

Party, Constituency, and Constituents in the Process of Representation

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For presentation at the Conference on the State of the Parties, University of Akron, October 16, 2009. This is a draft; comments welcome.

The concept of representation that informs most political science studies is based on the idea that voters exert equal influence over elected office holders. Because of this influence, representatives have powerful incentives to respond to their constituents' interests (Pitkin 1972; Achen 1978; Miller and Stokes 1963). A variety of mechanisms linked to the electoral process are thought to affect electoral control over officeholders by constituents, including political parties, political participation, and competition between candidates. The effects of these and other factors may either reinforce liberal-democratic egalitarian ideals in the process of representation, or they may introduce significant distortions.

Our goal is to re-evaluate ongoing questions about the process of representation from a new empirical perspective. Our approach, based on a study of the 2006 U.S House elections, has both methodological and substantive implications for how we study representation, although the questions we address are conventional. We begin with a brief summary of mechanisms commonly thought to affect the process of representation in House and other legislative elections. We then take up a methodological issue that has troubled every study of constituency representation of which we are aware. We propose our solution to this problem and describe the design of our study. Our major substantive conclusions, based on a simple spatial model of candidate and constituency placement on a common liberal-conservative scale, support the importance of egalitarian (constituency-wide) effects on representation, alongside the distorting effects of the political parties and activist participation. Electoral competition is a condition that weakens the representation of the median voter and enhances the proximity between activists and their candidate. We do not find evidence of a significant effect of income or socio-economic status. We conclude with a discussion of how our analysis informs a broader understanding of political representation.

Mechanisms of Constituency Representation

In theory, representatives align themselves with their constituents out of a desire for reelection. Elections are based on the principle of equality, with each voter having one and only one vote. Thus, a fundamental standard for evaluating legislative representation is the degree to which political equality is realized. Factors that bias representatives away from the ideal of political equality do so because some classes of citizens have an advantage over others, which causes representatives to depart from the equality standard toward the interests of favored or advantaged citizens (Verba et al. 1995; Bartels 2008; Gilens 2005). The normative expectation of political equality among citizens or voters in liberal conceptions of representative government suggests a simple framework for evaluating the equality standard, based on a regression model (Achen 1978; Bartels 2008):¹

$$Y_k = \alpha + (\sum_{ik}\beta_1 X_i)/N_k + \beta_2 P_k + \xi \quad [1]$$

Where: Y = the issue position of legislator k ; X_i = the issue preferences of individual constituents; N_k = the number of constituents in the constituency; and P_k = the party of the legislator.

The equation states that each individual constituent's opinion is equally weighted to reflect the equality standard, which is estimated as the mean constituent opinion in district-level analysis (Achen 1978 479-80). Moreover, by breaking the constituency down into groups based on variables that may distort the process of representation from the egalitarian ideal, various mechanisms of influence and distortion can be evaluated (Griffin and Newman 2005):²

¹ The equation is from Bartels (2008 254), and is identical to Achen's except that Bartels includes the party term.

² As Achen (1978 480) notes: "if regression coefficients were assumed equal only for *groups* of constituents (say, social classes or ideological bedfellows), the specification would be more realistic, and the differences in coefficients for different groups would measure the failure of representativeness."

Elections and the median voter: In spatial models of candidate and party competition in two-party systems, the median voter determines the majority and thus the victor. Therefore, candidates have an incentive to declare policy positions at the median constituent's preference. Across a number of constituencies, then, candidate positions reflect variation in the position of the median constituent. If constituent opinion is reasonably close to a normal or other symmetrical distribution, as is often assumed, the median constituent's and the mean constituent's opinion are identical. This assumption drives many analyses of the impact of constituency opinion on representative behavior (eg Miller and Stokes 1963; Erikson 1978), and provides a useful baseline for our analysis.

Distortions from the egalitarian ideal of political representation captured by the median-voter expectation may occur for two fundamental reasons. First, voters may not decide solely on the basis of policy preferences as the spatial model assumes. If the process of majority building is not only or simply a matter of aggregating preferences on policy issues, significant departures from the median voter model of representation may occur. Second, departures from an egalitarian ideal of political representation may occur even if voters choose candidates exactly as the spatial model predicts, *if* some citizens have more influence than ordinary voters *and* their policy preferences differ from those of ordinary citizens. In this second case, there are mechanisms other than winning votes that help explain the positions representatives take, and since voters with interests different from the median voter's preferences exert extraordinary influence, their positions reflect the preferences and interests of those with influence. Addressing these two sources of distortion—voters choosing candidates based on criteria other than policy preference and unequal influence in the process of representation—is a daunting task. Our goal in this paper is to illustrate how a proximity-based design and analysis can shed new

light on these issues by considering factors that are commonly seen as affecting the baseline median-voter model of egalitarian representation:

Political Parties: The principal competitor to the spatial model of voting choice and candidate competition in the literature on voting and elections in the U.S. is a partisan model. In the partisan model, voters choose not based on their ideological or issue preferences, but fundamentally based on their partisan identification (Campbell et al. 1960, Converse 1964) At the same time, electoral competition in the United States is largely organized by and around the political parties. Parties mobilize participants, signal voters about the qualifications and policy positions of candidates, and provide a national policy focus to local competition for office. Parties, moreover, structure the nomination process through the direct primary, which may provide strong incentives for candidates to appeal to primary electorates and activists in order to win their party's nomination. Such pressures on candidates away from the constituency median voter and are commonly given as reasons for party divergence in U.S. elections (Aronson and Ordeshook 1972; (Moon 2004)). Indeed, the pervasiveness and centrality of the parties in the political process has led numerous scholars to offer normative theories of representative government that place the parties, rather than the median voter and the underlying political equality it implies, at the center of their ideal (Schattschneider 1960; Ranney 1962).

Activist Participation: Those who participate in the political process by engaging as activists beyond voting may differ in their preferences from those who merely vote (or do not participate at all). A great many studies have found that campaign activists tend to be more extreme in their issue and ideological preferences than ordinary voters (Brown, Powell, and Wilcox 1995;). Moreover, if their participation, for example by contributing money, campaigning, or participating in other ways is efficacious, these individuals may exert

disproportionate influence over electoral outcomes. A major focus of Verba et al (1995) is that activists have the potential to distort the process of representation toward their interests, away from the preferences and interests of ordinary citizens (cf. Rosenstone and Hansen 1993; Griffin and Newman 2005). Moreover, elected politicians may be more attentive to activist participants because they may be more effective at communicating their preferences, and because participation can involve the exchange of political support and resources beyond votes for policy outcomes. Therefore, to the extent that activists wield disproportionate influence, candidates may have incentives to take more extreme positions, pushing them away from the median voter in their constituency.

Social and Economic Resources: Perhaps the most widely hypothesized distorting variable in the process of representation is economic wealth and other resources related to socio-economic status (Verba et al 1995; Bartels 2008; Gilens 2005). One possible path of distortion is through activist participation because those with more resources are better able to bear the costs of participation. The wealthy, well educated, and well positioned also have skills that may enhance the efficacy of their participation and the claims they press. Moreover, they are more likely to have access by virtue of their social and economic positions, which they may share with those in or close to elected positions in government. Bartels (2008) and Gilens (2005) provide striking evidence that income differences among mass constituents are linked to differential responsiveness by elected office holders and in policy outputs.

Incumbency: Incumbents, especially in U.S. House elections, are often portrayed as having significant resource and visibility advantages that insulate them from constituency pressures and undermine their incentives to represent constituency interests (Erikson 1971; Mayhew 1974; Ansolabehere, Brady, and Fiorina 1992). Moreover, several studies have found

that incumbents are more extreme than challengers in their ideological positions, which may reflect a tendency by incumbents to stray from moderate constituency positions (Burden 2004). Alternatively, incumbents may be seen as successful politicians because of their political resources and skills, and because they represent their constituency interests (Zaller 1998; Erikson 1971; Canes-Wrone, Brady and Cogan. 2002; Stone and Simas 2010). If the electoral process works to select individuals in line with constituency interests, those who have won election and reelection should, on average, be closer to their constituencies than those who have not successfully passed the electoral filter (Mondak 1995).

Electoral Competition: the effects of electoral competition (or its absence) are often seen as the reason incumbents may not represent their constituencies' opinions, since the average House incumbent wins reelection by a wide margin. On this view, electoral competition increases the incentive of officeholders to move toward the median voter's position (Fiorina 1974). In the absence of competition, incumbents may shirk their responsibilities to their constituencies because the immediate threat of electoral sanction is removed.

These and other variables that shape the process of representation do not act in isolation. As noted, one reason wealth and other social resources may translate into political influence is because they enable individuals to bear the costs of activist political participation. Political participation is often facilitated as well by the political parties. Whereas electoral competition may stimulate politicians to adopt more moderate positions consistent with the median voter, it may also reflect the underlying partisan makeup of constituencies. Districts that are relatively balanced between Democrats and Republicans are more moderate in the aggregate than those dominated by constituents in one or the other party, which may account both for the competition that occurs in these districts relative to those dominated by a single party and the moderation of

candidates in those districts (Fiorina 1974). Before developing a multivariate approach capable of sorting out the independent effects of each factor, we suggest a proximity-based analysis that avoids difficulties and ambiguities associated with the covariance approach of Bartels (2008) and Achen (1978) as in Equation [1].

Proximity vs. Covariance in the Study of Constituency Representation

The advantage of spatial models of electoral competition is that they place candidates, officeholders, and voters on the same policy scale, which allows these models to reach conclusions about how candidates and voters behave in response to each other. The problem, in empirical studies of representative-constituency relations, is that it has been virtually impossible for scholars to place citizens and constituencies, or groups within the constituency, in the same issue or ideological space as the candidates. In the absence of a common scale on which constituents, office holders, and candidates can be placed, empirical studies of representation have been prevented from employing an intuitive concept of representativeness: the proximity in the policy space of the citizen or the constituency to the candidate or office holder. In spatial models, the closer the candidate/office holder is to the constituent, the more represented the constituent is, since distance from the constituent's ideal policy point reflects policy positions that depart from his or her interests, and the greater the distance, the greater the departure from the citizen's interest.

The policy positions of representatives in a legislature may be estimated based on scales derived from roll call votes, but candidates for legislative office do not typically have roll-call voting records, and constituents certainly do not cast roll call votes. Some studies have developed identical scales of incumbents and candidates by relying on interview data derived

from asking their opinions or positions on specific policy issues (Miller and Stokes 1963; Burden 2004; Ansolabehere, Snyder, and Stewart 2001), but questions posed to constituents, if a constituency survey is included in the study, are in varying degrees different from those put to candidates and office holders. By far, the most common design in studies of legislative representation is to rely on roll-call measures of incumbent policy positions and either survey data or surrogate measures such as demographic characteristics or votes cast in presidential elections or other races to capture constituency interests (Miller and Stokes 1963; Fiorina 1974; Kuklinski 1978; Ansolabehere, Snyder and Stewart 2001).

The absence of equivalent scales that place representatives and constituencies in the same policy space has meant that scholars have relied on covariance-based measures of the relationship between constituencies and representatives such as the correlation coefficient or regression slope. As several have pointed out (Achen 1978a, b; Kuklinski 1979), covariance-based measures do not capture the intuitively appealing notion of representation as proximity-in-space, although they are often mistaken for doing so.³ Figure 1 illustrates the problem. All four examples in the figure are based on a common liberal-conservative space defined as ranging on the left from the most liberal possible ideological position to the most conservative possible position on the right. The examples in Figure 1 assume a simple political system composed of three constituencies and a legislature composed of three members. The figure assumes that there is a common ideological dimension in all four examples on which it is possible to place constituencies and representatives.

(Figure 1 Here)

³ Achen distinguishes between the correlation coefficient, which he argues should not be employed, and the regression slope, which he treats as a measure of “responsiveness.” Our argument distinguishing between proximity-based and covariance-based approaches applies equally to the regression slope and correlation coefficient.

Figure 1a depicts perfect representation, where each of the three constituencies is represented by legislators at exactly the same point in the policy space on the left-right scale. This example would be equally well described by a correlation coefficient of 1.0, since there is a perfect fit between constituencies and their representatives; a regression slope of 1.0, since a one-unit difference among the three constituencies is perfectly reflected in a one-unit difference among their representatives; and a mean proximity score, ρ , of 0, since each constituency is paired with a representative at exactly the same position on the left-right scale.

Figure 1b, in contrast, depicts a situation where covariance-based measures would fail to capture the misrepresentation evident in the system. Representatives are much more conservative than their constituents—in fact, each representative is exactly two units to the right of his or her constituency. Thus, from the “dyadic” perspective that matches up each constituency with its representative, there is a severe conservative bias. In addition, of course, the legislature as a whole is much more conservative than the electorate. However, covariance-based measures would describe a situation of “perfect” representation, no different from the one depicted in (a), because the same conditions hold: a one-unit shift to the right by constituencies is perfectly matched by a one-unit shift to the right by representatives.⁴ The proximity score, in contrast to the covariance-based measures, would be larger than zero (it would equal 2 in this example), reflecting the fact that each representative is two units to the right of his or her constituency.

⁴ In a regression equation, the intercept would reflect the conservative bias in the system, *provided* the scoring of the two scales reflected the greater conservatism of the legislature.

Example (c) would produce a very high (although not perfect)⁵ correlation, and a regression slope substantially greater than 1.0, because a one-unit shift to the right among constituencies is associated with a greater than one unit shift to the right among representatives. By the proximity model, the centrist constituency, C_2 is perfectly represented, but Representatives 1 and 3 are more extreme than their constituencies, which would increase the mean proximity score, depending on how much more extreme the representatives are relative to their constituencies

Finally, in example (d) there is relative consensus among both representatives and constituencies on policy, but because the left-right ordering among constituencies is opposite that of representatives, covariance-based measures depict a situation of perfect misrepresentation, exactly opposite (a). However, with sufficient consensus, an average proximity measure in this example produces more policy agreement between constituencies and their representatives than either examples b or c.

The problem, of course, is that when representatives' positions are measured on one scale (e.g., NOMINATE or ADA scores) and constituencies' positions are measured on another scale (e.g., an opinion scale or by presidential vote shares), we have no way of determining which of the four examples (or variations on them) applies. Standardizing the representative and constituency scales to create proximities on the transformed scales (Griffin and Newman 2008) does not help since assuming that the variances and means are equal would not alter the reality underneath examples b and c.⁶ What is needed is a method for observing the positions of

⁵ Because the variances of the independent and dependent variables are not equal.

⁶ Standardized versions of examples b and c in Figure 1 would force them to appear to be equivalent to (a), without altering the political reality depicted.

constituents, representatives, and candidates on the same scales so that the proximity model of representation can be applied.

The examples in Figure 1 depict different representation relationships by comparing constituency opinion with representatives' positions on the same policy or ideological scale. While dyadic relationships between constituencies and their representatives are a useful place to begin, evaluating the effects of different variables on proximity requires that we move to the sub-constituency and individual levels of analysis. Recall that in Equation [1] the coefficient on the mean opinion in the constituency is justified on the grounds that each individual constituent has equal influence over the position the representative takes. However, if one group has more influence than another, there is no reason these groups (wealthy and non-wealthy constituents; activist and non-activist constituents, and so on) cannot be considered separately. In Equation [1] this would involve distinguishing the relevant groups within constituencies and evaluating their coefficients for evidence that one group had a stronger impact on candidate positioning than another. A number of scholars have taken just this approach (Adams and Ezrow 2009; Bartels 2008; Gilens 2005; Griffin and Neman 2005). In a proximity-, as opposed to a covariance-based analysis, the point would be to evaluate the hypothesis that some groups within the constituency are closer on average to their representative than others.

Furthermore, it is possible to disaggregate the data to the individual level. Whereas the influence of any single constituent on the positioning of a candidate must ordinarily be trivially small, it nonetheless makes sense to evaluate conditions under which individual constituents are closer or further from their representative. A proximity-based analysis allows us to investigate that question (cf. Achen 1978; Griffin and Newman 2008). In other words, the distance between the individual and her representative (or any candidate for office) is an attribute of the individual,

subject to statistical analysis and explanation like any other. Analysis at the level of individual constituents will allow us to sort out the effects of the mechanisms of representation discussed in a multivariate analysis, although the exact causal processes that produce the effects we observe remains open to question. However, as a descriptive account of which types of individuals get represented, the analysis permits us to sort out how well different explanations account for the proximity between individuals and their representatives.

Research Design

We address the problem of nonequivalent scales through a research design that places citizens and congressional candidates on the same seven point ideological continuum. We utilize a study of the 2006 U.S. House elections that surveys registered voters and district experts in a sample of districts. The voter sample pools respondents from two surveys of registered voters in the study districts: the Indiana University Congressional election study and the UC Davis module of the CCES mid-term election study.⁷ Both studies drew respondents from a random cross-section national sample of 99 U.S. House districts and a supplementary sample of 55 districts that were open or that close observers of congressional elections judged to be competitive.⁸ We conducted an independent survey of district experts, who could provide information about the two parties' candidates running in each House district in the sample. These experts are comprised of 2004 national convention delegates and state legislators in both political parties who resided in one of

⁷ We have reconciled slight differences in the coding of several variables by grouping these variables into identical categories. Ideological placement variables were coded identically between the two studies.

⁸ We consulted *Congressional Quarterly*, *Cook Report*, *Sabato crystal Ball*, and *National Journal* in the early summer, 2006, to identify districts rated “tossup” or “leaning competitive” by any of the sources. The four sources substantially agreed on which districts they anticipated to be competitive ($r > .70$).

the sample districts.⁹ A key component of the district expert survey is a pair of questions that ask informants to place the Democratic and Republican candidates on a 7-point liberal-conservative scale identical to the one put to respondents in the Indiana and UC Davis studies. We treat the median expert rating as the candidate's "true" position, after correcting for partisan sources of bias.¹⁰

Patterns of Constituency Representation in the House

Under the spatial model the quality of representation enjoyed by a citizen declines monotonically as the distance between the individual and the officeholder increases. Thus, we can assess the relative level of representation a citizen, or a group of citizens, receives by comparing the distance between the citizen(s) and the House member. Figure 2 depicts the placements of constituents, incumbent representatives, and challengers in the 2006 U.S. House elections. The placements of incumbents and challengers in the figure are based on the mean informant ratings within each sample district, averaged across all districts in the study. The placements of constituents is based on the pooled Indiana-UC Davis surveys. The average median voter within a district is located closer to the middle of the spectrum, leaning slightly conservative. On the other hand, the average incumbent tends to be off center on the spectrum,

⁹ The district expert survey was conducted by mail during October, 2006, and was completed before Election Day. The response rate was 21%.

¹⁰ The difference between the mean and median district informant rating on most variables is small. For example, the correlation between the placement of candidates based on the mean and median informant placement is .99. However, we have preliminary evidence that the median informant placement reduces the bias in mean expert ratings that results from extreme values on the scale (Buttice and Maestas 2009). We have investigated at length the validity and reliability of informant-based measures of candidate placements. For summaries, see Stone and Simas 2010, and Stone, Fulton, Maestas, and Maisel 2010. The short version is that candidate placements by informants are very strongly correlated with criterion variables such as NOMINATE and ADA scores for incumbents *and* challengers, that these correlations remain strong within party, and that expert ratings are highly reliable by several different models of measurement reliability.

with Democrats on the left and Republicans on the right. Consistent with many previous studies (Poole and Rosenthal 1984; Jacobson 2000), the parties in the House appear strongly polarized. A quick reading of the data might suggest that ideological extremists are representing many moderate districts. However, the figure shows that the average median voter in Democrat-controlled districts is more liberal than the average median voter in all districts. Similarly, the average median voter in Republican-controlled districts is located to the right. Moreover, Democrats in Democrat-controlled districts are even more liberal than their districts as a whole, while Republicans in Republican-controlled districts exhibit the opposite pattern. Figure 2 suggests that party has a strong influence in the pattern of representation. The substantial polarization in Congress is weakly echoed by districts and more closely approximated by partisan constituents within the districts.

(Figure 2 here)

A district effect in figure 2 is evident in the differences between incumbents and challengers, particularly among Democratic candidates. Democratic challengers ran in more conservative districts than the Democratic incumbents, which helps explain why they are somewhat less liberal than their incumbent counterparts. Of course, we cannot be sure whether the challengers are responding directly to the ideological composition of the district or to other factors that are not controlled for in this model, although further analysis reveals a strong relationship between district opinion and Democratic candidates' ideological positions. A less dramatic difference between Republican challengers and incumbents on the right is associated with a considerably weaker relationship between district opinion and candidate position among Republicans (Stone and Simas 2010; cf. Ansolabehere, Snyder and Stewart 2001; Burden 2004).

Another potential source of distortion from the standard of equal representation is activist participation beyond voting. Activists may distort representation beyond party effects because

activists are typically more extreme than ordinary voters who identify with the party and because they participate in ways that may be more efficacious than merely voting. Figure 3 presents the placements of activists and non-activists in relation to their House candidates and shows that activists tend to be more extreme than non-activists. In Republican-controlled districts, Republican activists are closer to their incumbents than non-activists while in Democrat-controlled districts active Democrats are closer to their incumbent than non-activist Democrats. Figure 3 suggests that both parties' incumbents are located at almost the same position as their activist partisans. Thus, it appears that activists on average get better representation in the form of closer policy agreement with their representatives than do non-activists.

(Figure 3 here)

A Multivariate Approach: Who Gets Represented?

Evaluating placements of various sub-constituencies one at a time does not allow us to control for competing explanations for the patterns we observe in figures 2 and 3. Without a multivariate analysis, we cannot observe the relative effects of the median voter vs. constituents who share the party with the incumbent, in the pull and tug of political forces at work on candidates from within their districts. Our approach continues to rely on the proximity model of representation based on the idea that constituents who are closer to the candidate on the liberal-conservative scale are better represented than those whose position on the scale is further away from the incumbent. The dependent variable is the proximity between the respondent's placement of herself on the seven-point ideological scale and the median expert placement of the candidate on the same scale. We generate the proximity variable by taking the absolute value of the difference between respondent and candidate. We then reverse the scale so that higher values

indicate greater agreement between the respondent and the candidate.¹¹ To observe differences in the proximity of challengers and incumbents to the citizen in a single model, the unit of analysis is the respondent-candidate pair. Each respondent is included twice: once in relation to the incumbent and once in relation to the challenger. Thus, a single observation of the outcome variable is the proximity between respondent i in the j^{th} district and the incumbent from district j . A second observation is the proximity between that same respondent (respondent i in the j^{th} district) and the challenger from district j .

The explanatory variables are selected to reflect the mechanisms that affect constituency representation discussed above:

Proximity to the median voter: Each respondent is given a score to reflect his or her distance from the median voter in the district, according to our pooled surveys. If the median-voter theorem explains candidate incentives and positioning, constituents should gain greater representation as they approach the position of the median voter. Because ours is a proximity model of representation, constituents should gain in proximity to the candidates as they are closer to the median voter in their district because candidates adopt positions close to or at the median voter's preference. This expectation is central to theories of representation based on the spatial model and the ideal of equal influence among all citizens over representative/candidate behavior, so we treat this moderation effect as a baseline model, akin to the model articulated by Bartels and Achen in Equation [1].

Partisanship: We use dummy variables to code whether constituents share the party of the candidate or are in the party opposite the candidate's. Strict independents are the omitted

¹¹ We have replicated the analysis using squared distance as our measure of proximity, which produces identical substantive results.

category. We know that party identification has a powerful effect on voting choice in congressional elections and that partisan differences within House districts are almost as great as the differences we observe in Congress. The question is the effect of party on ideological proximity to the candidate. To the degree that party structures the relationship between candidates and voters in the ideological space, we expect shared partisan affiliation to increase proximity between the constituent and the candidate, and opposing party affiliations to decrease proximity. These effects of party potentially distort the process of representation from the median-voter baseline.

Activist participation: Constituents are coded by whether they were active in a House candidate's campaign in any way beyond voting.¹² We construct dummy variables to indicate activism in the candidate's campaign and in the opposing candidate's campaign. If activism is associated with distortions in the process of representation, the expectation is that activists benefit in the representation they enjoy. Thus, we expect activism for a candidate to have a positive effect on proximity, and activism for an opponent to be associated with less agreement, because candidates are typically so far apart in the typical House district, and activists, as seen in Figure 3, tend to be located close to the candidate in their party. Separating the effects of activist participation from partisanship illustrates the value of a multivariate approach. In Figure 3 it is difficult to determine how much of the effect of activism is due to the shared partisanship between most activists and the candidates they support, and how much is due to activism per se.

¹² The activities we specifically asked about were: contributing money, canvassing for the candidate, etc. Activists are not included among constituents who share the party of the candidate. Put another way, the effect of partisanship is assessed for non-activist constituents. The vast majority of those who participate as activists do so for the candidate in their party.

By taking a multivariate approach, we will be able to observe the independent effects of each factor.

Socio-economic status: To account for the possibility that socioeconomic status affects representation, we include *SES*— a composite index of income and education.¹³ To the extent that socio-economic status distorts the process of representation in favor of high-status interests (Bartels 2008) independent of partisanship and activism, we expect a positive coefficient.

Incumbency: If incumbency insulates office holders from concerns about constituency interests, we may observe a negative effect; if incumbents are selected for their representation of constituent interests, we will see a positive effect. Note that if incumbents are elected and reelected because they are in the district majority party, the shared-party effect will capture what might otherwise appear to be an effect of incumbency. The point here is to compare incumbents with non-incumbents independent of party and the other variables in the analysis.

Electoral competition: We include a dummy variable to identify districts judged in advance of the election as competitive, including the districts in the competitive and open-seat supplementary sample. Electoral competition may have an additive effect on proximity by making candidates more attentive to constituents' ideological preferences; it may also boost proximity by enhancing the attentiveness of constituents to the campaign, increasing their tendency to engage in ideological thinking or partisanship, which may enhance the representation of constituents.

Other: We include in the analysis a dummy variable for the survey sample (whether the respondent was in the Indiana or UC Davis sample), and we control for the party of the candidate

¹³ We standardize each variable and compute the mean. As a practical matter, our conclusions do not change if we use income alone or education alone as our indicator.

with a Democrat dummy.¹⁴ If there is no difference between the two samples in proximity to the candidates (as we expect and hope), the sample dummy will be insignificant. If there is a systematic difference between Democratic and Republican candidates, as appears to be the case in Figure 2, we will observe a positive effect of the Democratic candidate dummy to reflect the tendency of Democratic candidates to be closer to their constituents than Republican candidates.

Equation 1 in Table 1 presents the baseline model of constituent proximity, analogous to Equation [1] in Bartels (2008), with a study dummy to accommodate our design. Note that the constituent's proximity to the median voter has a strong effect on candidate positioning, amounting to almost one-half a unit difference in candidate position with a one-unit difference in proximity to the median voter in the district. On this evidence, there is strong support for the median-voter theorem in the sense that constituents closer to the district median voter enjoy better representation than those further away from the median voter on the left-right scale.

[Table 1 here]

Equation 2 in Table 1 includes the remaining variables suggested by our discussion of mechanisms relevant to the quality of representation enjoyed by constituents. The first thing to notice is that the median-voter and Democratic candidate effects in the baseline analysis are essentially undisturbed. Thus, we continue to see the power of the median voter logic in explaining the quality of representation for individual citizens, even in a more fully specified analysis. Alongside this effect, Equation 2 also illuminates the power of other factors in explaining who gets represented in congressional elections. Consider the importance of party. Respondents in the same party as a candidate can expect a two-thirds of a unit gain in agreement with a candidate compared with a strict independent, other things being equal. Being in the

¹⁴ We report robust standard errors clustering on the House district.

opposite party produces a strong negative effect that is almost as strong. The net effect of party in this analysis is well over a unit on the 7-point liberal-conservative scale, which is by a substantial margin the largest single effect we observe in Table 1. Activists in the candidate's party also realize a significant gain in agreement with the candidate they support, and suffer an almost equal loss from the candidate they oppose. Since the vast majority of candidate activists are *party* activists, this effect adds to the partisan nature of the process. The party and activism effects confirm the pattern in Figure 3. In short, Democrats are liberal and Republicans are conservative; activists in each party are more extreme than ordinary partisans. This partisan structure in the mass public and among activists is rewarded because candidates are also polarized by party.

Notice that the effect of proximity to the median voter is *not* merely a reflection of the partisan composition of districts. We know that as districts become more Republican in their makeup they become more conservative. If the district median were affecting candidate positioning (and therefore citizen proximity to candidates) only by virtue of the partisan composition of the district, the partisan (and activism) effects would carry the water in Equation 2, with nothing left over for the district median voter. That is emphatically not the case, however, as the median-voter effect in Equation 2 is as strong as it is in the baseline equation, which takes no account whatsoever of constituents' partisan relationship to the candidates.

Finally, note that there is no significant effect of the constituent's SES, nor are incumbents closer (or further) from their constituents than non-incumbents, nor does electoral competition have a significant effect. The absence of an SES (or income) effect on proximity to candidates is in direct contrast to Bartels' (2008) results, and deserves further attention in future research. We do not find significant or consistent SES differences at the zero-order level, which

comports to some degree with recent work questioning the consistency and robustness of Bartels' finding (Erikson and Bhatti 2009). The effects of both incumbency and competitiveness are in the expected direction, but do not reach conventional levels of statistical significance.

Equation 3 recognizes that the effects of competition are likely to be complex and conditional. The conventional expectation is that electoral competition enhances candidates' sensitivity to the median voter. In contrast to this expectation, the interaction between proximity to the median voter and competitiveness indicates that the median voter *loses* representation in competitive districts, compared with the median voter in non-competitive races.¹⁵ Why might this be the case, and who wins as a consequence of electoral competition? Our conclusions here are somewhat speculative but a fairly clear picture emerges in the analysis. One might expect that in competitive races, candidates play to their partisan bases, but the indication is that ordinary partisans may lose representation in competitive districts. However, activist supporters appear to be big winners in competitive races, with a strong premium in additional proximity accruing to them in competitive, as compared with non-competitive races (see Figure 4). In fact, the proximity enjoyed by activists is more than doubled as a result of electoral competition. This proximity gain for activists is consistent with other research—both theoretical and empirical—that shows that candidates have incentives to attend to their activist base when they face an electoral threat (Baron; Moon 2004; Stone and Simas 2010; cf. Ansolabehere et al.). It is also possible that these effects are linked to strong primary challenges, which are likely to result when incumbents are vulnerable or the race in the district is expected to be competitive. Tough primary races could easily tie candidates more firmly to their activist base.

¹⁵ Although the impact of the median voter in competitive races is still positive. It is only relative to non-competitive races that the median voter loses ground.

(Figure 4 here)

Conclusion

Ours is the first empirical study that places candidates and voters in the same ideological space, which allows us to incorporate the spatial model of candidate behavior into an empirical analysis of constituency and constituent representation. This, in turn, allows us to begin sorting out the effects of different mechanisms thought to affect the process of legislative representation. That exercise allows us to conclude based on our analysis that the median-voter logic is alive and well, but so is the logic of partisan competition. We have also seen that activism appears to pay off for those involved in the process beyond voting. At the margin of these effects, the median voter experiences a modest loss and candidate activists enjoy a sizeable premium associated with a competitive race. Other mechanisms linked to socio-economic status and incumbency do not appear to affect the process of ideological representation.

While we have consistently referred to “mechanisms” of representation in our discussion of the various factors in our analysis, we recognize that a variety of causal processes could produce the effects we observe, which our analysis thus far does not permit us to adjudicate. Three examples illustrate the point: First, the median-voter effects we observe are consistent with electoral models that posit responsiveness of candidates to electoral incentives. Another possibility that would produce the same effect is if candidates were selected by random draws from their districts’ populations. Candidates would reflect district mean/median opinion to some degree simply because they were selected from districts that vary in opinion. The greater the cross-district variance (and the smaller the within district variance), the stronger would be the link, without any electoral motivation on the part of candidates. In principle, we can control for

this effect by simulating the random-draw procedure and incorporating it in our analysis a control we will include in future analysis.

A second example is in the context of the partisan effects we observe. One possible mechanism for the partisan distortions from the median-voter model is that voters base their choices on party, rather than ideological proximity. Party might cause voters to back candidates on partisan rather than ideological grounds, and candidates' responses might in turn produce "mis-representation" by the ideological proximity model. A more complete model of the process of representation that takes into account voters' partisan as well as their ideological interests, might accommodate these sorts of interests. Alternatively, the partisan effects we observe could be rooted in elite-level processes, such as candidate recruitment, that do not immediately reflect voter behavior. Other possible mechanisms are also consistent with the partisan effects we observe.

Finally, the activism effects in our analysis are ambiguous as to their root causes as well. It could be, as we have speculated, that activists realize a proximity premium because of the efficacy of their active participation. Candidates respond to activists, perhaps, because they need the resources and support activists uniquely provide. But again, other possibilities abound. It may be that activists and candidates share preferences because candidates emerge from the activist stratum in their districts. Whatever forces make activists more extreme than ordinary partisans may also be at work on candidates, without any direct influence or responsiveness between activists and candidates. It is even possible that candidates influence activists, rather than the other way around (Zaller 1992).

Despite the questions unanswered by our analysis, we suggest the approach we take brings us closer to an understanding of the complex processes of representation in Congress. By

constructing our measures around an explicit proximity approach, we can show in a way that previous studies have not who wins and who loses in the process. If this approach cannot answer the most fundamental questions of cause and effect in the relationship between representative and represented, it may help us rule some explanations out, and it gives us a new way to consider enduring questions in the field. That may amount to an advance against notoriously difficult questions in the study of democratic governance, even if it is not the final word.

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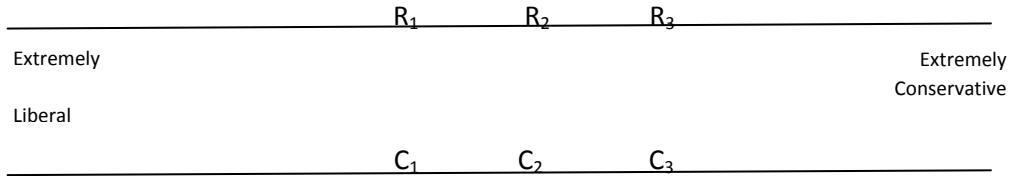
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Table 1 - Predicting ideological proximity between respondent and candidate

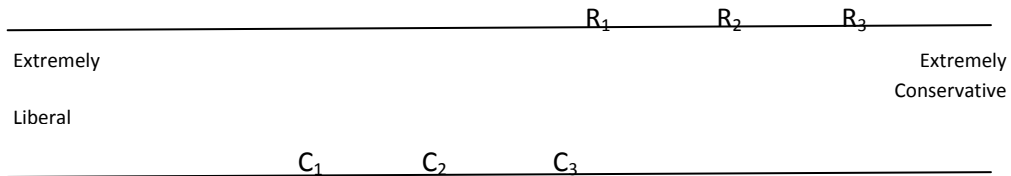
	(1)	(2)	(3)
Proximity to median voter	0.436*** (19.37)	0.427*** (17.15)	0.477*** (13.91)
Same party as candidate	--	0.780*** (11.77)	0.913*** (9.19)
Opposite party as candidate	--	-0.623*** (-8.52)	-0.620*** (-8.42)
Activist for candidate	--	0.394*** (8.29)	0.276*** (4.02)
Activist for opponent	--	-0.334*** (-5.62)	-0.345*** (-5.87)
SES	--	0.0239 (1.11)	0.0215 (1)
Candidate is incumbent	--	0.0717 (.86)	0.0658 (.78)
Competitive district or open seat	--	0.0733 (1.16)	0.501** (2.88)
Candidate is Democrat	0.0919 (1.03)	0.0381 (.45)	0.0296 (.35)
Sample (1 = UC Davis)	-0.0567 (-1.89)	-0.0593 (-1.54)	-0.0599 (-1.55)
Proximity to median voter * competitive or open	--	--	-0.0966* (-2.08)
Same party as candidate * competitive or open	--	--	-0.277 (-1.92)
Activist for candidate * competitive or open	--	--	0.231* (2.36)
Intercept	2.327*** (25.03)	2.229*** (16.62)	2.021*** (13.22)
N	4252	3041	3041
R-sq	0.091	0.386	0.389
t statistics in parentheses	* p<0.05, **p<0.01, *** p<0.001		

Figure 1. Proximity vs. Covariance-Based Measures of Representation

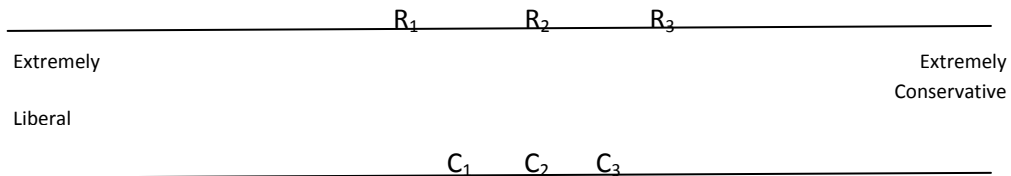
(a) Consistency between Proximity and Covariance Models ($r = 1.0; \beta = 1.0; \rho = 0$)



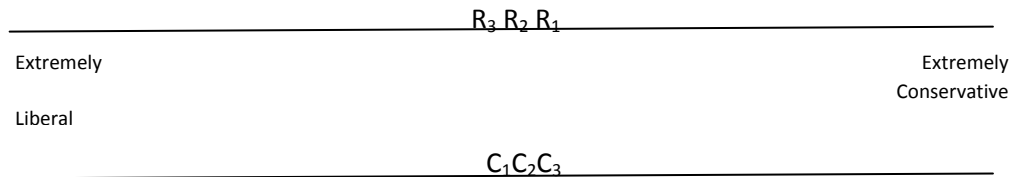
(b) Scale Shift ($r = 1.0; \beta = 1.0; \rho \gg 0$)



(c) Variance Shift ($r \approx 1.0; \beta > 1.0; \rho > 0$)

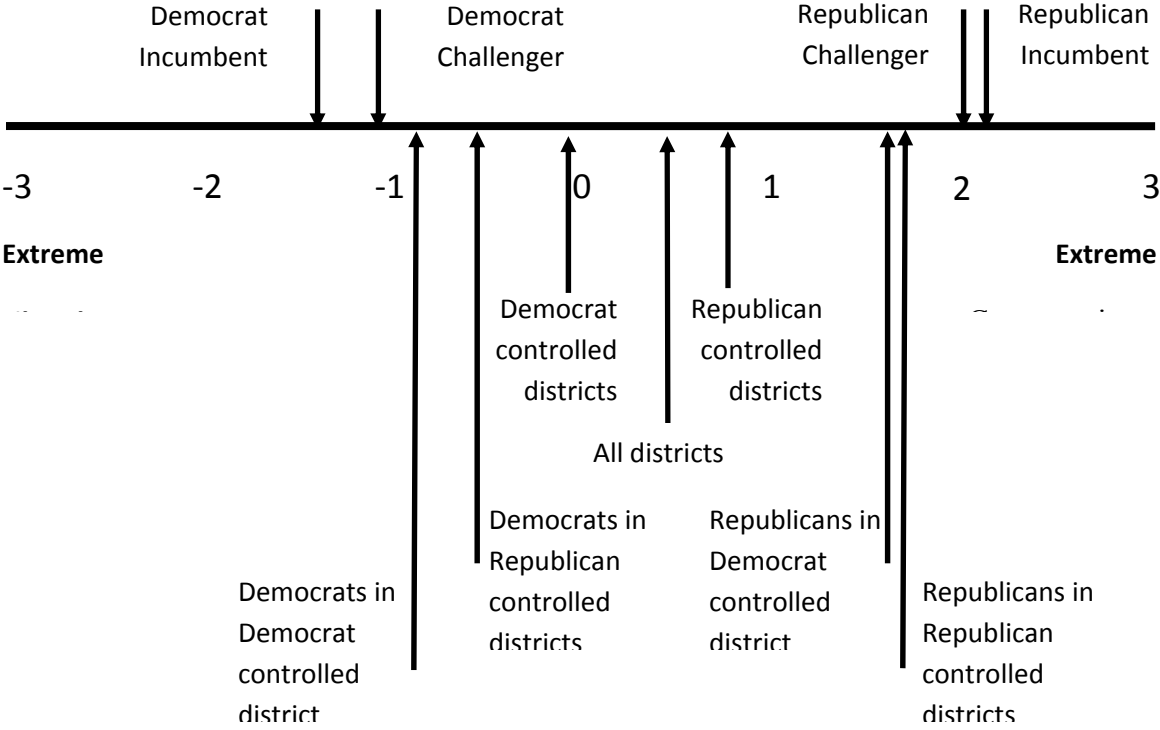


(d) Consensus, dyadic reverse order ($r = -1.0; \beta = -1.0; \rho \approx 0$)



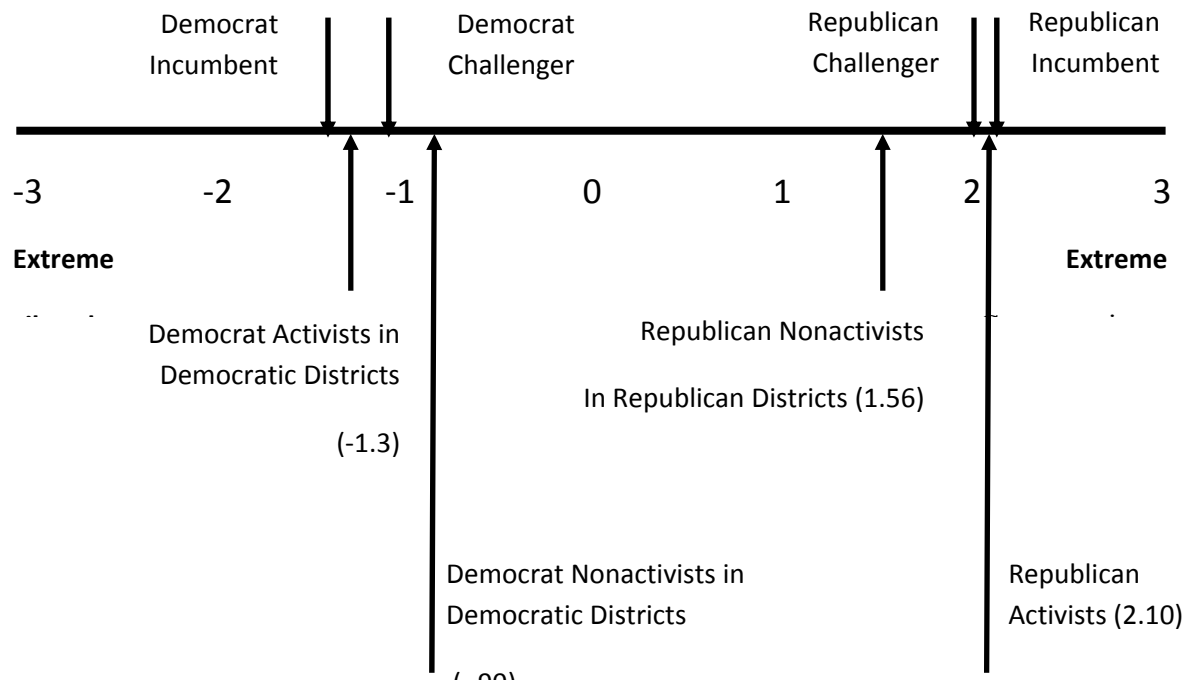
Note: r = correlation between constituency and Representative positions; β = regression slope from regressing Representative position on constituency opinion; ρ = absolute distance between constituency and Representative.

Figure 2: District ideology by party



Sources: 2006 UC Davis Module, IU study, Informant survey, Common Content

Figure 3: District ideology by activism and party



Sources: 2006 UC Davis Module, IU study, Informant survey, Common Content

Figure 4. Electoral Competition, Proximity to the Median Voter, and Activism

