversion point) over the median, even if there is a floor majority with the opposite ordering. They then might seek means by which to ensure the status quo is maintained, which Cox and McCubbins develop as negative agenda control, that is, letting nothing on the floor at all, thereby maintaining the status quo. Aldrich and Rohde look at positive agenda control, that is, when the majority party might prefer to change the status quo, and they look to see if the majority party might prefer an alternative to the median voter position as well. The party can find this out by either implicit or explicit votes in Caucus/Conference of the majority party members. Should, say, a majority of the majority party agree on a preferred alternative for them that is not either the status quo or the floor median, they can empower their party leaders with the resources to ensure that that majority holds together, which is usually achieved in combination with the use of restrictive special rules, to honor their pledge to each other.

In this setting, the most general account of models with positive agenda control with political parties is due to Aldrich (1986). Its key assumptions are that X is an n-dimensional space, and therefore we are considering the special case where n=1. Second, each legislator is affiliated with one of the two political parties, where for this paper we call the majority party **M** and the minority party **m**. There is a simple agenda consisting of a bill which is considered by

the majority party MCs, perhaps working through committees.[8] They offer the minority a single

amendment, and thus there are two possible agendas. Either no bill is proposed to change the

status quo (this exemplifies the Cox McCubbins negative agenda control), or there is a bill

proposed (by which we mean "makes it to the floor" and is the instance of Aldrich-Rohde's

positive agenda control), and they allow the minority a single amendment (similar to the Motion

To Recommit with Amendment until revised for the 117th Congress [see Ramjug, 2021]). The

possibility of a minority party amendment means that there are up to two floor votes.[9] The first

considers the bill (if proposed) and the amendment (if proposed), decided by simply majority of

the chamber. The winner faces the status quo, with the chamber's final decision being the simple

majority winner of this vote. All MCs are considered sophisticated at least in terms of this round

of decision making – that is, they can look ahead to the final vote and evaluate by backwards

induction (and thus, preferences of all MCs are common knowledge, unlike, say, Sen.

Manchin's).[10] The theorem is, then, that there is a unique equilibrium to this sequence of

considerations, and it is a winner that is preferred over available alternatives by at least a simple

majority of MCs on the floor and by at least a simple majority of affiliates with majority party

M. From the majority party's perspective, we can say that the outcome (SQ, bill, or amended

bill) is <u>desired</u> by the majority party (at least a majority of the majority party prefer that over

other viable outcomes), and it is <u>feasible</u>, that is to say that it wins on the floor. This is thus an

existence theorem and fairly general (especially in the context of multi-dimensionality).

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[8] We will have more to say about committees and their role in this theory below.

[9] But the minority party is assumed to look "down the game tree" to see what is the best viable amendment (often, the floor median), or otherwise the majority party could propose a bill that would be less attractive to the minority than otherwise, taking advantage of the minority's failure to select the strategically best amendment.

[10] Aldrich further assumed that the minority selected the best (strategic) choice that would be maintained. The best outcome they can be assured of getting is to propose the median voter's ideal point, which the majority party cannot anticipate bettering. Thus, a single minority party amendment is sufficient to stand in for the complex web of amendments open rules in Congress can sometimes generate.

Location is not generally specified, although that any (amended) bill that passes must be within the range of preferences of the majority party.[11] Often, at least in the special cases investigated which are typically of reasonably "polarized" cases, it is well within that range. Of course, in Lineland, the floor median is necessarily within that range, and so the question is whether outcomes are even further "inside" the majority party's policy preferences than the floor median. In this paper, we develop that outcome precisely in the theory we call conditional party cartel.

The Conditional Party Cartel Theory:

This model assumes two of the three conditions of Black/majoritarianism: (unidimensional) single-peakedness and pair-wise voting. It substitutes majority party cartel actions, particularly concerning the policy agenda, for Black's open agenda assumption. That is, the agenda is a choice, and it can be a choice of no agenda at all (maintenance of the SQ without considering any alternative), a proposal with an open rule (and hence possible amendment), and a proposal with a closed rule (and hence no amendment). We assume this choice is made by the majority party, through empowering its leaders to act as a leadership cartel. The power granted by the majority party to its leaders allow them to exercise two points of agenda control. First, if at least a majority of the majority party prefers SQ to the median voter's ideal point (let us now call it the floor median), the leaders can keep any proposal from reaching the floor. The status quo is thereby maintained, even though a majority of all MCs might prefer the floor median to SQ. Second, if at least a majority of majority-party MCs prefer a point (especially the median of all majority party MCs) to both the status quo and the floor median, the majority party leadership is empowered to offer (up to) that point on the floor with a restrictive special rule that prohibits

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[11] Roughly, that means lying within the convex hull surrounding ideal points of party **M** affiliates.

amendments (that is, with a closed rule). As we will see, if the closed rule is agreed to, the vote for the proposed bill (with closed rule) will pass on final vote, often with a large majority, including at least some minority party votes, but it selects an outcome more "extreme" than the floor median in favor of the majority party's preferences. In these ways, the majority party gives its leadership resources to exercise both negative and positive agenda control.

These results are simply special cases (or very small variants) of results already proven by Cox and McCubbins and by Aldrich and Rohde. This proposition merely puts the two together in a common framework. Further, the (strong) assumption of unidimensional single-peakedness permits the development of a full set of results with specific policy proposals covering the full-range of preferences across the two party MCs. We sketch these results below.

Assumptions: Legislative action in the chamber.

1. There are K members of a legislative chamber akin to the U.S. House (hence, aka MCs).

$$\mathbf{K} = \{1, 2, \ldots, k, \ldots, K\}$$

2. Every MC is a member of exactly one of two political parties. Denote these as **M** for Majority party and **m** for minority party.

2a. $\#\mathbf{M} > \#\mathbf{m}$

2b. $\mathbf{M} \cap \mathbf{m} = \varnothing$

2c. $\mathbf{M} \cup \mathbf{m} = \mathbf{K}$

3. There are n policy instruments (or dimensions) on which the legislature can take action. These can be represented by points in an n-dimensional Euclidean space. Both the Status Quo (SQ) and all bills and amendments to change the SQ are represented as points in that n-space.

3a. Special Case 1: n = 1 (unidimensionality or "Lineland").

3b. Special Case 2: If there are legislative committees, each is assigned a unique single dimension as their jurisdiction. Thus there are n committees and thus committee jurisdictions cover the policy space in the sense of Shepsle (1979).

4. All MCs have (induced) policy preferences that are additively separable on each of the n dimensions, when $n > 1$. Each MC k has an ideal point, x_i^k, on dimension i and utility declines with the sum of the distances between the issue-specific ideal points and policy outcomes: $u_k(z) = -\Sigma_i |x_i^k - z_i|$. All MCs seek to maximize the utility they derive from the final choices on each dimension and vote strategically on each attempt to change the SQ on dimension i.

5. Voting is binary between all motions, that is, between points in X, decided by simple majority rule. SQ always enters the voting in the last pairing, and only in that last pairing. It faces a proposal to change SQ as the proposal was modified by amendments, if any.

6. Bill proposal. Every MC is free to enter any permissible bill, b_i, as option to change the status quo on dimension i. There are three methods of defining agendas that determine which bills reach the floor and how they may be amended (see below). All amendments in each of the three agenda designs must be germane, that is to change SQ_i via a bill and any amendments along dimension i only.

7. Amendments: there are two rules governing amendments;

    7a. The Open Rule permits any MC to propose any germane amendment they want. Amendments will be voted on separately in sequence by binary choices decided by simple majority rule, with the winner being the version of the possibly amended bill that makes it to the final passage vote or SQ, whichever receives a simple majority vote.

    7b. The Closed Rule prohibits any MC from proposing any amendment, germane or not. Thus, any proposal that makes it to the floor faces a single "up or down" vote, that is pitting it versus SQ, decided by simple majority rule.

8. Access to the floor: The three methods of controlling access to the floor are:

    8a. Floor dominance ("Majoritarian Theory"): Every MC can propose any bill they choose and it will be voted on. Any MC can propose any amendment to any proposal they want. Each bill will be taken up one at a time and each amendment to that bill will be taken up one at a time. That is, each bill gets its vote. Each amendment is voted on, with every vote being binary, decided by simple majority rule.

    8b. Majority Party with Negative Agenda Control ("Party Cartel Theory"): Party leaders ("senior partners of the majority party" in Cox and McCubbins terminology) alone can block bills from reaching the floor.

    8c. Majority Party with Positive Agenda Control ("The Theory of Conditional Party Government"): Party leaders alone (or in combination with the Rules Committee if there is one) can ensure that any bill reaches the floor, or does not. They can also use their resources to secure an open or a closed rule for amendments. We will consider the ability of the majority party leadership to secure a closed rule in this case below.

Legislative Propositions:

1. Floor Dominance (or Majoritarianism):

If Assumptions 1, 2, 3a, 4, 5, 6, 7a, and 8a hold, then:

      1. At least one bill will be proposed at every opportunity unless $SQ = F_m$, where F_m denotes the floor median.

      2. It will reach the voting stage.

      3. If the special rule is open (1a) amendments will be offered as desired by individual MCs. Unless the bill, b, is at the floor median, the MC with ideal point at F_m will want to, and be able to, offer her ideal point.

      4. Once F_m enters the voting agenda, whether SQ, the bill or the amendment, it will win every binary vote and thus be chosen.

      5. Voting is binary between all motions, that is, between points in X, decided by simple majority rule. SQ always enters the voting in the last pairing, and only in that last pairing. It faces a proposal to change SQ as the proposal was modified by amendments, if any.

      Proof: Application of Black, 1948.

2. Negative Agenda Control (or Party Cartel)

If Assumptions 1, 2, 3a, 4, 5, 6, 7a, and 8b hold, then:

      1. At least one bill will be proposed at every opportunity unless $SQ = F_m$.

      2. It will reach the floor unless it is in the Majority Party Blockout Zone ("BOZ," see below).

      3. If it reaches the floor, amendments will be offered as desired by the individual MCs. Unless the bill, b, is at the floor median, the MC will ideal point at F_m will want to, and be able to, offer her ideal point.

      4. Once F_m enters the voting agenda, whether by being SQ, the bill, or the amendment, it will win every binary vote and thus be chosen.

      5. In addition to being the Condorcet winner, it also follows that the simple majority relation over points in X will be an order (complete, reflexive, and transitive) (Black, 1948).

      6. Letting M_m denote the median ideal point in the majority party, and assuming $M_m < F_m$, the Blockout Zone is the set of points $[(2M_m - F_m), F_m]$. When $M_m > F_m$, the Blockout Zone is $[F_m, (2M_m - F_m)]$. The remaining possibility is that $F_m = M_m$ in which case there is no Blockout Zone. If SQ is in the Blockout Zone, no bill reaches the floor. Otherwise, F_m is chosen (Proof: Cox and McCubbins, 2005)

3. Positive Agenda Control (or Conditional Party Government)

3a. If Assumptions 1, 2, 3a, 4, 5, 6, 7a, and 8c hold, then:

    1. At least one bill will be proposed at every opportunity unless $SQ = F_m$.

    2. It will reach the voting stage if it is in the Majority Party Proposal Set ("MPPS," see below).

    3. If it reaches the floor with assumption 7a, amendments will be offered as desired by the individual MCs. Unless the bill, b, is at the floor median, the MC with ideal point at F_m will want to, and be able to, offer her ideal point.

    4. Once F_m enters the voting agenda, whether SQ, the bill or the amendment, it will win every binary vote and thus be chosen.

    5. In addition to being the Condorcet winner, it also follows that the simple majority relation over points in X will be an order (complete, reflexive, and transitive).

3b. If Assumptions 1, 2, 3a, 4, 5, 6, 7b, and 8c hold, then:

    1. At least one bill will be proposed at every opportunity unless $SQ = F_m$.

    2. It will reach the voting stage if it is in the Majority Party Proposal Set ("MPPS," see below).

    3. If it enters the vote with assumption 7b, no amendments are in order.

    4. If the bill, b, is in MPPS, it will defeat SQ and be the policy outcome chosen by the chamber.

    5. It will not be a Condorcet winner and thus could be defeated by, inter alia, F_m. (Black, 1948),

    6. For X in R^1 and for $M_m < F_m$, the Majority Party Proposal Set is the set of points from point, say, g, to F_m, i.e., $[g, F_m]$, where g is either M_m or $|SQ - F_m|$ whichever is closer to F_m. (Proof, see appendix).
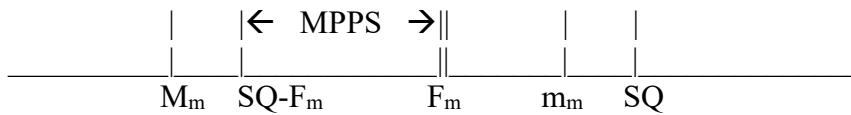

Note that MPPS $\subseteq$ BOZ.

The following figures illustrate the three propositions of Conditional Party Cartel Theory
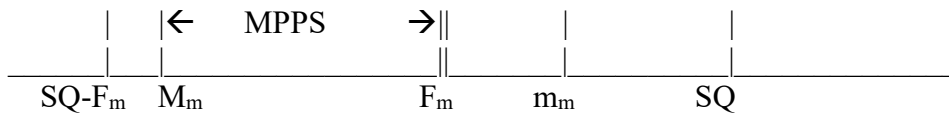
Conditional Party Cartel in a Unidimensional Congress
Negative Agenda Control:
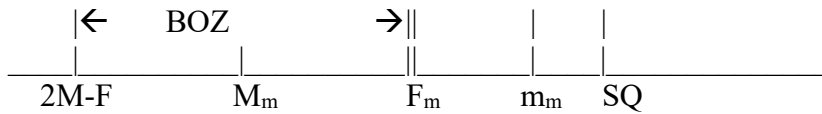
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    |←      BOZ        →||      |      |
    |                  ||      |      |
____|_____|_____||_____|_____|_____
  2M-F      Mm         Fm     mm     SQ
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Conditional Party Cartel in a Unidimensional Congress
Positive Agenda Control, Case 1:

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       |     |←  MPPS  →||       |      |
       |     |          ||       |      |
_____|_____|_____||_____|_____|_____
      Mm   SQ-Fm         Fm      mm     SQ
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Conditional Party Cartel in a Unidimensional Congress
Positive Agenda Control, Case 2:

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     |   |←     MPPS      →||       |            |
     |   |                 ||       |            |
_____|___|_____||_____|_____|_____
  SQ-Fm  Mm                Fm      mm           SQ
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Elections in Lineland with Conditional Partisan Campaign Resources and Election Motivated Candidates

The election consists of two candidates, d and r, representing parties D and R, respectively. Each is seeking to win a seat in Congress by taking a position in X, the unidimensional policy space. Voters correctly evaluate these policy platforms and vote for the candidate who offers the promise of greater benefits, denoted b_i for voter i.[12] Thus, citizens have a preference for one candidate or the other or, if for example d = r so that therefore b = 0, they are "indifferent" between the two. Because it is a two-candidate election, all voters vote for the more preferred candidate.[13]

An Expanded Version of the Calculus of Voting: The interesting question about citizens, then, is whether they abstain or turnout to vote. The standard "calculus of voting" (Riker and Ordeshook, 1968; né Downs, 1957) is that the "rewards" for voting, Re, are due to the expected utility of voting for one or the other candidate, that is, the b-type benefits offered by the candidates times the likelihood one's vote is pivotal, p, plus the intrinsic costs associated with voting (costs due to decision-making, registration, and going to the polls), C, and any intrinsic rewards to casting a ballot, such as doing one's duty as a citizen, "Du:"[14]

$$Re = pb + Du - C.$$

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[12] The b term stands for the difference in utility to the citizen if d is elected as compared to if r is elected; thus "b" denotes "benefits." We use lower case b, d, r, and so on to denote values associated with the district and its candidates. Capital letters, such as B, D, and R, will denoted "benefits" and utility (if any) that is associated with the national-level party in Congress.

[13] It is impossible to distinguish observationally between sincere and "strategic" voters in a two-candidate contest, because every strategic voter has a "straightforward" strategy of voting for the more preferred candidate, which is identical to casting a sincere vote.

[14] We call the duty term "Du" to avoid confusion with the "D" for Democrats, just as I call the rewards from voting "Re." instead of the more common "R."

We propose two ways to expand this view. One is to include expressive voting at both the national and/or the district levels. We use lower-case letters to denote variables at the district level and upper-case letters for those at the national level. Thus, the pb term in the "standard" version of the calculus reflects the probability of one's vote being efficacious at the district level times the relative difference between the election of the higher rather than lower ranked candidate. The terms P stand for the probability that one's vote is efficacious in affecting which party holds the majority in the House after the election, and B denotes the difference in preference between the two parties in Congress. The expanded calculus of voting is thus:

$$Re = pb + b + PB + B + Du - C.$$

Aldrich and Smith (forthcoming) employ an empirical version of this expanded calculus and find that all terms are substantively important in explaining (validated) turnout, with the national level variables proving particularly empirically potent. [15]

Why Do Candidates Diverge in Lineland? Primary Elections: There are two prominent explanations for why candidates might choose to diverge from the ideal point of the median voter in their district. One reason commonly given is to protect themselves from a candidate coming from their party's extreme in the primary election. In Lineland, the median voter's ideal point location in district k is the equilibrium position for the general election. But to get to that contest, the candidate must get through the primary election. It is usually assumed that the primary electorate is fully sorted by party such that it consists of voters with ideal points to the

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[15] Their findings are quite different from those of Abramson, et al. (2021). In their work, they find that the district closeness and valuation terms were more important than their national equivalents in the 2010 election in the UK.

left (for party D) or right (for party R) side of the median voter for the fall election.[16] In the

primary, the party's median voter location would be the equilibrium for that election (considered

in isolation, that is, by not conditioning primary votes on the basis of looking ahead to the

general election), which is therefore at a different location than the equilibrium for the general

election. The candidate therefore would face the tradeoff of positioning herself at or near the

median of the party's primary voters to win the primary and then at or near the constituency

median for the general election. Of course, Downs' assumption of perfect spatial mobility would

allow the candidate to do both in sequence, but it seems likely that those who voted for the

candidate in the primary because she located herself near their party center, would notice that she

was no longer at that position in the fall.[17] Assuming that the candidate must choose a single

position for both contests, however, the candidate would balance the push to the extreme and the

pull to the center.

Why Do Candidates Diverge in Lineland? Party Activists and Campaign Resources: A

second explanation of candidate divergence is that it is due to the need activist support. Aldrich

first developed the model for Lineland in particular (1983), which Aldrich and McGinnis (1989)

generalized to the n-dimensional case. Aldrich showed that party activists, defined as those who,

by virtue of the calculus of voting logic, choose to contribute time, money, or effort to their

party's candidate (to force her off the general election median) would themselves form an

equilibrium distribution of activists and their resources. Their contribution of those resources is

designed to increase turnout among supporters of the party's candidate, luring her from the

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[16] Of course, if turnout approached 100%, instead of the more typical 25%, the median voter would necessarily be a voter in one party's primary, but low turnout and some thing like an impolicit assumption of full party sorting makes the statement in the text supportable.

[17] It has long been known (Aranson and Ordeshook, 1972) that there is no equilibrium to this sequential election game with a candidate facing even one strategic candidate in the primary and one in the general election, and this is even more evident with more than one opponent in each contest.

constituency median toward the median of the party activists, to turn out a higher proportion of the now smaller base of support. Unlike the primary account, this model has a formal equilibrium, with the candidates moving away from the median of the constituency toward their respective party medians. Just how far the candidates diverge depends upon the sensitivity of turnout to increased use of resources. With too low a sensitivity, they don't move the candidate from the constituency median at all. With high enough sensitivity, the candidate may move ever closer to the median of the party's activists.

Candidate Divergence in District General Elections: Both of these explanations of candidate divergence yield expected candidate positions someplace off the candidate's district median in the direction of the center of the candidate's party, and the candidate tends to move closer the stronger the pull of the primary candidate or of useful campaign resources. The logic of these cases suggests or even formally implies that district candidates will tend to diverge away from their district's median and be located close to or, generally, inside the Majority Party Proposal Set (and thus within the Block Out Zone). But that leaves open a host of questions necessary for developing full models about the induced policy preferences that victorious candidates bring to Congress.

Consider the following modeling choices:

1a. Whether to use a calculus for voters with only instrumental, only expressive, or both forms of policy preferences in evaluating the choices they face.[18]

1b. Whether to use the original, the local, the national, or any of these several versions of the calculus of voting.

2a. Model non-median locations for candidates in their district general election based on primary elections, where candidates pick a single point for their primary and general elections.

2b. Model non-median locations for candidates in their district's general election based on the use of resources contributed by party activists for campaigning in the general election.

2c. Use both primary and activist accounts, or use neither (and, with neither, presumably derive that both candidates converge to the policy preference of the median voter, with no sources of divergence).

3. Consider how to relate district medians and district party medians to the national distribution and thus to the distribution of preferences in the Congress. If modeling activist resources, one could choose to model them as being generated within the district or reflecting national sources and considering the consequences for district election and distribution of MC ideal points in Congress.

There may well be even further modeling choices to consider. Aldrich and Rohde (forthcoming) pursue a model with a purely instrumental calculus for district considerations and purely expressive account for national considerations. They then consider such a model with

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[18] Note that it is not immediately obvious that incorporating local and national, instrumental and expressive components to the calculus affects the plausibility of assuming single-peaked preferences.

neither activist nor primary electoral components (and therefore conclude candidates are at their respective district medians). They contrast that model with one that has activist resources. While they do not fully develop the results for the distribution of MC ideal points in the resulting Congress, we reproduce their modeling in the appendix for illustrative purposes.

Why would "Moderate" Majority-Party MCs support a Closed Rule?

By way of conclusion, consider one last question: Why would majority party members vote for a closed rule if they prefer the floor median to the party position able to be adopted with a closed rule? We put this question here, after considering both the internal workings of the Congress and elections, because the reasons may be due to those internal to the workings, or they may include components in the district and thus need to be addressed at least in part by the model of elections.

Several formulations address this question. One is that contained within Cox and McCubbins (2005). They effectively ask whether all majority-party members can be better off if policy is set to the majority-party median, rather than to the floor median, on all issue dimensions in some subset of issues. The answer is that this is *not* possible, if members are arrayed in the same order on all issues in the subset, but is possible, if there is sufficient heterogeneity in members' placement across issues. This observation relates to the question of closed rules because, when majority-party leaders propose a closed rule, they immediately move the previous question, the approval of which entails an immediate up-or-down vote on adoption of the rule (Finnochiaro and Rohde 2008). When majority-party leaders (exclusively) can propose closed rules, and employ the tactic just described, they are well-positioned to (a) find a majority logroll on some subset of the issue space that will make everyone better off, and then (b) enforce the deal by insisting on party loyalty on the previous question motion (attached to a closed rule).

A second possibility is that the resources contributed by the majority party to its leaders for securing the party's collective interests are used to provide enough selective benefits to MCs whose ideal points are closer to the floor median than to the proposed legislation to overcome this utility difference and thereby make it in their interest to support the closed rule on the floor. This is precisely what Jenkins and Monroe find empirically. They write, "we find that [such members] are rewarded disproportionately by majority party leaders … via side payments in the form of campaign contributions." (2012, abstract, p. 897). Similarly, it is possible for the leadership to impose penalties (e.g., loss of desirable committee assignments) on members who fail to support the party's proposed rule (Aldrich and Rohde 2000). Of course, all of these approaches could be true simultaneously.

The third possibility is that resources are used in campaigns more generally, as in the Aldrich-McGinnis model, in which candidates are pulled from their district median to secure resources which they can use to turnout a higher proportion of their supporters). The inducement of these resources requires the incumbents to support on the party on such procedural votes as closed rules, as Caroll and Eichhorst (2013) have shown to hold empirically in state legislatures (and echoes the results of Aldrich, et al., 2017).

More alternatives might readily be forthcoming. Each is a variant of the use of the resources that a conditional theory of party cartels assumes MCs offer their party leaders to seek to achieve actions in the collective interests of their parties, even if they are not in the individual interests of its members. Indeed, if all majority party MCs found it in their interests to always support their party, they would not need leaders nor would leaders need resources to achieve the party's collective interests.

Appendix

(from above and from Aldrich and Rohde, forthcoming)

Assumptions: Campaigns and Elections

1. All K seats in the legislature are up for vote in every election. All K incumbents are eligible for reelection, all seats are based on single-member districting.

2. In the general election, there is always exactly one candidate from party D and one candidate from party R, and no third-party candidates are running. Each district is thus pairwise and decided by simple majority. The party whose candidates wins the most seats becomes party M, the majority party in the chamber.

3. Candidates take positions in the same n-space as above, which we can refer to as their electoral platform. Voters base their choices on where the candidates stand on these n-policy positions.

4. If the incumbent runs for reelection, their platform is, in whole or part, the results of votes in the prior term in Congress.

5. All citizens have (induced) policy preferences over the n-dimensions (where, here, n = 1). Each voter i has an ideal point, x_i^l on dimension l and utility declines with the sum of distances between the ideal point and policy option z_j: $u_l(z) = - \Sigma_j |x_i^l - z_j|$.

6. Citizens assess turnout via the expanded (but localized) calculus of voting.

Hence for turnout for citizen i in district j

$$Re_i = p_{ij}b_{ij} + b_{ij} + rs_{ij} + Du_i - C_i, \text{ where}$$

p = the efficacy of the vote in the district.

$b = ||x_i - d_j| - |x_i = r_j||$

rs_{ij} = personal benefits ("resources") I receives from the preferred candidate to offset costs of voting.

Du_i = citizen i's intrinsic benefits from voting.

C_i = citizen i's personal costs associated with voting.

7. Resources given to the candidate are based on how close the candidate is to the equilibrium distribution of party activists in their district.

6. Candidates maximize expected plurality and utilize resources to maximize the number who support them (that is, are closer to their position, whether the citizens vote or not) and turnout of that set. Turnout of that set is increasing in resources. Thus, candidates might take a position

with a smaller base of support that turns out a higher proportion of that base if the expected support for the candidate is larger that way, in expectation.

7. There are two types of elections;

7a. Resource free or the "pure" Downsian spatial model. Candidates have no (or too few) resources to stimulate turnout. Citizens support the closer candidate and turnout if the expected party differential exceeds the (net) costs of voting. Hence $d_j^* = x_{med,j} = r_j^*$ for all j. (Downs, 1957).

7b. Resource filled Partisan Elections. We assume the activist conditions in Aldrich, 1983 (having already assumed the conditions for citizens and candidates). Candidates may acquire resources from their party activists based on their proximity to its platform. If they are sufficient to "mobilize the base," then $p_{dj}^* \leq d_j^* < x_{med} < r_j^* \leq p_{rj}^*$, where $x_{med,j}$ is the ideal point location of the median voter in district j, p_{dj}^* (p_{rj}^*) is the location of the median activist for party D (R) in district j, and d_j^* and r_j^* are the equilibrium locations for the two parties' candidates in district j. Of course, all inequalities could be reversed (i.e, D stands at higher points in X than R) but we use the standard partisan orderings without loss of generality.

Consequences of this Theory of Voting:

Assumptions of the Standard Model:

Assume R^1, the standard calculus of voting, and citizens as voters (but not activists).

Assume there are exactly two candidate, and both are single-minded seekers of election and reelection.

Assume voters maximize policy rewards, i.e., maximize Re in the calculus of voting.

Derivations from the Standard Calculus for Candidates/MCs and for Citizens as Voters:[19]

1. Every district's electorate satisfies the conditions for Black and Downs.

It therefore follows that:

a. Candidates converge to the ideal point of the median voter in every district,

b. And thus d = r = ideal point of median voter in that district.

c. Thus, b = 0 and pb = 0 for all, citizens.

2. Therefore:

a. Citizens in the standard calculus vote only if Du – C > 0.

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[19] Derived by application of Black, 1948, Downs, 1957 (see also, e.g., Shepsle, 2010, 112-118).

b. Citizens in the expanded calculus vote only if $B + Du - C > 0$.[20]

3. Every winner and therefore every MC in the next congress is equally likely to be a d as an r.

4. Therefore, MCs vote independently of party until and unless there is a non-zero b (and hence non-zero pb) and/or a non-zero B used by voters in the district.

5. Therefore, the distribution of (induced) policy preferences in Congress is, on average, the same in each party on the House floor.

6. The distribution of preferences of MCs in Congress is precisely the distribution of the ideal points of the 435 median voters in the districts, modified only by how they imagine their district's median might differ in two years.

Assumptions of the Expanded Model of the Calculus of Voting and Activism:

Assume in addition that there may be party activists in districts motivated to maximize expected policy through the election of their preferred candidate in their district.

Derivations from the Expanded Calculus for Candidates/MCs and for Citizens as Voters and as Activists:

1. If the resources are insufficiently valuable, candidates converge to the voters' median.

2. If resources are sufficiently valuable, candidates diverge such that d[r] locates in the equilibrium policy position between the ideal point of the median voter and the ideal point of the median activist in the district. Just where depends upon the amount of resources gathered by diverging from the center and their ability to translate those resources into increased turnout of the candidate's supporters.

3. The collection of the 435 MCs therefore is (likely) to be more broadly dispersed on (induced) policy preferences, that is to say the MCs will have a greater variation in induced policy ideal points with party activists in elections than without.

4. MCs as reelection seekers will have a party component in the arguments of their utility function, because their expected outcome is dependent in part on the policy positions of activists.

There will be at least "sorting" (if not partisan polarization) among MCs compared to the prior case, such that d's will be drawn from the left half of their district's distribution of ideal points and r's will be drawn from the right half. How much, of course, depends in part on the sensitivity of turnout to application of resources and in part on the distribution of citizen ideal points across districts.

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[20] Note that [Aldrich and Rohde are assuming an instrumental local and expressive national calculus of voting].

References

Aldrich, John H. "A Downsian spatial model with party activism." *American Political Science Review* 77, no. 4 (1983): 974-990.

Aldrich, John H. *Why Parties?: a second look*. University of Chicago Press, 2011.

Aldrich, John H., and Michael D. McGinnis. "A model of party constraints on optimal candidate positions." In *Formal Theories of Politics*, pp. 437-450. Pergamon, 1989.

Aldrich, John H., and David W. Rohde. "The consequences of party organization in the House: The role of the majority and minority parties in conditional party government." In *Polarized politics: Congress and the president in a partisan era*, pp. 31-72. 2000.

Aldrich, John H., and David W. Rohde. "The transition to Republican rule in the House: Implications for theories of congressional politics." *Political Science Quarterly* 112, no. 4 (1997): 541-567.

Aldrich, John H. and Jacob F. Smith (forthcoming) "Turnout in Misterm Congressional Elections and the Calculus of Voting."

Black, Duncan. "On the rationale of group decision-making." *Journal of political economy* 56, no. 1 (1948): 23-34.

Black, Duncan. "The theory of committees and elections." (1958): 1341-1356.

Carroll, Royce and Jason Eichorst, "The Legislative Consequences of Partisan Electoral Competition," *Legislative Studies Quarterly*, 2013: 38:1 February, 83-109.

Cox, Gary W., and Mathew D. McCubbins. *Setting the agenda: Responsible party government in the US House of Representatives*. Cambridge University Press, 2005.

Cox, Gary W., and Mathew D. McCubbins. *Legislative leviathan: Party government in the House.* Cambridge University Press, 2007.

Fenno, Richard F. *Congressmen in committees*. Vol. 6. Little, Brown, 1973.

Jenkins, Jeffery A. and Nathan W. Monroe, "Buying Negative Agenda Control in the U./S. House," *American Journal of Political Science*, 56:L4 October, 2012, 897-912./

Jenkins, Jeffery A., and Timothy P. Nokken. "The Institutional Origins of the Republican Party: Spatial Voting and the House Speakership Election of 1855-56." *Legislative Studies Quarterly* 25, no. 1 (2000): 101–30. https://doi.org/10.2307/440395.

Krehbiel, Keith. *Information and legislative organization*. University of Michigan Press, 1992.

Krehbiel, Keith. *Pivotal politics*. University of Chicago Press, 1998.

Mayhew, David R. *Congress: The electoral connection*. Yale university press, 1974.

Mayhew, David R. *Divided we govern: Party control, lawmaking and investigations, 1946-2002*. Yale university press, 2005.

McCubbins, Mathew D., and Thomas Schwartz. "The politics of flatland." *Public Choice* 46, no. 1 (1985): 45-60.

Ramjug, Patrick (2021).

Rohde, David W. *Parties and leaders in the postreform House*. University of Chicago Press, 1991.

Romer, Thomas, and Howard Rosenthal. "Political resource allocation, controlled agendas, and the status quo." *Public choice* 33, no. 4 (1978): 27-43.

Romer, Thomas, and Howard Rosenthal. "Bureaucrats versus voters: On the political economy of resource allocation by direct democracy." *The Quarterly Journal of Economics* 93, no. 4 (1979): 563-587.

Shepsle, Kenneth A. "Institutional arrangements and equilibrium in multidimensional voting models." *American Journal of Political Science* (1979): 27-59.