

**Does Democracy “Suffer” from Diversity?
Issue Representation and Diversity in Senate Elections**

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ABSTRACT

Several recent studies examine the degree to which congressional behavior affects candidates' electoral fortunes (e.g., Carson 2005). Research examining electoral competitiveness (Bond, Campbell and Cottrill 2001; Koetzle 1998) and roll call voting (Bailey and Brady 1998; Jones 2003) finds that diversity in the electorate mediates the impact of numerous variables upon election outcomes and representation. However, the influence of diversity on other modes of representation – such as the policy positions taken by Senate candidates – remains unexplored. We investigate the link between representation and Senate candidates' policy positions and thereby examine the degree to which voter diversity affects candidates' policy responsiveness. We find that diversity significantly influences responsiveness, both directly and indirectly—candidates in homogenous states are more responsive to constituents than are candidates in heterogeneous states.

Introduction

The degree to which citizens hold elected officials accountable for their actions is among the most important questions facing students of democracy. Elections provide a mechanism through which the electorate conditions the behavior of the elected. If responsible behavior is a condition produced by elections, then so too is it a function of the campaigns that precede them. Failure to fulfill campaign promises raises issues of trust and antagonizes the voters incumbents rely on. Consequently, representation and elections are interdependent.

The effect of citizen diversity on legislator behavior is a central question in the study of representation. Representation scholars commonly explore the degree to which legislators' roll call voting behavior corresponds with constituents' opinions or economic interests (for a review see Uslander 1999). However, the diversity of citizens' opinions may mediate the quality of representation they receive. The strength of the message constituents transmit to legislators when they are unified in their preferences is quite different from the strength of the message sent when they are divided.

Such questions are not easily investigated by analyzing legislators' behavior in Congress (but see Bovitz and Carson 2003). Political parties' abilities to structure the manner in which legislation is considered, through the use of both rules and procedural tools, allows shrewd party leaders to prevent votes from occurring that cast majority party members in a poor light. For instance, Arnold (1990) documents how legislators obscure or enhance the traceability of legislation in order to make unpopular policy effects difficult to attribute, or to make popular policy easily attributable. As a result, the issues legislators address are a product of political calculation, rather than solely a response to the demands of the citizenry. Consequently, the institutional context of the roll call voting decision may affect the conclusions we draw about the effect

of citizen diversity on legislative representation. Fortunately, a legislator's roll call voting record reflects only one aspect of democratic behavior.

This study examines the effects of citizen diversity on representation in an alternative setting: the policy positions that candidates adopt in U.S. Senate elections. We build upon work that examines the influence of constituent diversity on legislators' roll call votes (e.g. Bullock and Brady 1983, Bailey and Brady 1998, Jones 2003), electoral competitiveness (e.g. Fiorina 1974, Bond 1983, Koetzle 1998, Bond, Campbell and Cottrill 2001), and party competition (Aistrup 2004) to examine how constituent diversity influences representation in election campaigns. In so doing, we present the first examination of how diversity conditions the position-taking behavior of senate candidates.

We begin by placing the studies of diversity and representation in the context of the congressional elections literature, and we develop and test hypotheses about the degree to which constituent diversity influences candidate policy positioning. We find a highly significant impact for diversity using the *responsiveness* criterion. Moreover, we also find an indirect effect—candidates are significantly more responsive in homogeneous states than they are in heterogeneous states.

Literature Review and Expectations

Research on legislative representation reaches conflicting conclusions concerning the degree to which legislators reflect the preferences of constituents (e.g. Miller and Stokes 1963, Uslander 1999). Increasingly, these conflicting research findings are attributed to citizen diversity. Diversity influences representation in a substantive way—when two people disagree on an issue, it is impossible to represent them both. Since all states and districts display some degree

of political diversity this problem is ubiquitous. Consequently, understanding how diversity affects representation is crucial to understanding how and when representation occurs.

The influence of diversity is perhaps best understood in the context of congressional elections. Here, scholars examine the degree to which increased citizen diversity leads to safe or competitive seats in the House (Fiorina 1974, Bond 1983, Koetzle 1998). The findings of this work depend crucially on how diversity is measured (Koetzle 1998, Gronke 2001). In general, when diversity is measured using demographic characteristics that do not account for the propensities of particular groups to associate with one of the major parties – as is the case for the widely-used Sullivan Index¹ – we find that diversity has minimal influence on election outcomes (Fiorina 1974, Bond 1983; Koetzle, 1998). However, diversity has been found to influence other aspects of the democratic process. For instance, David Jones (2003) finds that *political* diversity, as measured by the state level variance of respondents' ideological self-placement, influences legislators' decisions as to whether or not to take an issue position on roll call votes.

However, political diversity differs from demographic, i.e. descriptive, diversity.² The former assesses the degree to which a state's citizens' policy preferences are diverse. The latter describes the diversity of the demographic characteristics of the citizens living in the state or district. Political diversity increases with the number of competing viewpoints. A state consisting entirely of whites can be politically but not descriptively diverse. For instance, Vermont in 1990 was 98.6% white, and in this sense was demographically homogeneous; however Ver-

¹ The Sullivan index is a measure of population diversity that estimates the average percentage of unshared characteristics in a population (See Bond 1983 for a discussion). Higher scores correspond to increased diversity.

² Throughout this paper we use the terms demographic and descriptive diversity interchangeably to reflect the degree to which individuals share the same demographic characteristics. Similarly, we use the terms political, ideological and substantive diversity to refer to the degree to which individuals share issue preferences. See Pitkin (1967) for a discussion of the distinction between substantive and descriptive representation.

mont's political diversity was reflected by the fact that its citizens had elected a Democrat, a Socialist and Republicans to statewide office. Similarly, Erikson, Wright and McIver (1993) find that the greatest ideological distance between the average Democrat and the average Republican citizen exists in Utah, which is 93.8% white (Barone and Ujifusa 1993). Like the distinction between substantive and descriptive representation, different measures of diversity reflect important but different political phenomena.

Descriptive diversity—how different people are in their background and physical characteristics—may also affect roll call voting. Examining legislative representation, Bailey and Brady (1998) find that constituent diversity conditions the manner in which representation occurs. Specifically, using the Sullivan Index, a measure of demographic diversity, Bailey and Brady find that in homogenous states, constituent policy preferences are the only factor that exerts statistically significant influences on legislators' roll-call votes on free trade. However, in heterogeneous states, constituent preferences are but one of several influences on legislators' free trade roll-call votes. Consequently, the effects of demographic diversity on roll call voting representation are similar to those observed in the electoral competitiveness literature. In both cases, diversity conditions the degree to which other factors influence outcomes.

This paper extends and synthesizes the research cited above by examining how both political and demographic diversity affect senate candidates' tendencies to present issue positions that faithfully represent their constituents' preferences. In particular we examine the degree to which diversity conditions the variables that influence candidate issue positioning. The paper proceeds as follows. First, we examine the direct influence of political and demographic diversity on representation. Then, following Bailey and Brady (1998) and Bond, Campbell and

Cottrill (2001), we examine how common explanations for candidate position-taking vary according to the diversity of the state in which the campaign occurs.

Diversity and Representation

In order to assess the degree to which constituent diversity conditions the issue positions candidates take in senate elections, we explore responsiveness, one of the three aspects of representation described by Achen (1978).³

Responsiveness assesses “the degree to which the representative system adapts to citizen preferences.” (Achen 1978, 490).⁴ In the context of senate election campaigns, the responsiveness criterion assesses the degree to which senate candidates’ policy proposals vary across states with the liberalism or conservatism of their state electorates. Consequently, responsiveness is a systemic, rather than a state level measure of representation—it cannot assess whether legislators respond to their state’s median voter. However, assessing responsiveness allows us to examine the efficacy of representation for the system as a whole—precisely the criterion for evaluating representation advanced by Pitkin (1967). A system of representation is efficient when responsiveness is high as differences in citizens’ preferences correspond to large shifts in the campaign

³ We omit two of Achen’s measures from this study, proximity and centrism. Differences in proximity depend crucially on the characteristics of the state rather than the behavior of the candidates and are thus inadequate for evaluating the legislator’s behavior. Centrism assesses the degree to which a legislator’s policy is located at the center of the distribution of constituents’ preferences. Unfortunately, measures of centrism appropriate for analysis do not exist. Early versions of this manuscript examined the affect of diversity on centrism using candidate placement measures from the *American National Election Study: Pooled Senate Election Study*. Unfortunately, further investigation shows the centrism measure is statistically indistinguishable from zero for about 40% of candidates due to the small sample sizes in each state. Consequently, we are unable to examine this aspect of representation.

⁴ Responsiveness is commonly referred to as, and is synonymous with, congruence (e.g., Hall 1996).

positions candidates offer. If diversity – whether political or demographic – conditions representation, then the factors that influence candidates’ positions should vary with state-level diversity.⁵

Our data on candidate positioning in U.S. Senate elections are drawn from the *United States Senate Campaign Strategies and Media Analysis 1988-1992* study which surveyed senate candidates’ campaign managers in order to estimate candidate ideology. These data allow us to compare Senate candidates’ ideological positions (as perceived by their own campaign managers) against the distributions of their state electorates’ ideology.⁶

Responsiveness

There are empirical and theoretical reasons to expect that the more politically diverse the district, the less responsive the candidates’ policy positions relative to the average district voter. Empirically, research suggests that when the opinions of the electorate are diverse, candidates tend to diverge from the position of the average voter in order to adopt their supporters’ preferred position (Fiorina 1974).⁷ As diversity increases there are more opportunities for candidates to profitably diverge and appeal to disparate views on particular issues. Past research suggests that as diversity increases, races are likely to become multidimensional and no single dominant platform, including an appeal to the average voter, exists (e.g., for a review see Goff and Grier

⁵ We also investigated several related questions including: whether diversity conditions responsiveness differently for winning or losing candidates; whether diversity affects the distance between the candidates in an election; or whether diversity influences the distance in the positions of the same-state senators. We find no significant influence for diversity and representation on these questions.

⁶ These data are especially appropriate for testing questions of representation because they avoid the confounding we might observe in measures of constituent preferences obtained from House districts, since the distribution of citizens’ preferences in states is not the product of political manipulation. Moreover, they allow us to overcome perception biases that may afflict alternative estimates of candidates’ campaign positions, such as those based on citizens’ perceptions.

⁷ See Adams and Merrill (2003) for the development of this argument in a spatial modeling context.

1993).1993). Moreover, even if a legislator wanted to be perfectly faithful to constituents, doing so becomes increasingly difficult as more people differ.

Responsiveness accounts for the degree to which legislators' behavior corresponds with the preferences of constituents across districts. To examine the degree to which candidates' positions are responsive to the policy preferences of the citizens they hope to represent, we specify a model of position-taking. Here the dependent variable, *Position*, denotes campaign managers' ratings of their Senate candidate's position on the seven point ideological scale. Higher scores denote increased conservatism.

The central independent variable of interest is *Constituent Ideology*, which assesses the political preferences of the states' citizenry. This variable is Erikson, Wright and McIver's (1993) estimate of net state ideology constructed by pooling citizens' responses to tens of thousands of public opinion surveys which allows for valid and reliable estimates of the ideology of respondents from each state. The measure is rescaled such that higher scores reflect increasingly conservative state preferences.

We also include several control variables that are commonly used to explain legislator behavior. The influence of party is accounted for by the binary variable *Democrat* which is scored 1 if the candidate is a Democrat and 0 otherwise.. The binary *Midterm* variable controls for the possibility that positioning in midterm elections may differ from that which occurs in presidential election years due to differences in the voting electorate. The variable *Incumbent* denotes whether or not the candidate is an incumbent legislator.⁸ Because incumbency may also reflect the fact that moderate candidates may be more likely to win, we include an additional

⁸ Incumbents may be similarly socialized as members of the institution and this may shape the issues candidates consider and positions they take. Mayhew (1974), for instance, suggests that incumbents of both parties share the desire to be re-elected and that this shared goal may structure institutional organization.

incumbency-related variable, *Party Incumbency*, which accounts for this by multiplying the incumbent dummy by a party dummy coded -1 for Republicans and 1 for Democrats.⁹ Similarly, *Party x Safety* accounts for the differential impact of electoral vulnerability by political party. Higher scores on the *Safety* variable correspond to decreased electoral vulnerability. The coding for all of the independent variables is described in the Appendix.

We estimate two models of responsiveness, each of which applies a different measure of diversity. The variable *Demographic Diversity* is the Sullivan Diversity Index calculated for 1990. Higher scores reflect increased demographic diversity. However, as Koetzle (1998) notes, the Sullivan Index poorly reflects the primary quantity of interest in studies of representation, political diversity. To account for political diversity, we incorporate an additional measure, *Ideological Diversity*, which is defined as the variance of respondents' seven point ideological self-placements—as recorded in the American national Election Study: Pooled Senate Study—by state.¹⁰ This measure is identical to that recommended by Gronke (2001) and used by Jones to investigate the effect of diversity on abstention in Congress (2003). For each of these measures, higher scores correspond to greater diversity.¹¹ We note that our measures of political and demographic diversity are almost completely independent of each other (the correlation between these variables is around .05), indicating that these two measures tap different aspects of constituency diversity.

⁹ This coding strategy is from Bartels (1997) and employed because use of a binary variable using 0 would preclude assessing the impact for incumbent Republicans.

¹⁰ The state variances are computed using mean placements from across the three election cycles. Consequently, the sample sizes are comparable across states.

Roll call voting research suggests that diversity – whether political or demographic – should be negatively associated with responsiveness (Bailey and Brady 1998). The logic underlying this expectation is straightforward—it is more difficult to respond to a constituency that disagrees. Responsiveness is a function of the size of the *Constituent Ideology* coefficient (Achen 1978). More specifically, since both candidate and constituent ideology are scored such that larger scores are more conservative, candidates’ positions more closely reflect constituents’ ideological preferences as the size of the ideology coefficient increases. To evaluate the hypothesis that candidate responsiveness declines with diversity we include an interaction between *Diversity* and *Constituent Ideology*. The statistical model is specified below:

$$\begin{aligned}
 \text{Candidate Position} = & \alpha + \beta_1 * \text{Midterm} + \beta_2 * \text{Incumbent} + \beta_3 * \text{Democrat} + \beta_4 * \text{Safety} \\
 & + \beta_5 * \text{Diversity} + \beta_6 * \text{Party} \wedge \text{Incumbency} + \beta_7 * \text{Party} \times \text{Safety} + \beta_8 * \text{Constituent Ideology} \\
 & + \beta_9 * \text{Diversity} \wedge \text{Constituent Ideology}
 \end{aligned}$$

The regression model captures the extent to which representation varies with state heterogeneity. Table 1 presents the results of these analyses, estimated on the 133 Senate candidate positions in our data set.¹²

¹¹ We note that we also performed analyses using Koetzle’s (1998) *Political Diversity* measure, which is constructed by gathering demographic data that map well to political preferences. These analyses yielded substantive conclusions that were identical to the ones we report below.

¹² The source of missing data varies. The response rate from campaign managers was about 70%. In 1990, incumbents in Virginia, Arkansas, Georgia and Mississippi ran unopposed. Unfortunately, challengers’ campaign managers were significantly less likely to respond to the survey. However, we re-estimated all the results omitting races where either candidate’s manager failed to respond. The results are substantively identical to those reported here. We note that we also estimated this model using the *Pooled Senate Study* respondents’ perceptions of each

The first column reports the results of the ideological diversity model and shows that only the party variable significantly influences on candidate positioning. The constituent ideology variable narrowly misses significance ($p < .106$). Notably, the estimated coefficient for the *Ideological Diversity* \times *Constituent Ideology* variable is not statistically significant, and therefore does not support the hypothesis that diversity depresses candidate responsiveness. However, the ideological diversity control is highly significant.

--Table 1 Here--

Results from the second column, which examines the impact of demographic diversity, support similar substantive conclusions. Both *Democrat* and *Constituent Ideology* are significant. So too is the interaction of *Demographic Diversity* \times *Constituent Ideology* suggesting that increased diversity negatively affects candidate responsiveness. In combination, these results are puzzling in that demographic diversity influences responsiveness while ideological diversity does not. However, the absence of constituency influence in the political diversity model raises questions about the possibility of multicollinearity. Collinearity poses a threat in these models because of the relatively small number of cases and the constrained variation in the measures of diversity.¹³ Consequently the interaction term that accounts for the impact of diversity on representation is highly correlated ($r > .9$) with the constituent ideology variables.

Examination of three diagnostic tests suggests that collinearity is responsible for the insignificance of the representation interaction in the political diversity model. First, re-estimating the models omitting *Constituent Ideology* finds that the interaction between *Constitu-*

candidate's mean ideological placement on the 7 point scale. These analyses supported conclusions similar to the ones we report here.

¹³ In particular, the standard deviations of the political diversity and demographic diversity measures are .09 and .04 respectively.

ent Ideology and the diversity measure is highly significant. Second, re-estimating the model omitting the diversity interaction finds that the constituent ideology variable is highly significant. Finally, following Berry and Feldman's (1985) prescription, we conduct joint hypothesis tests to see whether the variables are jointly significant. Indeed, F statistics for the combined (insignificant) coefficients are highly significant ($p < .01$).

Comparing the results of models estimated on subsamples of the data containing the most and least homogeneous states allows us to examine whether important differences in responsiveness and influences on positioning exist. If heterogeneity conditions constituents' influence on legislators' position-taking, as research on legislators' roll call voting behavior has shown (Bailey and Brady 1998), then we should see different effects across samples of races. For these analyses, states are divided into two samples containing the most and least heterogeneous electorates.¹⁴ Past research suggests that constituent ideology should be an important influence on candidate positioning in homogeneous states and insignificant in heterogeneous ones.

--Table 2 Here--

The results of the model for homogeneous and heterogeneous states are reported in Table 2. This table depicts whether representation varies according to a state's political (columns 1 and 2) or demographic (columns 3 and 4) diversity. States were divided depending on whether they fell above or below the median on each diversity variable. More specifically, the model estimated in Table 2, omitting the diversity and constituency interactions was re-estimated for each of these groups of states.¹⁵

¹⁴ Following Nagler (1991) we split our sample in order to ease interpretation of the impact of diversity.

¹⁵ The number of cases varies with diversity because the median is established using diversity data from all races. However, ideological positioning data from the CSMA are only available for about 70% of the candidates.

Differences in the influences on candidate positioning by political diversity are seen in columns 1 and 2. The most striking finding is that the impact of constituency differs across states. In homogenous states we see a highly significant role for constituency ideology, while no such effect is evident in heterogeneous states.¹⁶ Indeed, we can conduct a Chow test to examine whether the difference in the size of coefficients differs by diversity. The F statistic for this test is significant at about the .02 level. The impact of constituency is significantly larger in politically homogenous states.

The results reported in columns 3 and 4 illustrate the impact of differences by demographic diversity. Here the story is substantively identical to that of political diversity in columns 1 and 2. In homogeneous states, constituent ideology exerts statistically significant effects on responsiveness, while in homogeneous states the estimated effect is near zero and is not statistically significant. Once again a Chow test for differences in the impact of demographic diversity upon responsiveness is significant ($p < .01$).

In combination, these results suggest that senate candidates' responsiveness to voters' policy preferences differs sharply between homogenous and heterogeneous states, regardless of the diversity definition used. The magnitude of these differences is perhaps most clearly seen by looking at partial regression plots of the relationship between candidate ideology and state ideology, estimated separately for homogeneous and for heterogeneous states. These relationships are plotted in Figure 1A (for political diversity) and Figure 1B (for demographic diversity). Regardless of the diversity measure used, the impact of constituent preferences is stronger (i.e., it has a significantly steeper slope) in homogenous states. This suggests that candidates in homo-

¹⁶ The insignificance of *Constituent Ideology* in the heterogeneous states of both models is not a function of collinearity as extensive test show no such effects with this variable.

geneous states are responsive to their constituencies' ideological beliefs, while candidates in heterogeneous states are not similarly responsive.

--Figures 1A and 1B about Here—

Discussion and Implications

Our results provide important new evidence on the role of heterogeneity in representation. We conclude that state-level diversity conditions senate candidates' ideological responsiveness to their constituencies, regardless of how diversity is defined. Specifically, candidates' positions in politically and demographically homogenous states are significantly more responsive to the average citizen's ideological preferences compared to candidates' positions in heterogeneous states.

These results also highlight an important similarity in the process through which representation works across democratic venues. One of the central expectations of democratic theory is that political behavior across venues should be motivated by democratic norms. Our results are consistent with those discovered in other institutional venues, such as senators' roll call voting behavior (Bailey and Brady 1998). Senate candidates' positions are responsive in homogenous states but not in heterogeneous ones. Consequently, these results contribute to our broader understanding of the efficacy of representation in Congress and in campaigns.

This finding is not necessarily counter-democratic, however. A long line of public choice scholarship examining the behavior of same state senators demonstrates that no unique undominated issue platform exists for elections occurring in states with two or more issue dimensions and in which less than half the voters have the same preferences (Goff and Grier 1993). Those same observations apply to senate candidates' platforms. The factors

influencing voters' decisions vary substantially across individuals, suggesting the existence of multiple policy and non-policy (i.e., valence) dimensions. Moreover, Dougan and Munger's (1989) observation that same state senators' behavior may diverge if voters care only about a subset of issues is consistent with, and may well explain, the results we obtain above.

These results are also consistent with the long standing findings pertaining to the 'uncovered set' which is the range of policy platforms that are not dominated by their opponent's choice of issue positions. In particular, our finding that candidates from heterogeneous states are less responsive to the average voter's preference is consistent with Goff and Grier's (1993) summary of McKelvey's finding that increased preference heterogeneity increases the size of the uncovered set. As the number of viable platform alternatives increases, it seems illogical to expect candidates to remain faithful to the average voter given the heterogeneous voter preferences described above.

We also note that different concepts of diversity produce similar results. While a debate has developed about the relevant aspect of diversity (i.e. political or demographic) in studies of electoral competitiveness, our results suggest that the implications of this debate are less important for studies of representation. While the results in the competitiveness literature turn completely on such definitions, here no such differences are found. Whether demographic or political measures of diversity are used, the results are the same: candidate responsiveness declines as diversity increases.

This finding is surprising given that there is an extremely weak relationship between our measures of demographic and political diversity ($r=.05$). One explanation might be found in the literature on subconstituencies which suggests that candidates appeal to groups that vary across

issues and districts (e.g., Bishin 2000, 2003). If true, the ideological diversity of groups in heterogeneous states might be poorly reflected through the use of average state ideology measures, compared to homogeneous states where fewer groups with similar preferences exist. While this hypothesis requires further investigation, the finding that both political and descriptive diversity inhibit responsiveness is an intriguing puzzle.

Our findings may also illuminate the process underlying a range of studies of minority politics. An emerging literature finds that when minority groups (e.g., African Americans) are concentrated into single districts, they are better represented (e.g., Lublin 1997, Hutchings 1998).¹⁷ The logic underlying the findings presented here suggests that the implications of the minority politics literature are much broader than commonly recognized. More specifically, our results suggest that the increased responsiveness observed by particular minority groups is simply one manifestation of increased responsiveness that accrues to any politically homogenous group. Citizens in homogeneous states (e.g., Utah) seem to obtain the same representational benefits (increased responsiveness) as do those living in House districts designed to maximize descriptive representation of a particular racial or ethnic minority group.

Our results are also consistent with findings in the roll call voting literature (e.g. Kingdon 1973) and the committee behavior literature (e.g. Hall 1996), that suggest that constituents have a substantive influence on behavior. Constituents have a significant impact on the positions candidates take. However, politicians are not equally responsive to all constituencies. More specifically, we find additional support for the idea that the degree to which legislators' positions correspond to those of constituents depends on the diversity of the state they represent. Candidates in homogenous states appear to respond to constituents, while candidates in heterogeneous

states do not. While these results do not identify the cause of such differences, our findings, in combination with Bailey and Brady's (1998) similar findings in an entirely different representational context, suggest that politicians are significantly less responsive in states with greater political disagreement. In this context, it appears that democracy does indeed "suffer" from diversity.

Consequently, these results also speak to discussions concerning redistricting.¹⁸ Our findings offer the potential to prescribe the characteristics used to draw districts in order to maximize responsiveness. While responsiveness is only one standard by which democracy might be judged, our results suggest that the quality of representation depends critically on the political diversity of the citizenry. Clearly then, map makers' decisions when drawing political boundaries influence not only which party holds political power, but also the degree to which citizens in these districts acquire responsive legislators. Consequently, arguments concerning strategic redistricting that focus only on average district preferences should be rethought.

If one standard by which democracy is judged requires that the largest number of citizens receive responsive politicians, then democratic ideals like responsiveness may be maximized when the largest number of homogenous districts are created. In policy terms, however, such a standard presumably leads to the wasting of votes since only a plurality is necessary for victory. Redistricting then becomes a tradeoff between political (seat maximization) and democratic efficiency (maximizing responsiveness). While some scholars have begun to address these

¹⁷ However there is considerable debate about whether such groups are able to have such policies passed as a result of this redistricting. See Lublin (1999) and Shotts (2001) for competing perspectives.

¹⁸ Gronke's (2001) finding that on average House districts are no more or less homogeneous than states means that states are an appropriate sample from which to draw inferences concerning the impact of redistricting. More specifically Gronke finds examples of House districts that are more diverse than the most diverse states, and districts that are more homogeneous than the most homogeneous states.

issues (e.g., Shotts 2001) clearly additional research is needed to identify the conditions under which some equilibrium among these concepts may be achieved.

Conclusion

This paper examines the impact of state-level political and demographic diversity upon candidate positioning in senate elections. The results suggest that heterogeneity influences representation both directly and indirectly. We find that in the most homogeneous states, constituent ideology significantly influences candidate positioning. In heterogeneous states there is no evidence of such an effect.

These results speak to a seldom examined but important aspect of representation, candidate positioning in Senate campaigns. Representation in this venue is especially important because elections are the central mechanism through which politicians are thought to be held responsible to the electorate. Consequently, candidates' behavior should reflect the desire to appeal to the electorate. Importantly, our empirical findings are consistent with the results of other studies of behavior in Congress which also find a role for diversity.

However, this study also raises serious questions about the democratic process across institutions. In particular, when these results are considered in combination with the conclusions of studies of the effect of diversity on roll call voting (e.g., Bailey and Brady 1998) we must ask why do we find no responsiveness in heterogeneous states? Does the process of representation actually differ with diversity? Dougan and Munger (1989), Goff and Grier (1993), and Bishin 2000 all implicitly suggest answers to this question based on the concept of cycling majorities which are likely to occur in more heterogeneous constituencies where candidates are likely to appeal to different groups of voters on different issues. However, it is important to keep in mind

that heterogeneity is a relative concept. A diverse constituency on one dimension may be quite homogeneous on another.

A final implication of these results is that the act of representation is not limited only to the elected. Indeed, we find that candidates in general, both incumbent and challenger are responsive to constituents' preferences; and this effect is heightened in homogenous states. Moreover, we are sanguine about the generalizability of our results to studies of the House. If, as Gronke (2001) shows, states are about as diverse as districts, then inferences drawn from senate data, like that presented herein, should be widely applicable.

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Table 1. Regression of Responsiveness on Influences in Senate Elections

	Ideological Diversity	Demographic Diversity
Constant	-2.71 (3.35)	0.10 (2.95)
Midterm	-0.18 (0.22)	-0.26 (0.23)
Incumbent	-0.03 (0.22)	-0.05 (0.22)
Democrat	-1.46** (0.69)	-1.26* (0.69)
Party x Incumbent	0.20 (0.22)	0.13 (0.22)
Safety	-0.05 (0.11)	-0.05 (0.11)
Party x Safety	-0.06 (0.11)	-0.08 (0.11)
Constituent Ideology	0.35 (0.21)	0.46** (0.20)
Ideological Diversity	4.97** (2.30)	
Descriptive Diversity		9.45 (6.02)
Ideological Diversity x Constituent Ideology	-0.21 (0.15)	
Descriptive Diversity x Constituent Ideology		-0.94** (0.43)
Adj. R-squared	0.33	0.33
Observations	133	133

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 2. Candidate Responsiveness by State Diversity in Campaign Positioning.

	Ideological Diversity		Demographic Diversity	
	Homogeneous States	Heterogeneous States	Homogeneous States	Heterogeneous States
Constant	3.58*** (0.62)	5.98*** (0.95)	4.37*** (0.77)	4.50*** (0.78)
Midterm	-0.16 (0.27)	-0.13 (0.39)	-0.14 (0.31)	-0.42 (0.34)
Incumbent	0.08 (0.27)	-0.22 (0.37)	0.16 (0.30)	-0.18 (0.35)
Democrat	-1.66* (0.86)	-1.98* (1.17)	-2.14** (0.96)	-0.16 (1.03)
Safety	0.07 (0.14)	-0.24 (0.19)	0.00 (0.15)	-0.12 (0.17)
Party x Incumbent	0.08 (0.27)	0.61 (0.38)	0.22 (0.30)	0.18 (0.36)
Party x Safety	-0.03 (0.14)	-0.01 (0.18)	0.07 (0.15)	-0.30* (0.17)
Constituent Ideology	0.07*** (0.02)	0.02 (0.02)	0.06** (0.02)	0.00 (0.03)
R-squared	0.46	0.35	0.34	0.43
Observations	74	59	74	59

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Figure 1a. Plot of Candidate Ideology on Constituency Ideology by Political Diversity

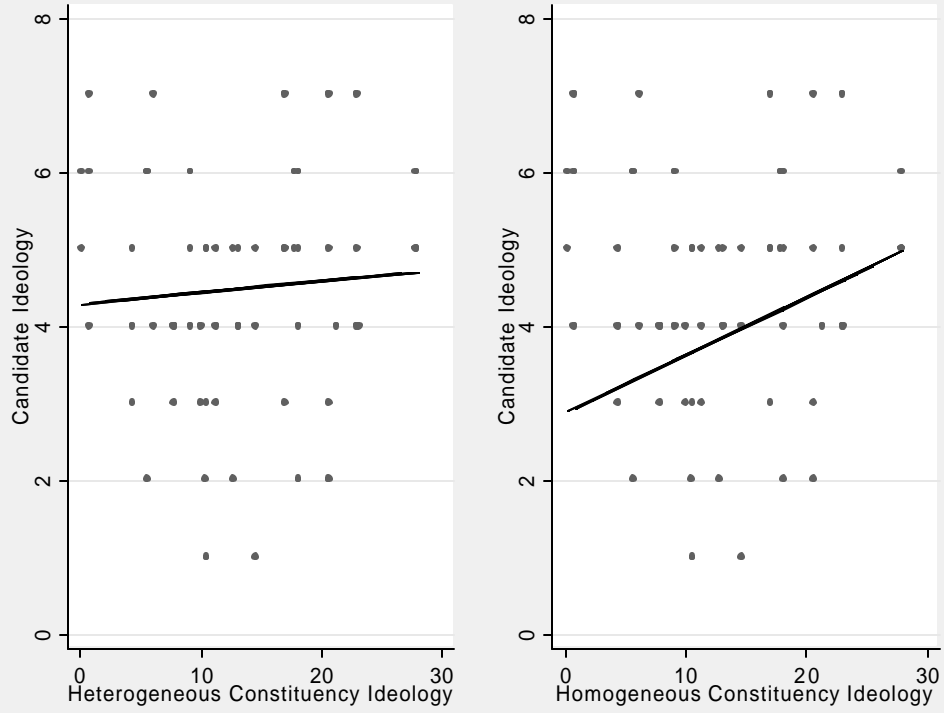
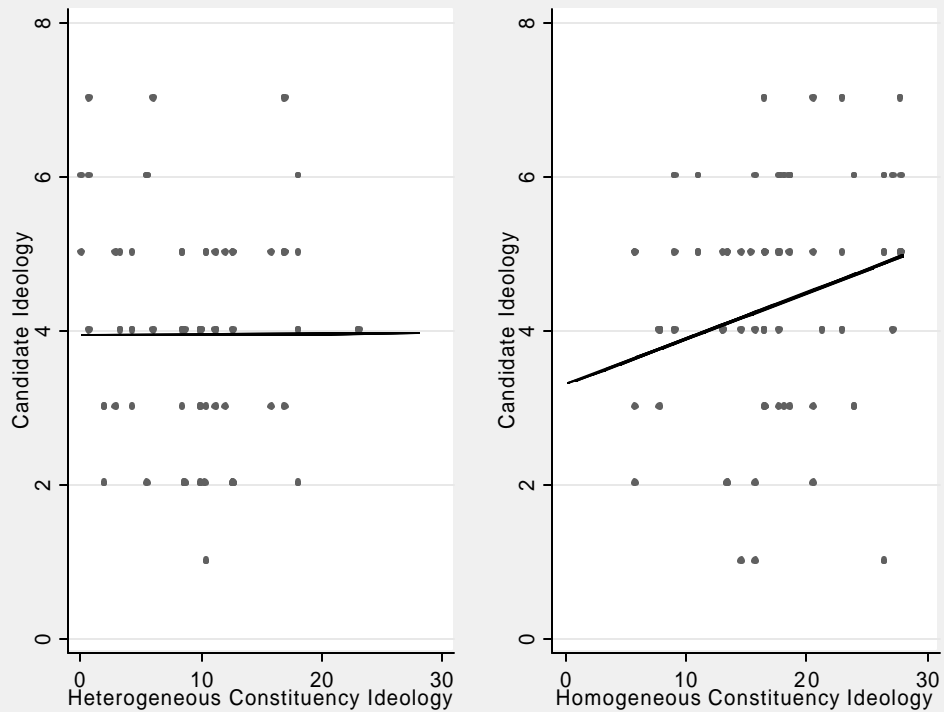


Figure 1b. Plot of Candidate Ideology on Constituency Ideology by Demographic Diversity



Appendix 1
Variables Used in the Statistical Analysis

Variable Name	Source	Coding
Position	CSSMA059	Mean candidate placement Calculated from non-missing observations.
Constituent Position	VPS0547	Mean state liberal-conservative placement in survey year on NES seven point scale.
Constituent Ideology	Erickson, Wright and McIver (1993)	Net state ideology.
Midterm	VPS0001, VPS0012	Binary variable denoting election year. 1990 off-year variable used as control for election turnout.
Incumbent	VPS0016, VPS0017, <i>Almanac of American Politics</i> 1988-1992.	Binary variable: 0 Challenger, 1 Incumbent.
Party x Incumbent	VPS0016, VPS0017, <i>Almanac of American Politics</i> 1988-1992. VPS0016, VPS0017	An interaction between <i>Incumbent</i> and party coded as -1 for GOP, and 1 for Democrats.
Democrat	VPS0016, VPS0017	Binary Variable denoting party affiliation of candidate. 1 Democratic, 0 Republican
Safety	VPS1388 Congressional Quarterly measure of seat electoral safety	Coded using a four point scale ranging from 1 (vulnerable) to 4 (safe seat)
Party * Safety	VPS1388 Congressional Quarterly measure of seat electoral safety	An interaction between <i>Safety</i> and party coded as -1 for GOP, and 1 for Democrats.
Demographic Diversity	Bailey and Brady (1998)	Sullivan Diversity Index calculated for 1990.
Ideological Diversity	VPS0547, VPS0012	Variance of Constituent Ideology for each State.
Political Diversity	Koetzle (1998)	Koetzle Diversity Index calculated for 1990.
Ideological Diversity× Constituent Ideology	Erikson, Wright and McIver (1993), VPS0547, VPS0012	An interaction between <i>Constituent Ideology</i> and <i>Ideological Diversity</i> .