Candidate Valence and Ideological Positions in U.S. House Elections

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We examine the relationship between the valence qualities of candidates and the ideological positions they take in U.S. House elections based on a study of the 2006 midterm elections. Our design enables us to distinguish between campaign and character dimensions of candidate valence and to place candidates and districts on the same ideological scale. Incumbents with a personal-character advantage are closer ideologically to their district preferences, while disadvantaged challengers take more extreme policy positions. Contrary to conventional wisdom, challengers can reap electoral rewards by taking more extreme positions relative to their districts. We explore a possible mechanism for this extremism effect by demonstrating that challengers closer to the extreme received greater financial contributions, which enhanced their chances of victory. Our results bear on theories of representation that include policy and valence, although the interactions between these two dimensions may be complex and counterintuitive.

Empirical studies of political representation have focused on a policy-based conception (Erikson 1978; Miller and Stokes 1963; Stimson, MacKuen, and Erikson 1995), consistent with prominent theories of representation (Pitkin 1967). Much of the work on policy representation traces its intellectual roots to the work of Anthony Downs (Downs 1957) and the convergence hypothesis, which states that in two-party competition, candidates and parties converge on the median voter's position. An emerging literature on representation addresses a second dimension, sometimes referred to as "valence" or nonpolicy factors (Stokes 1963, 1992). This literature argues that qualities such as personal integrity and competence are valued by constituents who cannot monitor every decision their representatives make (Bianco 1994). The personal qualities of representatives are important not only because voters value them for their own sake (McCurley and Mondak 1995; Mondak 1995), but also because such qualities make for a trusting relationship that allows voters to protect themselves from shirking.

We examine the empirical relationship between the valence and policy dimensions of representation in a simple Downsian framework using data on the 2006 elections. Although addressed by a number of scholars (Adams, Merrill, and Groffman 2005; Ansolabehere and Snyder 2000; Burden 2004; Feld and Groffman 1991; Groseclose 2001), there are significant theoretical ambiguities and inconsistent empirical results in the literature. The question is important because if a valence advantage by one candidate over the other creates the opportunity and incentive to shirk, the two dimensions of representation work at cross purposes. On the other hand, if constituents' interests in nonpolicy and policy concerns reinforce the quality of representation on both dimensions, there is cause for optimism about the electoral process. Unfortunately, each of these scenarios receives empirical and/or theoretical support in the literature. Our goal is to provide new evidence on the relationship between the valence and policy dimensions of representation.

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The Convergence Hypothesis and Policy Representation

The Downsian hypothesis that parties (and their candidates) in a two-party system converge on the preferences of the median voter implies that both are committed to a policy position consistent with district interests. The problem, however, is that the convergence hypothesis does not seem to describe the actual state of affairs in American politics. Three general conclusions seem warranted from the extensive literature investigating the Downsian convergence hypothesis. First, there is regular and substantial *divergence* between the two major parties in U.S. politics. The most extensive studies are of the Congress, where a large and apparently growing divide between the Democratic and Republican parties is evident. Comparisons based on roll-call voting behavior (Poole and Rosenthal 1997) and candidate positions (Ansolabehere, Snyder, and Stewart 2001; Burden 2004) provide evidence of this partisan gap. Thus, there is little evidence in congressional studies that the Downsian convergence hypothesis holds.

A second conclusion is that within the structure of partisan polarization, members of Congress differ in the positions they take consistent with variations in district preferences (Erikson and Wright 2000). Although the average Democrat in Congress is liberal and the average Republican is conservative, Democrats from relatively conservative districts are more moderate than those from liberal districts and Republicans from moderate districts are less conservative than those from conservative districts. This pattern of responsiveness to variation in district positions is usually described as secondary to the clear divisions between the two parties nationally, but it is apparent across a large number of studies employing different measures and methods.

The third generalization is that, despite the polarization between the parties, there appears to be an electoral penalty associated with ideological extremism. There is perhaps somewhat less in the way of scholarly consensus supporting this conclusion than the first two (Bernstein, Wright, and Berkman 1988), but on balance the result seems to hold up. Perhaps the most recent and comprehensive analysis of the question concludes that in the House of Representatives, incumbents' vote share and their probability of reelection are reduced by voting with their party's extreme (Canes-Wrone, Brady, and Cogan 2002). This finding does not confirm the convergence hypothesis, but it does suggest centrist policy behavior relative to other members of Congress is more acceptable to district electorates than extreme policy positions.

Valence Effects

In his seminal critique of the Downsian spatial framework for understanding party competition, Donald Stokes distinguished between "position issues" and "valence issues." Position issues are "those that involve advocacy of government actions from a set of alternatives over which a distribution of voter preferences is defined" (Stokes 1963, 373). These are the sorts of issues that form the liberal-conservative dimension along which voters, candidates, congressional districts, and members of Congress can be located.

In contrast to position issues, Stokes defined valence issues as "those that merely involve the linking of the parties with some condition that is positively or negatively valued by the electorate" (Stokes 1963, 373). Stokes used corruption in government as an example—there is no variation in the positions voters or candidates take on the "issue" of corruption, since everyone is against it. However, political outcomes often turn on which party is associated with valued outcomes such as virtue in government, peace, and low unemployment. It is true that position issues relate to how best to achieve these valued outcomes, but election outcomes are sometimes more dependent on which party is associated with such outcomes (or blamed for their opposites) than on which party is closer to the electorate on how best to achieve them.

While the Stokes paper was a critique of the Downsian spatial model, scholars recently have explored how candidates' valence advantage might affect their ideological positions. One perspective on this question has been motivated by explanations of why the Downsian convergence hypothesis is incorrect. The dominant hypothesis in this literature is that a valence advantage permits the favored candidate (usually the incumbent) the freedom to be more extreme in her policy positions than would be possible in the absence of a valence advantage. Articulated by Fenno (1978) and echoed more recently by Burden (2004), the logic of this hypothesis is that House members who build strong personal reputations in their districts have more leeway to explain apparently wayward votes or to withstand constituency-based pressures when they vote out of line with district preferences. Indeed, Burden found that incumbents in the 2000 election were more extreme than challengers, which led him to conclude "that in many districts the winning candidate is actually further from the center than the loser, but manages victory on the basis of non-ideological criteria that overwhelm the modest effects of ideological proximity" (Burden 2004, 221).

The claim that a valence advantage frees incumbents and candidates to adopt positions closer to their own views (and therefore more extreme than their constituents') has a certain intuitive appeal, but several scholars have suggested exactly the opposite conclusion (cf. Adams, Merrill, and Groffman 2005; Ansolabehere and Snyder 2000; Feld and Groffman 1991; Groseclose 2001; Moon 2004). By locating closer to district preferences, the advantaged candidate minimizes the policy differentiation between himself and his opponent. In the absence of policy differentiation, voters are left to vote on valence alone, which makes the candidate who is superior on valence difficult or impossible to defeat (Aragones and Palfrey 2004; Berger, Munger, and Potthoff 2000; Feld and Grofman 1991). In this way, the advantaged candidate forces the opposition to adopt a more extreme position to differentiate himself on policy. Because there is uncertainty about the ideological position of the constituency, adopting a relatively extreme position may help the disadvantaged candidate win on policy/ideological grounds. From this argument we should observe candidates with a valence advantage taking positions relatively close to their districts while disadvantaged candidates are more distant from their districts.

Issues in the Study of Valence and Ideological Proximity

Two questions are unresolved in the literature on valence and candidate positioning: (1) what is the meaning and appropriate measure of valence? and (2) moderation relative to what? Both have design and measurement implications that affect the consistency of empirical results and the inferences we draw from the literature.

Valence Reconsidered

Since Stokes's article was published, the term *valence* has frequently been used to refer to any nonpolicy advantage a candidate or party might have. For example, Groseclose equates a candidate's valence advantage to such factors as "incumbency, greater campaign funds, better name recognition, superior charisma, superior intelligence, and so on" (2001, 862). Burden (2004) employs the office-holding standard as his measure of candidate quality. Defining valence to include campaign skills and resources such as name recognition and fundraising skills may be appropriate when the concern is with the strategic choices candidates make about where they locate themselves on the left-right scale, but as part of our conception of representation, valence should distinguish qualities that voters value for their own sake from instrumental campaign skills. Thus, integrity, competence, and dedication to public service are examples of qualities that define the character and abilities of candidates. Voters value these qualities in their leaders and in government, and they may facilitate voters' trust in leaders' ability to advocate constituency interests. In contrast, name recognition and campaign funds, while necessary to mounting a successful campaign, are not of intrinsic interest to voters.[1]

The distinction between campaign and personal character valence is impossible to make with the standard indicators of valence. Incumbency (or office-holding experience generally), for instance, might reflect fundraising ability and high name recognition, or it might result from qualities and skills such as competence and integrity. Almost surely it reflects both, especially because the two dimensions of valence should be related if the ability to attract campaign resources depends on character. Ideally, then, we seek a design and measures that allow us to distinguish empirically the personal-character side of valence from campaign skills and resources. We refer to the bundle of qualities and skills that relate to character and job performance as "character valence" and the skills and resources instrumental to waging an effective campaign as "campaign valence."

Distinguishing the two dimensions of valence opens new questions about representation because of the potential relationship between valence and candidate positions, as described. If candidates with greater character valence are also motivated to represent the constituency's policy interests, the relationship between constituency and representative on both dimensions of representation is enhanced. If, in contrast, the valence advantage rests on campaign skills and resources, policy representation may be strengthened, but voters could still face a trade-off between the personal qualities they value in their elected leaders and their policy interests.

Extremism Relative to What?

A second problem in the empirical study of ideological positioning and valence in congressional elections is that previous studies have not been able to place House members, challengers, and districts on the ideological scale in

[1] Voters want candidates who are otherwise attractive to have high name recognition and ample funding, and they hope that candidates whom they oppose do not have these sorts of skills and resources. Our point, therefore, is not that voters do not value campaign skills, but that they are not of the same intrinsic interest as policy agreement and character qualities like integrity.

the same metric. Ideological placements of incumbents and challengers, for instance, may be based on roll-call votes and/or questionnaire items (see Ansolabehere, Snyder, and Stewart 2000; Burden 2004; Erikson and Wright 2000), while district ideological placement is typically measured by the partisan division of the presidential vote in the district. Although this may be a serviceable measure of districts' ideological proclivities, it does not allow the analyst to compute proximity scores between House candidates and their districts. This, in turn, means that measures of "extremism" are not relative to the district, but to other incumbents (e.g., Canes-Wrone, Brady, and Cogan 2002; Moon 2004) or the challenger (Burden 2004). The assumption of such studies is that "extreme" candidates relative to the comparisons made are also extreme relative to the district, but that assumption need not be correct. Convergence in one district might look like extremism in another (Achen 1978; Kuklinski 1979).

The 2006 Election Study Design and Measurement

Our study is based on a random sample of 99 U.S. House districts combined with an oversample of 55 districts that were either known to be open or judged by experts in the early summer of 2006 to be competitive.[2] We report results from the random sample of districts unless otherwise indicated.

The constituent surveys are based on the 2006 Cooperative Congressional Election Study (CCES) core survey, numbering over 36,000 respondents nationwide. The size of this sample affords the opportunity to build district-based measures of constituency opinion with unusually large district samples. The primary use of these data in this article is to compute mean district opinion on the liberal-conservative scale.[3]

In addition to the constituent surveys, we conducted a separate survey of 2004 Democratic and Republican national convention delegates and state legislators residing in the sample districts to serve as expert informants knowledgeable about their House district, the candidates running, and the campaigns they conducted. The district-informant survey was conducted by mail during the month of October 2006, before the November election.[4] We aggregate informant perceptions to the district level so that the unit of analysis throughout is the district and/or candidate. We have used district informants in prior House election studies to good effect (Stone and Maisel 2003; Stone et al. 2010), but this is the first study designed to include constituent surveys in the same districts in which district informants were surveyed.[5]

So far as we are aware, we are the first to employ district informants in a study of U.S. House elections, but using expert informants in other contexts by political scientists is common, and there is a literature analyzing the validity and reliability of informant-based measures of party positions in Western democracies (Marks et al. 2007; Steenbergen and Marks 2006). In general, this literature supports the validity of informant-based measures, while recognizing some limits of their use (Budge 2001). A more detailed assessment of our use of informant-based measures is included in Appendix B. Overall, our analysis suggests that we can proceed with caution employing the informant-based indicators.

For purposes of testing the relationship between constituency and candidate ideology, we use the informant placements to locate both the incumbent and the challenger on the liberal-conservative scale and to compare their placements with that of the district. District placements are from the CCES. Because we have both the constituency and the candidates on the same scale, we compute proximity scores as the absolute difference between the incumbent or challenger and the district on the liberal-conservative dimension.[6]

Items tapping informant ratings of candidates' campaign and character valences are scored on 7-point scales ranging from "extremely weak" (−3) through "extremely strong" (+3).[7] Table 1 demonstrates that incumbents

[2]The sources we consulted were *Congressional Quarterly, Cook Report*, *Sabato Crystal Ball*, and *National Journal*. If a district was rated as a "tossup" or "leaning competitive" by any of the sources in June 2006, we included it in the competitive-district supplemental sample. There was substantial overlap among the four sources, with correlations among them > .70.

[3]The mean number of respondents per district in the sample is 88. The district ideology estimates are highly reliable by the O'Brien "generalizability coefficient" (Jones and Norrander 1996; O'Brien 1990), which estimates the reliability of aggregate opinion estimates. In this case, the coefficient is .77, which compares favorably with estimates Jones and Norrander report on a variety of aggregate opinion estimates.

[4]We received responses from 932 delegates and state legislators for a response rate of 21%, with an average number of informants per district of 6.1.

[5]As appropriate, we weight by the size of the district-constituent samples, the size of the district-informant sample, or a joint weight that reflects the sizes of both the registered-voter and district-informant samples.

[6]The common-content liberal-conservative item is scored on a 5-point scale, whereas the informant-based measures are scored on 7-point scales. For details on how we rescaled the 5-point item to a 7-point item, see Appendix A.

[7]Partisan bias is evident in individual informants' assessments of candidates, especially on the character items. We adjust all scores

TABLE 1 Strategic and Personal Quality Ratings for Incumbents and Challengers, 2006

	Incumbents	Challengers
Campaign-Valence Items		
Ability to raise funds from others	1.99	−1.02
Ability to fund own campaign	.85	−1.39
Current name recognition in district	2.24	−1.22
Ability to attract attention	1.42	−1.01
Ability to be persuasive in public	1.27	−.37
Ability to run a professional campaign	1.64	−.57
Overall strength as a campaigner	1.39	−.52
Character-Valence Items		
Personal integrity	.90	.72
Ability to work well with other leaders	1.16	−.08
Ability to find solutions to problems	.49	−.17
Competence	.89	.25
Grasp of the issues	1.08	.20
Qualifications to hold public office	1.08	−.05
Overall strength as a public servant	.81	−.14
Campaign-valence index	**1.54**	**−.91**
Character-valence index	**.92**	**.07**
N	(78)	(75)

Note: Entries are mean informant ratings aggregated by district on 7-point scales ranging from "extremely weak" (−3) to "extremely strong" (+3). Open seats and districts without challengers dropped from analysis.

had a substantial advantage over challengers on items designed to capture the qualities, skills, and resources needed to mount a successful campaign. On every campaign item, challengers received negative scores and incumbents were rated positively, with the largest differences evident in name recognition, fundraising, and the ability to attract attention. We have computed a campaign-valence index as the mean of individual items, which reflects the substantial advantage incumbents enjoyed over their challengers on this dimension.[8]

The character items also reveal an incumbent advantage, but the difference is not nearly as great as was true of the campaign items. Incumbents were rated positively, although they were not rated as highly on these items as they were on the campaign battery, whereas challengers were rated barely positive on average across the items in the character-valence index. We computed relative campaign and character scores by subtracting the challenger's score on each index from the incumbent's in the district; the average advantage of incumbents on campaign valence was +2.45, while the incumbent's advantage on character valence was weaker at +.85. As these data suggest, most incumbents enjoyed an advantage over the candidate challenging them, with only 4% of incumbents facing a challenger rated higher on campaign valence and 25% of incumbents facing challengers rated more highly in their character.

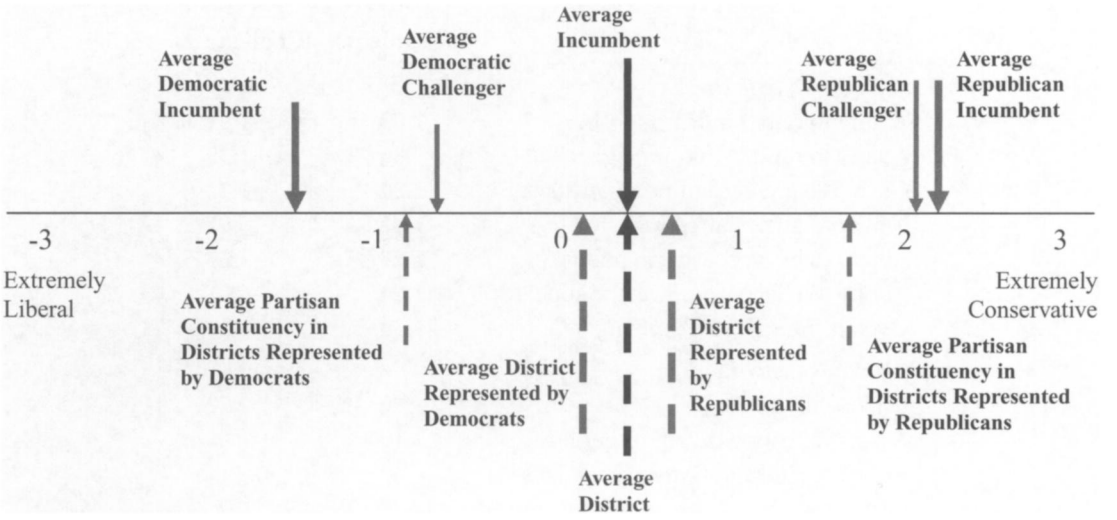
Ideological Positions and Extremity in 2006

The informant placements of the candidates in their districts along with the survey self-placement data by constituents allow us to map the ideological locations of candidates and constituencies prior to the 2006 elections

for this partisan bias by regressing informants' ratings on each item used in this article on a party dummy variable (coded −1 when the informant and the candidate were in the opposite party, and +1 when they were in the same party). We shifted each informant's rating to the intercept (0 implies an independent informant) before aggregating individual informants' ratings to the district level.

[8]We confirmed the distinction between campaign and character valences by a factor analysis of all of the items in Table 1 (conducted on informants' perceptions by the party of the candidate). Two distinct dimensions emerge in a principal components analysis (varimax rotation), with the character items loading on the first dimension (mean loading = .890) and the campaign items loading on the second (mean loading = .772).

FIGURE 1 Ideological Map before 2006 Elections



(see Figure 1). Although the average district is just to the right of center and the average incumbent occupies almost exactly the same position on the left-right scale, it is clear that these averages hide substantial differences between the parties, both among candidates and between districts or partisan majorities in districts held by each party.

The placements of Democratic and Republican incumbents indicate considerable polarization between the two parties in the House, a result in keeping with other studies. Much as Burden found with his survey data on incumbents and challengers in the 2000 election, the average Democratic challenger is more moderate than the average Democratic incumbent relative to the center point on the left-right scale, and by a smaller margin, Republican challengers were less extreme in their conservatism than the typical Republican incumbent.

The constituency placements make clear, however, that the moderation of challengers relative to incumbents should be considered in the context of the districts in which they compete. Districts represented by Democrats are almost half a unit less conservative than districts represented by Republicans, although districts are on average much less extreme than their representatives. Republican challengers ran in more liberal districts than those represented by Republican incumbents, while Democratic challengers sought to unseat Republican incumbents in relatively conservative districts. As a result, challengers in both parties were more moderate in an absolute sense on the liberal-conservative scale. However, although incumbents were more extreme than challengers on the left-right scale, they were slightly closer to their districts on average than challengers were.[9]

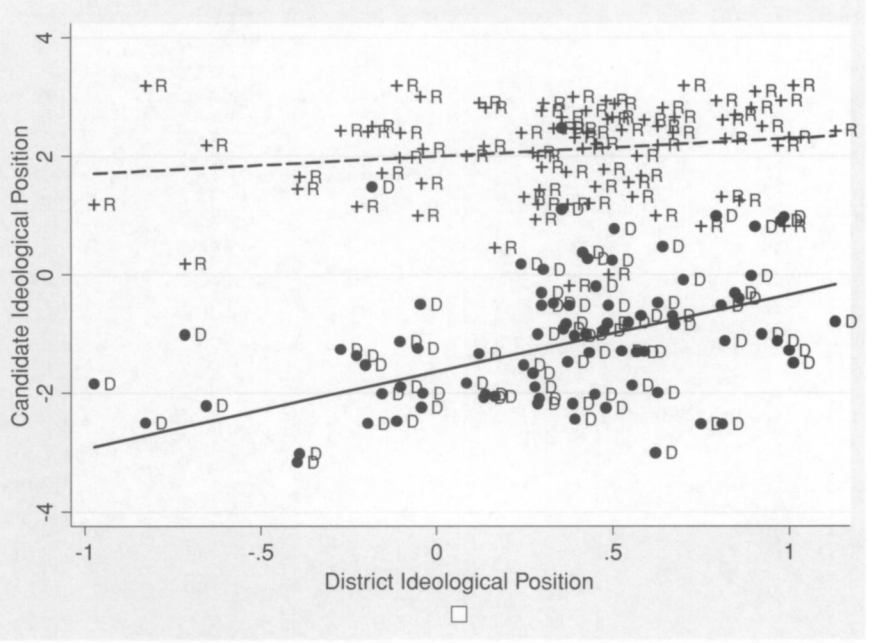
It is reasonable to suppose that incumbents are especially tied to the policy positions of constituents from their party (Fenno 1978). The polarization between district partisan majorities is not as great as it is between the parties in Congress, but it is strong enough to suggest that partisan polarization in Congress partially reflects constituency-based interests.

Figure 1 masks considerable district-level variation in the positions both of candidates and districts, as Figure 2 indicates (cf. Ansolabehere, Snyder, and Stewart 2001; Burden 2004). Figure 2 presents another picture of the polarization between the parties along with the tendency of candidates to reflect district interests. The upper line depicts the relationship between Republican candidates and their districts; the lower line the relationship between Democratic candidates and their districts. The distance between the lines reflects the difference between the parties' candidates in the 2006 elections. Both lines slope upward, indicating a significant tendency of Republican and Democratic candidates to adopt more conservative positions as the districts in which they compete are more conservative, although the district component of Republican candidate placement is much weaker than it is for Democrats.[10]

[9]The difference is small and not statistically significant ($p = .17$): incumbents' average distance from their district is 1.58 units; challengers are 1.71 units from their districts, on average.

[10]The OLS equation for Democratic candidates is: Placement = $-1.633 + 1.299 * \text{DistrictPosition}$ (t-ratio for the slope = 5.35);

FIGURE 2 Candidate Ideology by District Ideology, 2006



The mean difference between the two parties' candidates on the liberal-conservative scale is 3.08, which indicates the substantial partisan polarization in 2006. Based on the regression equations behind Figure 2, the expected difference on the left-right scale between the Republican candidate competing in the most liberal district and the Republican running in the most conservative district is .84 units, while the comparable difference on the Democratic side is 2.72 units. These differences reflect the effect of district preferences on candidate position taking, especially within the Democratic Party, even in the context of a contemporary congress deeply divided along partisan lines.

The Impact of Valence on Candidate Positions

We now consider the relationship between candidate valence and the ideological positions candidates take relative to their districts. Our dependent variable is the candidate's distance from the ideological position of the district, computed as the absolute difference between informants' placements of the candidate and CCES common-content sample self-placement on the liberal-conservatism scale, aggregated to the district level.[11] The principal independent variables of interest are relative campaign- and character-valence scores, computed as the difference between the ratings of the incumbent and challenger in the district. As noted, both of these measures reflect an incumbent advantage over challengers, with incumbents enjoying an especially large and consistent advantage over challengers in their campaign skills and resources.

We conduct separate analyses for incumbents and challengers because incumbents should have less leeway in adopting ideological positions in response to challengers since they are already in office with established records. Challengers, in contrast, typically do not have the same constraints. Moreover, conditions in advance of the election may have favored challengers who were more or less extreme, depending on factors specific to each district. Thus challenger placement may reflect who enters and who does not more than it indicates strategic decision making by any single challenger about where to locate on the left-right continuum. Either way, challengers should

for Republican candidates it is: Placement = 1.911+.402 * DistrictPosition (t-ratio = 2.15).

[11] Using the absolute value assumes that Democratic candidates are to the left and Republican candidates are to the right of their districts. This assumption is true for the vast majority of our cases. In the handful of cases where it is not true, the cause apparently is error in informant placements. In any event, relaxing the assumption in the statistical analysis does not affect our substantive results.

TABLE 2 OLS Analysis of Effect of Valence Advantage on Ideological Distance from the District among Incumbents and Challengers, 2006 (standard errors)

	Equation 1		Equation 2	
	Incumbents	Challengers	Incumbents	Challengers
Democratic incumbent	.210	.284*	.220	.147
	(.166)	(.167)	(.180)	(.171)
Incumbent's campaign-valence advantage	.032	−.057	.010	−.075
	(.090)	(.080)	(.085)	(.081)
Incumbent's character-valence advantage	−.240**	.257***	−.242**	.318***
	(.091)	(.091)	(.094)	(.090)
Mean district party identification (party of incumbent)			−.061	.553**
			(.224)	(.212)
Ideological polarization within the district			.098	.373*
			(.226)	(.215)
Incumbent's vote share in 2004 election			.009	−.003
			(.008)	(.008)
Constant	1.671***	1.442***	.870	.631
	(.180)	(.180)	(.774)	(.735)
F	3.64**	5.97***	2.03*	4.82***
Adjusted R^2	.097	.170	.077	.239
N	75	74	75	74

***p < .01; **p < .05; *p < .10. Open seats and districts without challengers dropped from analysis.

exhibit more flexibility than incumbents in their placements relative to their districts.

Table 2 presents the relevant analysis. The baseline analysis (equation 1) includes the two relative candidate valence measures, along with the party of the incumbent. It shows that relative campaign valence does not affect how close incumbents or challengers are to their districts' ideological preferences. Instead, the greater the incumbent's character advantage over her challenger, the closer the incumbent was to district preferences. The observed variation in relative character is substantial, with a range of +/− two standard deviations amounting to approximately five points from incumbents who are relatively disadvantaged to those who are highly advantaged. By the coefficient in equation (1), an incumbent high in character relative to her challenger would be 1.2 units closer to her district on the 7-point left-right scale than a colleague who was facing a challenger of stronger relative personal quality. Far from shirking in their policy representation, incumbents of strong personal character were closer to their districts' ideological preferences than representatives with less of an advantage on character. By separating the campaign from the character dimensions of valence, we observe that it is the personal qualities most valued by voters that relate to position taking on ideology.

Whereas incumbents' character advantage draws them closer to district ideological positions, challengers' disadvantage in character pushes them away from district preferences (and the incumbent). The positive sign in the challenger equation indicates the flip side of the logic for incumbents applies to challengers: as the character valence advantage of the incumbent increases (as the character *dis*advantage of the challenger increases), challenger distance from the district increases. Both the incumbent and challenger equations reveal the same tendency: valence-advantaged candidates are closer to the district; disadvantaged candidates are further from district preferences.

Equation (2) extends the analysis by including several additional variables that might affect the proximity of candidates to their districts' ideological preferences. These include the partisan makeup of the district, the ideological polarization within the district,[12] and the incumbent's vote share in the previous election. The district composition variables may indicate conditions under which district preferences are more apparent and

[12]Partisan makeup is based on the mean party identification scale (from −3 [strong Democrat] to +3 [strong Republican] coded to reflect the party of the incumbent); ideological polarization is the absolute value of the difference between the district majority and minority on the liberal-conservative scale.

TABLE 3 Comparisons of Candidate Positions by Whether the Incumbent or Challenger Is Advantaged on Character Valence

	Character Valence Advantage Is With:		
	Incumbent	Challenger	p
Mean distance between incumbent and district	1.55	1.93	.010
Mean distance between challenger and district	1.77	1.35	.006
Mean extremism of incumbent (informant-based measure)	1.69	2.32	.063
Mean extremism of incumbent (ADA score)*	.33	.43	.013
Mean extremism of incumbent (NOMINATE)	.43	.56	.016
Mean extremism of challenger	1.73	1.17	.001
N	56	19	

*Rescaled 0–1.
Note: Entries are mean values; p-values based on Table 2 estimates (equation 1), regressing distance or extremism variable on party and relative valence.

therefore more likely to be represented by one or the other candidate. The additional controls in equation (2) do not disturb the conclusions from the baseline analysis. District composition effects are evident for challengers, but character advantage retains its effect on the ideological positions of incumbents and challengers relative to their districts' opinion.[13]

Implications and Extensions

The finding that candidates disadvantaged on character valence adopt positions more distant from their districts is contrary to conventional wisdom on candidate position taking, so we extend the analysis to explore its implications. As a first step, Table 3 presents simple mean comparisons between races in which incumbents enjoyed a character-valence advantage and races in which the challenger had the edge. The first row of Table 3 shows that when incumbents have a character advantage over their challenger, they are almost .4 units closer to their districts' ideological preferences than when the challenger has the advantage. This difference is consistent with the negative coefficient in Table 2 showing that as incumbents' character advantage increases, their distance from their districts declines. The same general effect is evident among challengers in Table 3: challengers who had a character advantage over the incumbent were just over .4 units closer to their districts than those facing a stronger incumbent. These results, along with those in Table 2, are consistent with the idea that candidate ideological positioning can offset the valence advantage of the opposition.

The effect is evident with related measures, as the remaining rows in Table 3 demonstrate. Incumbents with a character-valence deficit were more extreme than their colleagues who were stronger than their challengers; challengers who had the advantage were less extreme than challengers at a disadvantage. In sum, incumbents usually have a character-valence advantage over challengers, and this encourages challengers to differentiate themselves ideologically. In the minority of cases where the challenger was stronger than the incumbent in character, incumbents followed the same strategy.

Effects of Candidate Position on the 2006 Elections

What is the effect of candidates distancing themselves from their districts on election outcomes? In part, our analysis reinforces the expectations of the Downsian model in that the advantaged candidate on character valence (usually, but not always, the incumbent) is relatively close to the district's ideological preferences. However, the tendency by disadvantaged candidates to diverge from district preferences is contrary to the Downsian model and to conventional wisdom. This raises the question of

[13] Since both ideological placements and character valence are based on district expert ratings, a possible problem is that expert informants judge candidates who are more moderate (and therefore closer to their districts) as higher in character valence than their more extreme counterparts. We show in Appendix C that this sort of endogeneity is very unlikely to account for our results.

TABLE 4 Effects of Candidate Position and Valence on Incumbents' Vote Share, 2006 (standard errors)

Incumbent distance from district	−.127
	(.855)
Challenger distance from district	−2.166**
	(.902)
Democratic incumbent	8.750***
	(1.272)
Mean district party ID (party of incumbent)	8.605***
	(1.606)
Ideological polarization within the district	.132
	(1.610)
Relative character valence	2.953***
	(.565)
Incumbent's vote share, 2004	.147**
	(.056)
Constant	46.176***
	(5.456)
F	21.20***
Adjusted R^2	.660
N	74

***p < .01; **p < .05; *p < .10.
Note: OLS analysis of incumbent vote share based on random sample of districts; open seats and districts without challenger dropped.

TABLE 5 Effects of Candidate Position and Valence on Republican Incumbents' Defeat, 2006 (standard errors)

Incumbent distance from district	−.070
	(.264)
Challenger distance from district	.425*
	(.257)
Mean district party ID (party of incumbent)	−1.606***
	(.603)
Ideological polarization with the district	−1.025*
	(.621)
Relative character	−.418**
	(.171)
Incumbent vote share, 2004	−.010
	(.016)
Constant	2.334
	(2.090)
Log likelihood	−34.051
χ^2	14.29**
Pseudo R^2	.173
N	68

***p < .01; **p < .05; *p < .10.
Note: Unweighted probit analysis based on all seats held by Republican incumbents, including oversampled competitive districts. Open seats dropped from the analysis.

whether this is an effective way for such candidates to increase their vote share and/or their chances of victory.

Table 4 shows that when each candidate's distance from the district is taken into consideration, the incumbent's distance has no significant effect on his vote share, whereas the challenger's distance is significant and negative.[14] Challengers who take positions more distant from the district are rewarded with a *greater* share of the vote (a reduced incumbent share) compared with challengers who take positions closer to the district. There is about a 3-point range in the distance between challengers and their districts (from very close to zero to just over three units on the liberal-conservative scale), so the expected vote gain for challengers who most differentiate themselves in their ideological positions compared with challengers at the district position is substantial.

While vote share is of interest in understanding election outcomes, the probability of winning the seat is arguably of greater interest. Our analysis of incumbent defeats is complicated by the fact that no Democrats lost in 2006, and our random sample of districts included only five districts in which Republican incumbents were defeated. By including the oversampled competitive districts, we increase the number of cases for analysis, along with the variance in the strength of challengers. Table 5 shows that distance from the district increased the probability that the Democratic challenger in 2006 would unseat the Republican incumbent.[15] As Figure 3 shows, the impact of Democratic challengers' distance from the district on their probability of winning was positive: challengers who did not diverge from their district were virtually certain to lose, while prospects for those who diverged improved.

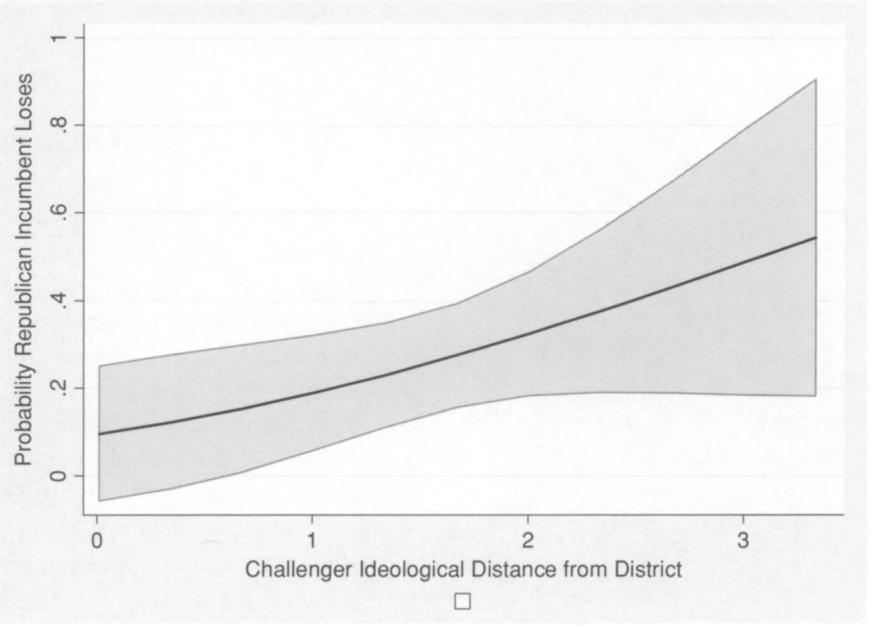
Discussion and Speculation

The idea that candidates can have an electoral incentive to move *away* from their district is at odds with the Downsian convergence hypothesis and conventional wisdom. If challengers can increase their vote share and chances of winning by diverging from their districts, it is not surprising to find that is what they do. But, despite the evidence

[14]An alternative specification based on relative candidate distance also indicates an effect of candidate distance, but it does not make apparent that it results from challenger distance, not incumbent distance.

[15]The analysis in Table 5 is unweighted. Weighting increases the effect of ideological distance but is questionable in probit analysis (see Stata update to Version 9, whatsnew9, 15 September 2005).

FIGURE 3 Estimated Effect of Challenger Distance from District on Republican Incumbent's Probability of Defeat, 2006



Note: Based on Table 5; shaded area represents 95% confidence interval.

we have shown that they *do* diverge and that they benefit on Election Day, skepticism about the conclusion that candidates can benefit by positioning themselves away from their district's preferences is understandable. What mechanisms might account for this finding? We leave for future work an intensive examination of the implications of candidate position taking in House elections, but preliminary speculation and results are possible.

Two sorts of processes may be set in motion by candidate position taking: those by elites and activists, and those registered directly by voters. In the Groseclose (2001) model, the logic behind the "extremist underdog" effect is based on uncertainty about the district median: in his model, valence-disadvantaged candidates move away from the incumbent in the hope that their position lines up with district preferences. That is not a satisfactory explanation of our results because we assume our district data capture the true state of district preferences. Party activists, including contributors, frequently are more extreme in their ideological preferences than ordinary voters (Aldrich 1983; Aronson and Ordeshook 1978; Moon 2004). It is reasonable to assume that potential contributors to challengers' campaigns in the average House district are more extreme than the voters. If challengers are distant from their districts not because of uncertainty about district preferences, but in order to appeal to activists and contributors for their support, the resources that result could be critical in explaining their subsequent electoral victory (Baron 1994; Moon 2004).

Two hypotheses follow from this speculation: (1) the greater a candidate's distance from the district preferences, the greater his financial contributions; and (2) taking account of campaign expenditures explains the effect of candidate distance on the probability of winning. Table 6 tests the first hypothesis by showing that Democratic challengers' distance from their districts was associated with increased receipts in the 2006 election, controlling for incumbent positioning, the partisan makeup and ideological polarization of the district, and whether a quality challenger ran in 2004. The conjecture that challengers increase their fundraising by moving away from their districts toward the preferences of potential contributors in their party is supported.

Table 7 tests the second hypothesis by including challengers' expenditures in the 2006 elections in the same equation used in Table 5 to test for an effect of Democratic challengers' positioning on their chances of winning. Not surprisingly, challenger spending has a positive effect on their chances of winning, but the coefficient for challenger distance from district preferences has dropped in magnitude and is no longer significant. Whereas in Table 5 challengers who were further from their district

TABLE 6 Effects of Candidate Position on Democratic Challengers' Receipts, 2006 (standard errors)

Challenger distance from district	.735***
	(.260)
Incumbent distance from district	−.323
	(.278)
Mean district party ID (party of incumbent)	−1.771***
	(.518)
Ideological polarization within the district	.794
	(.545)
Experienced challenger ran in 2004	1.079***
	(.375)
Relative character valence	−.710***
	(.156)
Constant	10.874***
	(1.600)
F	7.59***
Adjusted R^2	.371
N	68

***p < .01; **p < .05; *p < .10.
Note: Challenger receipts logged. Analysis based on all seats held by Republican incumbents, including oversampled competitive districts. Open seats dropped from the analysis.

TABLE 7 Effects of Candidate Position and Valence on Republican Incumbents' Defeat, 2006 (standard errors)

Challenger distance from district	.313
	(.302)
Incumbent distance from district	.051
	(.331)
Mean district party ID (party of incumbent)	−1.046
	(.682)
Ideological polarization within district	−1.464*
	(.755)
Relative character	−.404*
	(.220)
Challenger's expenditures, 2006 (logged)	.747***
	(.257)
Constant	−8.179***
	(4.928)
Log likelihood	−24.960
χ^2	32.47***
Pseudo R^2	.394
N	68

***p < .01; **p < .05; *p < .10.
Note: Unweighted probit analysis based on all seats held by Republican incumbents, including oversampled competitive districts. Open seats dropped from the analysis.

preferences increased their chances of winning, there is no effect with expenditures included in the analysis. This result is consistent with the hypothesis that relatively extreme challengers increase their chances of winning by raising more money.[16]

Conclusion

Our analysis sheds new light on candidate position taking and representation in U.S. House elections. Ours is the first study to place incumbents and challengers on the same scale as their districts and to compute distances between individual candidates and their districts. We saw, for example, that although the average incumbent is more extreme than the average challenger, constituency partisan differences help explain the partisan differences we observe in Congress and that much of the moderation of challengers can be explained by the fact that they run in districts dominated by opposite-party constituents.

We are also able to distinguish candidates' campaign qualities, skills, and resources as one dimension of valence from the personal character that voters value intrinsically in their representatives. Of the two dimensions of valence, character is more fundamental to our understanding of representation, although campaign valence is of obvious importance in understanding election outcomes. It is intriguing that a character advantage has an effect on candidate positions, whereas a campaign-valence advantage does not. A possible implication is that potential candidates, as well as voters, value character, a possibility we explore in detail elsewhere (Adams et al., 2010).

What can we say about the relationship between the character and policy dimensions of representation? Our general finding is that candidates stronger in character tend to be closer to district ideological preferences. The fact that these candidates typically win means that the character and policy dimensions usually reinforce each other and contribute to electoral victory. It also means that candidates with character advantages over their opposition do not shirk by adopting more extreme views that are presumably more in line with their own preferences. This is all good news for how the electoral system functions. At the same time, however, our evidence shows that challenger extremism results from a character

[16] A possible implication of our results is that the character-valence effect increases polarization in Congress because disadvantaged challengers can win by moving to the extreme. While it is true that winning Democratic challengers in 2006 were more extreme than losing Democrats, they were less extreme (and closer to their district preferences) than the average Democratic incumbent returned to office in 2006.

disadvantage, and that it *can* be an effective electoral strategy, apparently because it helps challengers attract support from activist contributors. When such candidates win elections over opponents who are closer to their district and of stronger character, the electoral system selects the weaker candidate on both dimensions. From the 2006 data, these results appear to be exceptions to the general tendency of the two dimensions to work in tandem. While the implications of these findings, especially the role of extreme financial contributors, are worth exploring in more detail, our investigations of the valence and policy dimensions of representation suggest a generally optimistic view of how the electoral process typically works to advance constituent interests.

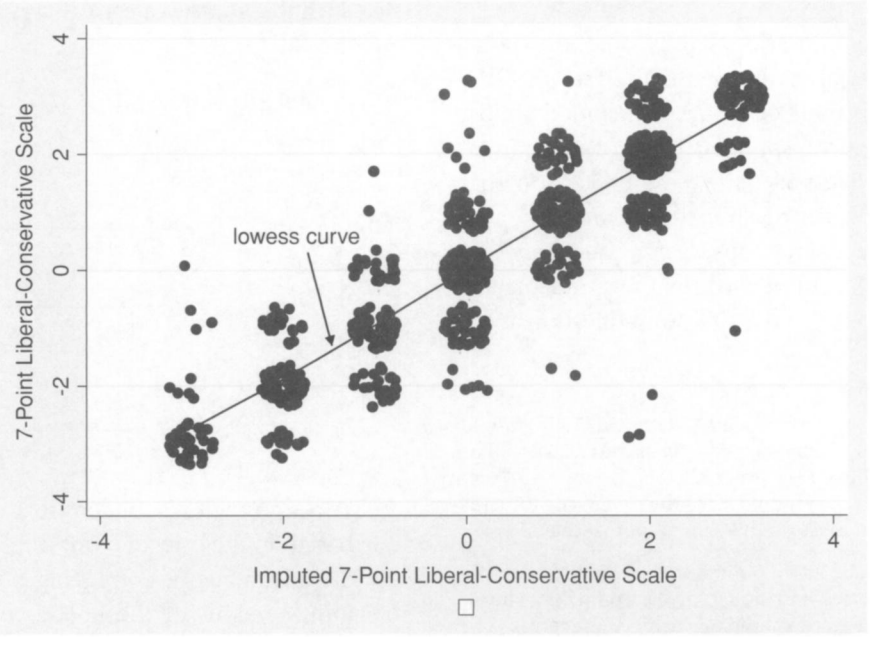
Our ability to distinguish between the dimensions of candidate valence and to place constituencies, incumbents, and challengers on the same ideological scale rests on our use of expert informants in the districts. We would be remiss not to recognize possible limitations in this approach. District-informant surveys are expensive add-ons to congressional election studies that reduce sample size and limit over-time analysis. There are obvious problems with generalizing too much from a single, possibly unique, election. Moreover, our reliance on informants, while providing substantial benefits, also carries limitations and risks, owing to the fact that expert respondents inevitably have their own perspectives and biases (Budge 2001).

Whatever one makes of the strengths and limitations of an informant-based strategy for measuring these concepts, it is important to expand the empirical study of representation to include the campaign and character dimensions of candidate valence. Doing so opens new theoretical and empirical avenues on fundamental questions of divergence and convergence, partisan polarization, district representation, and citizen engagement in the electoral process. Because constituents cannot monitor every decision made by their representative, they must decide when and how much to trust that their representative is acting in their best interests. An empirical accounting of valence as a criterion for citizen behavior in congressional elections as well as in theories of candidate position taking and representation seems overdue, especially in light of the obvious limitations of conventional theories of candidate position.

Appendix A

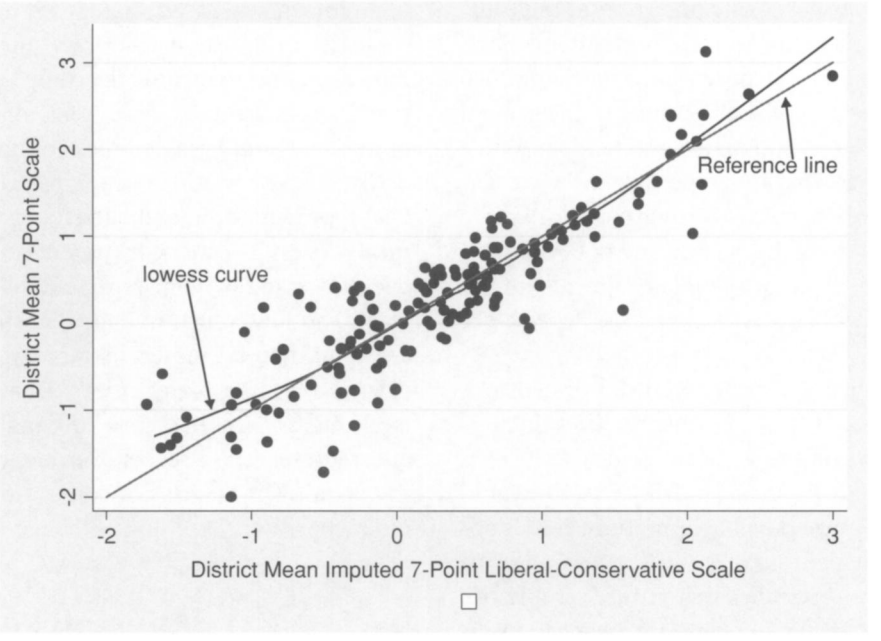
Much of our analysis rests on the claim that we have placed candidates and constituents on the same 7-point liberal-conservative scale. Our placement of the full CCES

FIGURE A1 Responses to 7-Point Liberal-Conservative Scale by Imputed 7-Point Scale



Note: Data jittered to reveal densities.

FIGURE A2 District Means Imputed and 7-Point Liberal-Conservative Scale, UC Davis Sample



Note: Includes all districts, including competitive oversample.

common-content sample is by imputation because the common-content survey asked the liberal-conservative item on a 5-point scale, rather than the 7-point scale we used with the informant survey. The purpose of this appendix is to report the imputation strategy we employed and to consider its implications for the district-level measures.

Our method for imputing scores on the 7-point liberal-conservative scale is based on the fact that the UC Davis module in the CCES survey included almost 1,000 respondents who responded to *three* versions of the liberal-conservative scale: the 7-point version that matched the question on the informant survey;[17] a 5-point version of the liberal-conservative question that was asked of all CCES common-content respondents, including our subsample;[18] and a 100-point question asked of all respondents.[19] Our method uses the 5- and 100-point versions of the question to model responses to the 7-point question for the 1,000 respondents in the UC Davis module using a generalized ordinal logit model to generate the probabilities of respondents falling into each of the seven categories. The probabilities are calculated such that for the category "very liberal" (coded −3):

$j = -3$

$$\Pr(j) = 1 - \frac{1}{1 + \exp(-\alpha_j - x'\beta_j)}$$

for $j = -2, -1, 0, 1, 2$

$$\Pr(j) = \frac{1}{1 + \exp(-\alpha_{j-1} - x'\beta_{j-1})} - \frac{1}{1 + \exp(-\alpha_j - x'\beta_j)}$$

and for $j = 3$

$$\Pr(j) = \frac{1}{1 + \exp(-\alpha_{j-1} - x'\beta_{j-1})}$$

We assign each respondent to a value on the 7-point scale based on the category with the highest probability.

The advantage of employing both the 5-point and 100-point versions of the liberal-conservative items to

[17]On the informant survey, respondents were asked, "How would you rate the Democratic U.S. House candidate in your district?" The 7-point scale was coded from −3 "very liberal" through +3 "very conservative." On the UC Davis module of the CCES, constituents were asked to place themselves on this same 7-point scale.

[18]"One way that people talk about politics in the United States is in terms of liberal, conservative, and moderate. We would like to know how you view the parties and candidates using these terms. The scale below represents the ideological spectrum from very liberal to very conservative." Very liberal is coded −2; very conservative is coded +2.

[19]The 100-point scale is the same prompt as the 5-point scale, with a 100-point response scale rather than five.

model the 7-point scale is that the 5-point item is closer in format to the 7-point scale, with the endpoints labeled identically, while the 100-point item allows respondents on the extremes to differentiate themselves. A concern is that the imputation would fail to identify the individuals on the extremes. The seven equations in the logit analysis (one equation for each category) show that both the 5- and 100-point items contribute significantly to the imputations for each category. Figure A1 shows the relationship between the imputed and actual 7-point scaling for the UC Davis sample. The figure demonstrates a strong fit between the imputed and actual items, although there is a slight tendency to underestimate extremists on the scale.[20]

A related concern is that any tendency to underimpute extreme values could affect the aggregated constituency scores by biasing district estimates, especially among districts dominated by one party or the other. To address this concern, we aggregated the imputed and actual 7-point scores for the UC Davis sample to compare district scores based on both items. Figure A2 shows that there is a strong linear relationship between district scores based on the imputed 7-point item and the actual 7-point item, although the weak bias with the imputed measure may lead to a slight tendency to underestimate the extremity of some districts.[21]

Appendix B

Our reliance on a survey of national convention delegates and state legislators to generate candidate placements on the left-right scale and valence scores raises questions about the reliability and validity of this approach. We have strong evidence in support of our approach for placements of incumbents because we have accepted independent indicators of incumbent placements on the left-right scale in ADA and NOMINATE scores. The correlations between the informant-generated placements of incumbents and these two indicators are .90 and .87, respectively. These correlations partly—but only partly—reflect the strong partisan polarization in the House: the informant × ADA correlations for Democratic and Republican incumbents, respectively, are .68 and .59. We do not have ADA or NOMINATE scores for all challengers, so we generated mean challenger placements from the CCES common-content respondents' placement of challengers. We also generated a CCES estimate of incumbent placement.[22] The correlation between informant and CCES placements of challengers is .83. We have data on a subset of newcomers to the 110th Congress who ran as challengers in 2006; the correlation between informant placements and NOMINATE scores for this subset is .93.

Following Marks et al. (2007), we estimated the errors associated with the informant placements of incumbents by regressing informant placements on the ADA, NOMINATE, and CCES measures of incumbent placements. This approach assumes that the three criterion variables represent the "true" placement scores, with the absolute value of the residuals capturing "error" in the informant placements. We then model the error in the informant measure as a function of incumbent extremism (on the ADA score), the standard deviation of informant ratings within the district, the size of the district-informant sample, whether the incumbent was a freshman in 2006, challenger expenditures (to measure the visibility of the campaign), and the party of the incumbent. The results indicate a highly significant ($p < .001$) effect of incumbent extremism such that informant placements of extremists have lower error. No other variable has close to a significant effect on error. The absence of an effect of the freshman dummy (or a seniority measure in its place) suggests that informants can accurately rate newcomers, which is further reassurance on informant placements of challengers.

Our ability to validate candidate-valence ratings is hampered by the absence of criterion variables, especially for character-valence ratings. Two frequently used measures of campaign valence are the Jacobson office-holding experience dummy and challenger expenditures. Both, of course, could influence informant valence ratings. A factor analysis of these two ratings plus the informant campaign-valence rating produces a single-factor solution, with all three variables loading at > .58. When we introduce the character rating, a second factor emerges, with the challenger character rating loading at .74. These results support our claim that the character- and campaign-valence items tap distinct dimensions and that the informant campaign-valence ratings relate to other measures of campaign prowess. However, the evidence also suggests

[20] The lowess curve almost exactly replicates the OLS prediction line (not shown). Regressing the actual item on the imputed scale reveals close to a one-to-one relationship: $Y = .007 + .934 * Y_{imputed}$. t-ratios for the intercept and slope are .29 and 61.91, respectively; adjusted $R^2 = .807$.

[21] Reference line is based on a one-to-one relationship. The OLS equation is: $DistrictMean_Y = -.004 + .935 * DistrictMean_{imputed}$. t-ratios for the intercept and slope are −.12 and 25.20, respectively; adjusted $R^2 = .811$.

[22] The correlations between the CCES incumbent placements and the informant, ADA, and NOMINATE scores are all > .92. A factor analysis of all four indicators produces a single factor with all loadings ≥ .93.

that the valence items may have somewhat more error than the ideological placement items. A residual-based error analysis of the campaign-valence item (regressed on challenger experience and expenditures) indicates that only informant sample size relates significantly to the magnitude of the error. Interitem reliabilities (Cronbach's alpha) for both the individual and district-level ratings on the individual indicators used to construct the campaign- and character-valence measures are >.92 and average .95.

Appendix C

Because our measures are based on experts' ratings of candidate positions and character, we must consider other factors that could explain the relationships we observe. To address these other factors, we examine individual informants' ratings of candidate character valence. Based on social psychological theory, the dominant sources of bias should be partisanship and ideological affinity between the informant and the candidate. The question is whether there is any evidence that character ratings reflect a bias based on candidate proximity to the district. We know of no social-psychological theory that would support this expectation, but there may be a *political* reason if informants assume that candidates closer to their district must be more astute, talented, and dedicated by virtue of their proximity to the district. Throughout our analysis, we have sought to minimize distortion by using independent measures, where possible. Thus, rather than locating district opinion based on informant perceptions, the candidate proximity measures are based on CCES district samples. Nonetheless, informants know that districts are relatively moderate, and the question is whether there is an effect of candidate proximity to the district on their ratings of character valence.

Table C1 shows the results of regressing incumbent and challenger personal quality ratings on whether the informant and candidate are in the same party, ideological proximity between the informant and the candidate, and the proximity of the candidate to district opinion. Equation (1) shows that both of the expected sources of distortion based on informant characteristics occur: informants in the same party as the candidate rate the candidate substantially higher on character, and as candidates are ideologically more distant from the informant, character ratings go *down*. Equation (2) shows that, indeed, as both challengers and incumbents are located further from district opinion, informant ratings of their character go down. Therefore, candidates who are closer to their districts on ideology are judged more favorably on their character. Does this mean that informants infer candidate character from their positioning relative to their districts? The problem is complicated by the fact our substantive conclusion—that candidates higher in character valence locate closer to their districts, while those at a character disadvantage locate further from their districts—is also perfectly consistent with the results for incumbents and challengers in equation (2). That is, our causal argument and the hypothesis that informants infer candidate characteristics from their proximity to the district are observationally equivalent.

TABLE C1 OLS Analysis of Informants' Ratings of Candidate Character Scores (robust standard errors)

	Incumbents			Challengers		
	(1) *b* (SE)	(2) *b* (SE)	(3) *b* (SE)	(1) *b* (SE)	(2) *b* (SE)	(3) *b* (SE)
Informant and candidate in same party	1.272**	1.309**	1.275**	1.614**	1.624**	1.620**
	(.157)	(.150)	(.150)	(.150)	(.198)	(.126)
Ideological distance between candidate & informant	−.370**	−.316**	−.321**	−.276**	−.190**	−.189**
	(.036)	(.038)	(.039)	(.039)	(.037)	(.037)
Ideological distance between candidate and district opinion (from CCES data)		−.267**	−.251**		−.287**	−.228**
		(.063)	(.069)		(.054)	(.062)
Ideological distance between candidate and *perceived* district opinion			−.021			−.071
			(.050)			(.043)
R^2	.475	.495	.492	.471	.488	.490
N	892	878	870	754	737	729

**p < .01; *p < .05.

We can address this problem by assuming that if informants take perceptual cues from candidates' positions relative to their district when they make judgments about character valence, they do so based on their *perceptions* of district opinion, rather than district opinion as it is measured from the CCES common-content survey. Equation (3) tests this idea by including in the analysis a measure of the ideological distance between the candidate and district opinion *as perceived by the informant*. The results clearly indicate that it is the *actual* distance between candidates and their districts that is statistically related to informants' character-valence ratings, rather than perceived distance. Thus, we conclude that informants make judgments about candidate character based on their perceptions of candidate qualities, not their perceptions of how closely the candidate is aligned with the district.

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