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James N. Druckman

Cari Lynn Hennessy

Martin Kifer

Michael Parkin
Oberlin College

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Issue Engagement on Congressional Candidate Web Sites, 2002–2006

James N. Druckman

Cari Lynn Hennessy

Northwestern University

Martin J. Kifer

Mathematica Policy Research, Inc.

Michael Parkin

Oberlin College

When candidates engage in robust policy debate, it gives citizens clear choices on issues that matter. Previous studies of issue engagement have primarily used indicators of campaign strategy that are mediated by reporters (e.g., newspaper articles) or indicators that may exclude candidates in less competitive races (e.g., television advertisements). We study issue engagement with data from a unique source, congressional candidate Web sites, that are unmediated and representative of both House and Senate campaigns. We find that the saliency of issues in public opinion is a primary determinant of candidate engagement. And, despite the unique capacity of the Internet to allow candidates to explain their positions on a large number of issues, candidates continue to behave strategically, selecting a few issues on which to engage their adversaries.

Keywords: *issue engagement; candidate Web sites; Internet; congressional campaigns*

Virtually all conceptions of democracy emphasize the need for vibrant and robust elections. Democratic theory suggests that, ideally, elections ought to feature engaged citizens as well as candidates who debate policy questions, providing voters with clear and distinct choices on consequential issues. In the words of one prominent scholar, democracies ought to have elections “in which competing leaders and organizations define the alternatives of public policy in such a way that the public can participate in the decision-making process” (Schattschneider 1960, p. 138). When candidates do not engage in direct policy debate, they deprive voters of critical information which may keep them from fully participating in the democratic process or lead them to base their political choices on other, less-than-ideal criteria.

Our understanding of the factors that keep candidates from engaging each other in policy debate is currently limited. First, past efforts to explain issue engagement have generally been constrained by a lack of ideal data. Most studies have relied on data from television ads and/or newspaper accounts, which, as we will discuss below, are neither fully representative nor provide a complete picture of the campaign’s message. Second, although the rise

Authors’ Note: The authors would also like to acknowledge Jason Seawright’s contribution in suggesting and making extensive recommendations concerning the simulations of candidate engagement. Please address correspondence to Martin J. Kifer, Mathematica Policy Research, Inc., 600 Maryland Ave., SW, Suite 550, Washington, D.C., 20024; e-mail: mkifer@mathematica-mpr.com. Note: The authors are listed in alphabetical order.

of the Internet has generated broad discussion about the role it plays in electoral politics, relatively little consideration has been given to how this new medium may be affecting the degree of issue engagement among candidates (see, however, Xenos & Foot, 2005). A full understanding of issue engagement requires some knowledge of how candidates are using this important new venue to discuss important policy matters.¹

We seek to address these limitations by exploring patterns of issue engagement between congressional candidates on their campaign Web sites. Using data from more than 700 House and Senate candidate Web sites from elections in 2002, 2004, and 2006, we analyze both the amount of online issue engagement as well as the motivations for convergence on particular topics. We believe that our approach not only provides insight into how candidates use the Internet for policy debate, it also helps to overcome some of the measurement issues that have hampered past efforts to explain issue engagement more generally.

We start in the next section with a discussion of the factors that may drive candidates into policy exchanges. We then detail the advantages of using candidate Web sites to study issue engagement, before presenting our data. Our analysis begins with simulations and descriptive statistics aimed at determining the extent of issue engagement in congressional races. We then test the direct effects that issue saliency and partisan ownership have on engagement before testing additional hypotheses about the race- and district-level motivations for entering into direct policy dialogue. We find that online issue engagement is largely a function of issue saliency in that engagement is most robust on issues deemed most important by the public. However, candidates also show some small signs of more strategic behavior by being more hesitant to engage on issues that offer them little advantage. We conclude with a brief discussion of implications and recommendations for future research.

Issue Engagement

Abundant empirical evidence confirms that candidates carefully consider the rhetoric they use in campaigns. In fact, there is a growing literature on several aspects of campaign communications including position taking (e.g., Franklin, 1991; Page, 1978; Simon, 2002), negativity (e.g., Kahn & Kenney, 2004; Lau & Rovner, 2009), and issue ownership (e.g., Damore, 2004; Holian, 2004; Petrocik, 1996). As noted above, there has also been some work on the extent to which candidates mention the same issues on the campaign trail (see, e.g., Benoit, 2007; Damore, 2005; Kaplan, Park, & Ridout, 2006; Sides, 2006; Sigelman & Buell, 2004; Simon, 2002).

This and other work on campaign behavior clearly show that candidates are strategic actors focused on gaining voters' support. Although some early literature suggested that few voters relied on issues (e.g., Campbell, Converse, Miller, & Stokes, 1960), more recent studies confirm that candidates' issue positions can substantially influence voters' decisions (e.g., Alvarez, 1997; Bartels, 1986; Enelow & Hinich, 1984; Krosnick & Berent, 1993). What candidates say about issues can affect voters directly (i.e., through persuasion) or indirectly by priming certain issues and thus altering the basis of voters' evaluations (see, e.g., Druckman, Jacobs, & Ostermeier, 2004; Miller & Krosnick, 1996). The potential to win (or lose) votes can encourage candidates to be quite calculating when it comes to the issues they discuss on the campaign trail. Unfortunately, this careful consideration can lead

candidates to talk past one another, at least on some issues, “almost as if they are participating in two different elections” (Berelson, Lazarsfeld, & McPhee, 1954, p. 236).

Past studies have provided some insight into the factors that determine the extent of issue engagement between candidates. This work has, however, yet to fully appreciate the Internet’s potential to possibly facilitate greater issue engagement by altering how candidates think about presenting their policy positions. Candidates may be generally less restrictive online given that, unlike other forms of paid advertising (e.g., television ads, radio ads, mailers), their Web sites provide virtually limitless space to present issue details—candidates can easily discuss every possible issue on their Web sites (see, e.g., Benoit, McHale, Hansen, Pier, & McGuire, 2003; Foot & Schneider, 2006). Moreover, candidates may be compelled to present information on a broad range of issues knowing that their sites are most often visited by engaged voters seeking detailed information (Bimber & Davis 2003; Institute for Policy, Democracy, and the Internet, 2000) and/or supporters who are preconditioned to agree with the candidate’s positions (Druckman, Kifer, & Parkin 2009; Stromer-Galley, Howard, Schneider, & Foot, 2003). These factors could motivate increased issue engagement with both candidates providing a near complete list of all policy positions. This would have the benefit of potentially bolstering civic engagement by providing interested Web site visitors with a clear sense of where the candidates stand on the issues that matter.

Despite this potential, candidates are still strategic actors who must consider other pressing incentives. The first political consideration concerns the perceived saliency of an issue. At any given time, there will be issues that the public sees as particularly important to address. Candidates know that voters are likely to punish them at the polls if they do not give some attention to the issues that are on the public’s mind (see, e.g., Ansolabehere & Iyengar, 1994; Sides, 2006). Therefore, we would expect engagement to be highest on issues that the public deems most salient. Less salient issues provide candidates with an opportunity to avoid engagement if there is some other reason for doing so.

One of the primary reasons that candidates may want to avoid engaging on an issue has to do with its degree of “ownership.” An extension of Riker’s (1993) “dominance principle,” theories of issue ownership posit that voters believe that one of the major parties is better suited to deal with particular issues. For example, voters may feel that the Democrats are better able to deal with Social Security, health care, and the environment while Republicans are best suited for dealing with crime, defense, and taxes. Studies have shown fairly consistent patterns of issue ownership although some issues (e.g., the economy) have changed with time and circumstance (see, e.g., Budge & Farlie, 1983; Holian, 2004; Petrocik, 1996; Petrocik, Benoit, & Hansen, 2003; Sellers, 1998).² It follows that candidates may want to play to their strengths and avoid issues that are owned by the opposing party (Simon, 2002; Spiliotes & Vavreck, 2002).³ This means that issue engagement is most likely to occur, all else equal, on issues that are weakly owned because candidates from both parties have relatively little to lose by engaging on them. In other words, strongly (i.e., clearly) owned issues may scare off candidates of the opposing party such that, unless otherwise tempted, they will avoid engaging in debate on the issue.

Issue ownership and saliency may, at times, work together in determining whether candidates will engage on a particular issue. For example, in some cases, the saliency of an issue may force candidates to engage on it even if one party is seen to have a clear disadvantage (see, e.g., Ansolabehere & Iyengar, 1994; Holian, 2004; Sides 2006). There are, however, still other political factors that may enter into the mix when deciding on which issues to engage.

The first of these concerns the relative experience and position of the candidates. It is conceivable that engagement will be higher on many issues in open seat races, where there is no incumbent/challenger dynamic. In open seat races, both candidates may be compelled to provide a full accounting of their positions, unlike incumbents who can avoid certain issues while running on their “experience.” Incumbents, particularly safe incumbents, are unlikely to engage on issues that may be damaging which drives down the level of engagement in the race (see, e.g., Abramowitz, Alexander, & Gunning, 2006; Gronke, 2000; Jacobson, 2004, pp. 23-28). Similarly, Senate races may engender more debate than House races due to the fact that Senatorial candidates are appealing to a broader electorate.

The competitiveness of the race often affects candidate behavior (see, e.g., Kahn & Kenney, 1999, 2004) and thus may also play a role in determining the level of issue engagement. As alluded to above, uncompetitive races are likely to feature low levels of engagement as the front-runner has little incentive to discuss common issues—why invite debate over an issue when the race is not close? Tight races, however, may force candidates onto uneasy issue ground because “as the competition for a plurality of votes becomes fiercer, candidates make more appeals to different slices of the electorate to edge out their opponents” (Xenos & Foot, 2005; 173, also see Kahn & Kenney, 1999; Simon, 2002). Avoiding an issue in a competitive race may actually cost the candidate more than taking an unpopular stance.

District characteristics might further help determine the level of engagement on certain issues. We might expect factors such as the wealth, education level, or size of the minority population to force candidates to engage on particular issues, despite other motivations. For example, candidates running in more educated districts may feel pressure to address more issues, and to engage in more dialogue with opponents, because these voters are more informed about policy issues and more likely to pay attention to politics (e.g., Nie, Junn, & Stehlik-Barry, 1996, Delli Carpini & Keeter, 1996).

Finally, the individual characteristics of the candidates, particularly their gender, may influence the level of engagement in a race. Female candidates, especially if they are trailing, could feel the need to engage on certain issues where they are considered weak in order to overcome that perceived weakness. For example, a female Democrat may eagerly engage in a discussion of crime policy even though her party does not “own” the issue because she wants to show strength by addressing negative stereotypes (see, e.g., Alexander & Anderson, 1993; Huddy & Terkildsen, 1993).

Our study examines the power of and tensions between these different incentives. Although the Internet provides an opportunity for significant engagement, political factors are likely to moderate the eventual level of dialogue. The context of particular campaigns creates conditions under which candidates may be either responding to public opinion and/or attempting to gain advantage. Although saliency and issue ownership are likely to exert some of the strongest influence, there are a host of other factors that may also be at work in determining the level of issue engagement in congressional races.

Studying Issue Engagement in Congressional Races

A central challenge for any work on candidate behavior, including issue engagement, concerns the identification of an appropriate source of data. Campaigns are complicated and

thus finding data that accurately capture campaign behavior can be difficult (see Lapinski, 2004, p. 9; Lau & Pomper, 2004, pp. 133-134; Simon, 2002, p. 94). Ideally, the data used to study issue engagement should come from sources that are unmediated (i.e., directly from the campaign), complete (i.e., represent the campaign's overall message), and representative of the population of campaigns.

Candidate Web sites uniquely meet these criteria. First, Web sites are unmediated. Even when a campaign hires a consulting firm to help construct its Web site, it is the campaign that provides the site's content (Ireland & Nash, 2001, p. 60-61). This contrasts with news media coverage of campaigns (e.g., newspapers), on which some prior issue engagement work relies (e.g., Petrocik, 1996; Sigelman & Buell, 2004). Lapinski (2004, p. 10) explains that "any analysis of media coverage will not provide an accurate measure of the messages that [candidates] are attempting to communicate. Because of the problems associated with studying mediated communication, it is essential to examine direct methods . . ." Analyzing candidate Web sites provides a clear measure of the campaign's policy message, enabling an accurate evaluation of issue engagement between candidates in a race.

Second, Web sites offer as holistic or complete a portrait of campaign strategy as is available. Campaigns can post copious information online, including copies of advertisements, speeches, or other material (Ireland & Nash, 2001, pp. 60-61). As a result, a campaign Web site captures the aggregation of the campaign's communications, reflecting its overall message.⁴ This differs from speeches or television advertisements which require candidates to choose brief snippets of their message (see, e.g., Kaplan et al., 2006; Petrocik et al., 2003). Thus, candidate Web sites provide the most comprehensive measure of a campaign's full issue agenda.⁵

Third, virtually all congressional campaigns launch Web sites, which is critical for capturing a representative sample of the population of congressional campaigns. In contrast, many House candidates and some noncompetitive Senate candidates fail to produce television advertisements (Goldstein & Rivlin 2005, p. 16; Kahn & Kenney, 1999, p. 34). Similarly, major newspapers spend little time covering House races or noncompetitive Senate races. As a result, studies that rely on advertisements (e.g., Kaplan et al., 2006) or media coverage (e.g., Sigelman & Buell, 2004) use truncated samples that almost always exclude House campaigns and less competitive (or less well-funded) Senate races (see Druckman, Kifer, & Parkin, 2008, pp. 19-20).⁶ Candidate Web sites thus allow us to explore issue engagement among a highly representative sample of races.

These factors make candidate Web sites the most nearly ideal source for studying issue engagement and other forms of campaign behavior. Studying candidate Web sites has the additional benefit of providing insight into how candidates are using this new medium to engage in policy debate. We now turn to a description of our data collection and approach to measurement.

Our data cover three election cycles, starting in 2002, a year in which Web sites first became "a critical part of any candidate's strategy" (Chinni, 2002, p. 1). In each year—2002, 2004, and 2006—we identified the universe of major party (Democrat and Republican) House and Senate candidates using *National Journal*, *Congressional Quarterly*, and various state party homepages. We included the universe of Senate candidates and then selected a systematic random sample of approximately 20% of House races, stratified by state and district to ensure regional diversity in the sample.⁷ We searched for all of the Web sites in our sample by following links from the *National Journal* Web site (www.nationaljournal.com) and using search engines such as Google (www.google.com). We carefully identified

candidates' personal campaign Web sites, excluding official congressional Web sites and Web sites sponsored by other groups or individuals.

We successfully identified nearly all Senate candidate Web sites and greater than 95% of House sites in our sample. The few cases where the candidates did not launch Web sites came largely from earlier year races where the candidates had no or very weak (e.g., inexperienced, low funded) opponents. Our sample consisted of a total 736 Web sites with 26% coming from the Senate and 74% coming from the House.

In each year, a team of coders started in a detailed training session before being randomly assigned a set of sites. All coding was conducted in the 10 days preceding Election Day. However, we also tracked a small sample of Web sites from after Labor Day until Election Day, and found little evidence of changes that would have significantly altered our coding. In addition, we assessed intercoder reliability by randomly sampling approximately 30% of the Web sites and having one of two reliability coders code these sites. For all the variables used in the analyses below, we find high levels of reliability, nearly always exceeding the .80 threshold, correcting for chance agreement (Neuendorf, 2002, p. 143; Riffe, Lacy, & Fico, 1998, p. 131). Given all of this, we are confident that our coding approach successfully captured each campaign's strategy and overall message.

Coders examined the entire site and followed a detailed coding framework that included a host of technical and political measures. Our coding of policy issues is, however, most important to describe for the purposes of this article. We took an extensive approach to coding the issues candidates mentioned. We instructed coders to first examine the front page (or homepage) and determine whether there was any issue information there, and if so, which issues were listed. Coders then recorded any issues that the candidate mentioned on his/her biography page(s) before indicating whether the Web site contained a distinct issues section and, if so, which issues were mentioned there. Coders also recorded the issues that were emphasized throughout other parts of the candidate's Web site. In short, coders systematically analyzed each candidate's entire Web site to identify any issues that were discussed.

Once the issues were identified, we categorized them into standard issue categories that included: defense (e.g., homeland security, foreign affairs), jobs and the economy, health care, education, group advocacy (e.g., support for children, minority communities), environment and energy, taxes, immigration, crime and gun control, moral and ethical issues (e.g., gay marriage, abortion), Social Security, government spending, and government reform. This enabled us to then create an empirical measure of how many times each candidate mentioned a particular issue on their Web site. We also created a dichotomous measure of whether or not the candidate mentioned a particular issue.

We transformed our measures to create a dataset in which individual congressional races became the unit of analysis. We then created a race-level measure of issue engagement amongst opposing candidates by first taking the dichotomous issue mention variable noted above and looking at both candidates in the race to see whether they had engaged on that particular issue (e.g., had both candidates mentioned health care?). If both candidates in a race had mentioned the issue, we scored it a 1. We coded it as 0 if neither candidate or only one candidate had mentioned that particular issue. Thus, each race has a dichotomous measure of engagement for each issue.

We also created a proportional measure of overall issue engagement to be used in the regression analysis. We did this by summing the number of issues each candidate

Table 1
Issue Saliency in 2002, 2004, and 2006

	2002	2004	2006	Average
Defense	39.00	46.67	46.50	44.06
Jobs and the economy	28.33	21.33	13.00	20.89
Health care	12.00	23.67	13.50	16.39
Education	9.67	10.00	8.50	9.39
Group advocacy	9.33	4.67	6.25	6.75
Environment	2.00	2.33	13.00	5.78
Government reform	5.00	5.67	4.50	5.06
Immigration	1.67	1.67	11.50	4.95
Crime	8.00	2.67	4.00	4.89
Moral and ethical issues	2.33	8.33	3.75	4.80
Social security	3.00	3.33	4.00	3.44
Taxes	2.33	1.00	0.75	1.36
Government spending	0.00	1.67	2.25	1.31

Note: Cell entries represent the percentage of the public that deemed the issue to be one of the two most important issues for the government to address.

mentioned and then calculating the total number of individual issues on which the candidates overlapped. We then made the number of overlapping issues in each race the numerator and divided it by the number of total issues mentioned, minus the overlapping issues.⁸

We then supplemented our dataset with additional information on the candidates' districts (or state for Senate races). For each district, we used the 2000 census to obtain measures of average household income, percentage of African American population, and average education level (i.e., percentage with a Bachelor's degree). We then took information from *The Almanac of American Politics* (Barone & Cohen, 2003, 2005; Barone, Cohen, & Cook, 2001) to make a district-level partisanship measure based on the average percentage of the vote for George W. Bush in 2000 and 2004. We also used the *Almanac* to create race-level variables indicating whether or not there was at least one female candidate and/or an incumbent running in the race.⁹ Finally, we created a measure of race competitiveness from the ratings of nonpartisan political analyst Charlie Cook (www.cookpolitical.com). Each race was coded as either solid (0), likely (1), leaning (2), or toss-up (3).

To test our predictions about the impact that issue saliency has on engagement, we used public opinion data from Harris Interactive's question concerning the "two most important issues for the government to address." We averaged the responses given to the question in polls from July until Election Day. This generated a saliency measure for each issue that reflected the percentage of the public claiming that the issue was important for the government to address. For example, Table 1 shows that education was considered to be one of the two most important issues by 9.67% of the public in 2002, compared to 10.0% in 2004 and 8.5% in 2006. This gives education an average (2002–2006) saliency score of 9.39%.

To capture the relative "ownership" of each issue in each year, we followed convention by using "iPoll" to collect data from multiple surveys on the public's perception of which party owned a host of policy issues (Hayes, 2005, p. 910; Petrocik, 1996, p. 832).¹⁰ We

Table 2
Issue Ownership in 2002, 2004, and 2006

Issue	2002			2004			2006			Average
	Dem	Rep	Diff	Dem	Rep	Diff	Dem	Rep	Diff	Diff
Environment	52.4	29.6	22.8	57.0	35.0	22.0	49.5	24.1	25.3	23.4
Health care	49.1	32.8	16.3	52.6	35.0	17.6	52.0	23.6	28.4	20.7
Group advocacy	50.5	33.0	17.5	56.5	36.5	20.0	50.3	29.8	20.5	19.3
Social security	47.5	34.1	13.4	50.7	37.3	13.4	47.4	25.4	22.0	16.2
Defense	26.8	54.1	-27.3	38.8	50.5	-11.8	37.8	40.0	-2.2	-13.7
Education	41.8	39.8	2.0	50.9	38.8	12.1	48.0	30.6	17.4	10.5
Government spending	40.2	43.4	-3.2	48.0	39.0	9.0	47.4	29.4	18.0	7.9
Crime	30.4	42.0	-11.6	39.0	48.0	-9.0	35.2	35.5	-0.3	-7.0
Moral and ethical issues	32.5	44.7	-12.7	(34.4)	(40.6)	(-6.2)	36.3	36.5	-0.2	-6.2
Jobs and the economy	40.6	42.1	-1.5	48.7	43.1	5.6	48.1	34.7	13.4	5.8
Government reform	31.0	37.8	-6.8	(35.3)	(32.0)	(3.3)	39.7	26.1	13.6	3.3
Immigration	33.0	50.0	-17.0	39.0	29.5	9.5	37.9	31.1	6.7	-2.3
Taxes	37.3	45.0	-7.7	43.4	47.3	-3.9	43.5	35.6	7.9	-1.2

Note: Cell entries represent that percentage of the public in each year that thought the particular party was best suited to deal with the issue. The differences (Diff) are calculated by subtracting the Republican (Rep) score from the Democrat (Dem), yielding positive numbers for issues owned by the Democrats and negative numbers for issues owned by the republicans. Entries in brackets are averages based on data from 2002 and 2006.

then computed the partisan advantage (according to public opinion) for each issue by subtracting the percentage of the public that thought the Republicans were better suited to handle the issue from the percentage who thought the Democrats were best suited. For example, in 2002, 52.4% of the public thought the Democrats were best able to deal with environmental issues whereas 29.6% thought the Republicans were better suited. This results in an ownership score of 22.8 (52.4 - 29.6), indicating relatively strong democratic ownership of the issue. Table 2 presents the issue ownership scores for each issue, in each year.

Results

We present our results in four sections. We begin with a series of simulations aimed at providing a comparative sense of overall issue engagement on candidate Web sites in 2002, 2004, and 2006. We then present detailed descriptive statistics on engagement levels for specific issues over the three elections. This section also presents our data in visual form, organized by saliency and then partisan ownership. The third section of the analysis continues our investigation with basic tests of the impact that saliency has on the tendency to engage in direct policy debate, controlling for the effect of ownership. Finally, we report the results of a series of regressions in which we investigate the impact that other race- and district-level factors have on issue engagement on congressional candidate Web sites.

Simulations

Monte Carlo simulations are often used to test actual outcomes against null hypotheses based on simulated scenarios (see, e.g., Mooney, 1997). We start our analysis with two such tests. In particular, we look at how the actual patterns of issue engagement between candidates compare with simulated patterns of engagement based on a draw from (a) an equal distribution of issues and (b) a distribution organized by issue saliency.

We start by calculating the average number of issue overlaps that actually occurred online between congressional candidates in each year. This is a simple case of summing all of the issue overlaps between candidates in a year and dividing by the number of races. We then determine the number of overlaps that would occur if candidates were randomly choosing issues based on a uniform distribution in which each issue has an equal chance of being selected. For our second simulation, we create a distribution of issues determined by their saliency and simulate the number of issue overlaps that would occur if candidates were selecting issues based on their perceived importance to the public.

We use the statistical software program R to draw randomly from the distribution for the number of issues,¹¹ drawing two numbers to simulate two candidates choosing to emphasize different numbers of issues on their Web sites. Then, we use the distribution of issue probabilities for that year to randomly draw specific issues for each fictional candidate. For example, the computer might draw the number three for Candidate A and the number one for Candidate B. Next, the computer would randomly draw three issues for Candidate A and one issue for Candidate B. The computer might draw defense, taxes, and health care for Candidate A and taxes for Candidate B. Once these numbers are generated, we instruct the computer to count the number of overlaps between the two issue lists.

The computer repeats this process based on the number of races in each year: 73 times for 2002, 116 times for 2004, and 135 times for 2006. Then, the program adds up all of the overlap counts and divides by the number of races to calculate the average number of overlaps generated in the simulation. We instructed the computer to repeat this process 2000 times, each time storing the average number of overlaps in a vector. The results indicate the distribution for the average number of overlaps that we would expect in each year if candidates chose to emphasize issues according to (a) a distribution of issues in which each issue is equally attractive and (b) a distribution based on the relative saliency of the issues in each year. The null hypothesis can be rejected at the .05 level if the average number of overlaps in the data is greater than 97.5% of the averages generated by the simulation.

Table 3 presents the results of our simulations. The first column shows the average number of actual issues upon which there was engagement in each year. Our data reveals that, on average, congressional candidates in 2002 engaged on 1.712 issues, compared to 1.414 in 2004 and 2.097 in 2006. These results reflect the fact that 16% of races had no engagement, 31.6% had dialogue on a single issue, 27.6% featured engagement on two issues, and the remaining 24.8% had engagement on three or more issues. The second column shows that we would expect significantly lower ($p = .000$ for each year) levels of engagement if candidates were randomly selecting issues from a distribution in which all issues were equal. The simulated average in 2002 is 1.262, in 2004 it is 1.028, and in 2006 it is 1.667. This shows that there is significantly more issue engagement in congressional races than we

Table 3
Issue Engagement Simulations

Year	Actual Engagement	Engagement Predicted by Uniform Distribution	Engagement Predicted by Saliency Distribution
2002	1.712	1.262 (.000)	1.964 (.087)
2004	1.414	1.028 (.000)	1.609 (.088)
2006	2.097	1.667 (.000)	2.240 (.267)

Note: Cell entries represent the average number of issue overlaps with p values in brackets for the difference between actual and simulated averages.

would expect to occur at random, thus suggesting that something is motivating candidates to engage on their Web sites.

The third column in Table 1 reports the average number of issue overlaps that we would expect to find if candidates were being driven by issue saliency. In 2002 and 2004, the number of overlapping issues in the simulation is only marginally higher ($p = .087$ in 2002 and $p = .088$ in 2004) than the actual number of overlaps found in the data. In 2006, the simulated and actual averages are statistically indistinguishable ($p = .267$). This means that the actual pattern of issue engagement is fairly close to what we would expect if candidates were selecting issues for debate based on their relative saliency. The fact, however, that the actual numbers are routinely lower than the simulated numbers suggests that while saliency may play a key role in determining candidate issue choice and engagement, it likely is not the only force driving the decision to engage.

Taken together, these results show that candidates are using their Web sites to engage in more policy debates than would be expected by chance. Although the actual level of engagement is still quite modest by democratic theory standards, it is growing with time and it does suggest that the Internet may become a particularly vibrant venue for policy debate. Moreover, the results suggest that overlaps might be occurring as a result of both candidates selecting issues that are important to the public. The simulations alone cannot tell us why candidates in our sample are choosing the same issues, however, and there are almost certainly other factors at work. We now turn to some descriptive statistics, broken down by individual issues, to get a better sense of the other factors that may be affecting decisions to engage.

Descriptive Statistics

Our analysis of engagement at the level of individual issues starts by calculating the percentage of races, with engagement on each issue. We then compare the level of engagement on each issue to the issue's saliency and strength of ownership. Table 4 presents the details on each issue's engagement, saliency, and ownership for each year.

To present this information more clearly, we summarize the data in visual form by presenting the percentage of races with engagement on each issue in each year. In Figure 1, the issues are ordered by their average (2002–2006) saliency with the most salient issues starting on the left. The pattern of results in Figure 1 shows a clear relationship between the degree of issue engagement and issue saliency—issue engagement is routinely highest on the most salient issues (i.e., defense, jobs and the economy, health care, and education) and

Table 4
Issue Engagement by Saliency and Ownership in 2002, 2004, and 2006

	2002 (<i>n</i> = 73)			2004 (<i>n</i> = 116)			2006 (<i>n</i> = 134)		
	Engagement	Saliency	Owner	Engagement	Saliency	Owner	Engagement	Saliency	Owner
Defense	21.92	39.00	-27.3	18.97	46.67	-11.8	46.27	46.5	-2.2
Jobs and the economy	31.51	28.33	-1.5	35.34	21.33	5.6	28.36	13.00	13.4
Health care	21.92	12.00	16.3	21.55	23.67	17.6	26.87	13.50	28.4
Education	42.47	9.67	2.0	27.59	10.00	12.1	25.37	8.50	17.4
Group advocacy	15.07	9.33	17.5	5.17	4.67	20.0	4.48	6.25	20.5
Environment	4.11	2.00	22.9	12.93	2.33	22.0	27.61	13.00	25.3
Government reform	1.37	5.00	-6.6	0.00	5.67	3.3	4.48	4.50	13.6
Immigration	0.00	1.67	-17.0	0.00	1.67	9.5	11.94	11.50	6.7
Crime	1.37	8.00	-11.6	2.59	2.67	-9.0	3.73	4.00	-0.3
Moral and ethical issues	2.74	2.33	-12.7	3.45	8.33	-6.2	8.21	3.75	-0.2
Social security	13.70	3.00	13.4	2.59	3.33	13.4	5.22	4.00	22.0
Taxes	12.33	2.33	-7.7	7.76	1.00	-3.9	11.94	0.75	7.9
Government spending	2.74	0.00	-3.2	3.45	1.67	9.0	5.22	2.25	18.0

Note: Positive ownership numbers equal democratic ownership.

Figure 1
Issue Engagement by Saliency in 2002, 2004, and 2006

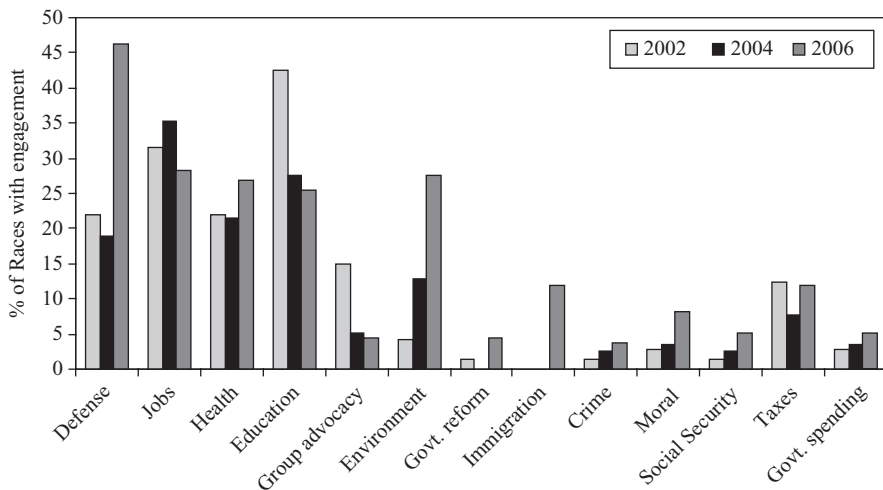
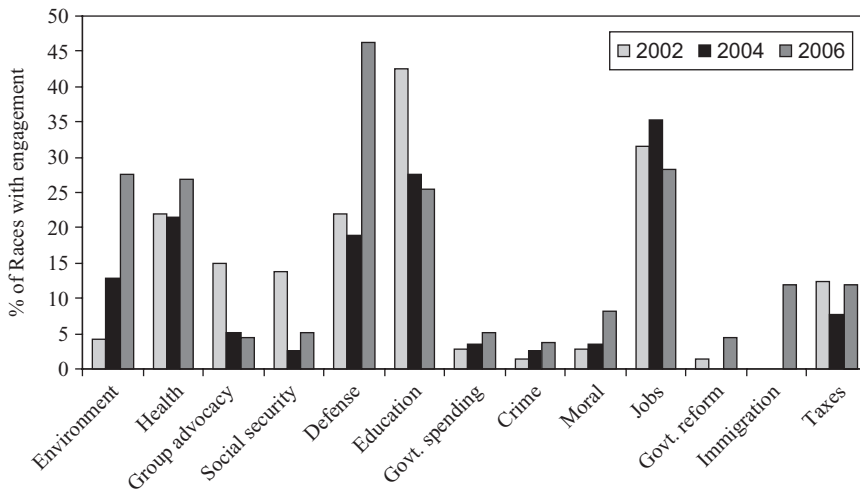


Figure 2
Issue Engagement by Strength of Ownership in 2002, 2004, and 2006



relatively low on issues deemed less important by the public (e.g., government reform, crime, and government spending). In fact, the correlation between the saliency score of the 13 issues and their level of engagement is .659 ($p = .000$).¹² This relationship is also evident in comparisons of single issues such as jobs and the economy, which was deemed important by the public in all 3 years (average saliency of 20.89%) and thus received relatively high levels of engagement—31.51% of races in 2002, compared to 35.34% in 2004, and 28.36% in 2006. At the other end of the scale, government spending was rarely considered important by the public (average saliency of 1.31%) and thus few races featured a debate about government spending—only 2.74% in 2002, compared to 3.45% in 2004 and 5.22% in 2006. Although there are a few slight anomalies (e.g., high engagement on education in 2002 and environment in 2006) the general relationship holds, providing further evidence that issue engagement is, to a large degree, a function of saliency.

In Figure 2, we ordered the issues by their average (2002–2006) degree of ownership, starting on the left with the most strongly owned issues. Unlike the graph for engagement by saliency, Figure 2 shows little consistent relationship between the strength of party ownership and the degree of engagement on particular issues. This is further confirmed by the low and insignificant correlation between ownership scores and the amount of engagement ($r = -.010$, $p = .954$). Additional evidence is found by looking at individual cases. For example, there is nearly as much engagement on health care (21.92% in 2002, 21.55% in 2004, and 26.87% in 2004), an issue strongly and consistently owned by the Democrats (average ownership of 20.7%), as there is on jobs and the economy (31.51% in 2002, 35.34% in 2004, and 28.36% in 2006), an issue that has been deemed a “performance issue” due to its inconsistent ownership (Petrocik et al., 2003). The lack of a clear pattern in Figure 2 suggests that issue ownership is not likely a primary factor in determining engagement in direct policy debate. Of course, ownership likely remains a critical motivation for individual candidates but it does not seem to have a consistent effect on the level of engagement between candidates.

Table 5
Issue Saliency and Ownership Categories

	2002	2004	2006
High saliency/strong ownership	Defense health care, group advocacy,	Defense health care education	Health care education environment,
High saliency/weak ownership	jobs and the economy, education crime	jobs and the economy, govt reform, moral and ethical issues	defense, jobs and the economy, immigration,
Low saliency/strong ownership	Environment immigration, moral and ethical issues, social security,	environment, social security, group advocacy, immigration,	Social security, govt spending, group advocacy,
Low saliency/weak ownership	govt reform taxes, govt spending	crime taxes govt spending	crime moral and ethical issues taxes, govt reform
Median saliency	5.00	4.67	6.25
Median ownership	12.70	9.50	13.60

Layered Means Comparisons

There is, however, still the possibility that issue ownership plays a role in affecting the relationship between saliency and engagement. To test this idea, we split the distribution of issues in each year by their median saliency and median ownership scores.¹³ Thus, each issue fell into one of four possible categories: high saliency and weakly owned, high saliency and strongly owned, low saliency and weakly owned, and low saliency and strongly owned. The breakdown for each year is presented in Table 5. We then ran a layered means comparison to test the effect that saliency has on engagement across the levels of ownership for each year.

Table 6 presents the results of the layered means comparison. To begin with, there is a clear pattern in which engagement is typically more robust on highly salient issues than it is on less salient issues. In all 3 years, the zero-order difference (see “Total” rows) between the high and low saliency groups is significant (i.e., $F = 8.948$, $p = .012$ in 2002, $F = 5.617$, $p = .037$ in 2004, and $F = 25.373$, $p = .000$ in 2006), thereby confirming the previous results.

When we focus on just the weakly owned issues, we see that saliency has some, albeit modest, impact on the level of engagement. Although the actual differences among weakly owned issues are fairly large in each year (19.64% in 2002, 8.33% in 2004, and 20.9% in 2006), they do not quite reach conventional levels of statistical significance ($F = 2.367$, $p = .199$ in 2002; $F = .537$, $p = .504$ in 2004; and $F = 4.203$, $p = .110$ in 2006). However, when all years are considered together, the differences between high and low saliency are significant among weakly owned issues ($F = 6.798$, $p = .019$). This suggests that decisions to engage on weakly owned issues are modestly influenced by the issues’ saliency—candidates tend to engage a little more on salient issues than nonsalient issues when neither party has a clear ownership advantage.

However, the differences between high and low saliency are robust on issues that are strongly owned by one of the parties ($F = 13.077$, $p = .015$ in 2002; $F = 19.844$, $p = .007$ in 2004; and $F = 1288.00$, $p = .000$ in 2006). In fact, when it comes to strongly

Table 6
Issue Engagement by Saliency and Ownership in 2002, 2004, and 2006

Year	Ownership	Saliency	Mean	SD	F	P		
2002	Weak	Low	5.48	(5.97)	2.37	(.199)		
		High	25.12	(21.28)				
		Total	15.30	(17.64)				
	Strong	Low	5.14	(5.96)			13.08	(.015)
		High	19.64	(3.95)				
		Total	11.35	(9.11)				
	Total	Low	5.28	(5.45)			8.95	(.012)
		High	22.38	(14.02)				
		Total	13.17	(13.24)				
2004	Weak	Low	4.60	(2.77)	0.54	(.504)		
		High	12.93	(19.48)				
		Total	8.76	(13.26)				
	Strong	Low	5.17	(5.59)			19.84	(.07)
		High	22.70	(4.42)				
		Total	12.69	(10.48)				
	Total	Low	4.93	(4.27)			5.62	(.037)
		High	17.82	(13.72)				
		Total	10.88	(11.50)				
2006	Weak	Low	7.96	(4.11)	4.20	(.110)		
		High	28.86	(17.17)				
		Total	18.41	(15.99)				
	Strong	Low	4.85	(0.427)			1288.00	(.000)
		High	26.62	(1.14)				
		Total	14.18	(11.66)				
	Total	Low	6.18	(2.91)			25.37	(.000)
		High	27.74	(10.95)				
		Total	16.13	(13.39)				
Total	Weak	Low	6.01	(4.16)	6.80	(.019)		
		High	22.30	(18.27)				
		Total	14.16	(15.35)				
	Strong	Low	5.05	(4.27)			90.45	(.000)
		High	22.99	(4.28)				
		Total	12.74	(10.00)				
	Total	Low	5.46	(4.15)			33.45	(.000)
		High	22.64	(12.88)				
		Total	13.39	(12.59)				

Note: cell entries show the average number of races with engagement on issues in each category (e.g., weak ownership and low saliency; weak ownership and high saliency) with the standard deviation (SD) in brackets. The p values (p) represent the statistical significance of the differences between low and high saliency issues for each level of ownership.

owned issues, saliency plays an important role in determining whether or not there will be a policy debate. For example, the Democrats consistently owned the health care issue, and yet there were many direct exchanges about health care in all 3 years. This is likely due to the fact that voters deemed health care as an important issue to address so Republicans could not avoid it. Taken together, these results suggest that saliency is an important motivator of

Table 7
Race- and District-Level Determinants of Issue Engagement

	Overall Engagement	Strongly Owned and High Saliency	Strongly Owned and Low Saliency	Weakly Owned and High Saliency	Weakly Owned and Low Saliency
(Constant)	.309*** (.098)	.124 (.082)	.157** (.077)	.709*** (.175)	-.109 (.058)
Competitiveness	.017* (.010)	.013 (.008)	.010 (.008)	-.003 (.018)	.005 (.006)
Open seat race	-.035 (.031)	-.071*** (.026)	-.020 (.024)	.075 (.055)	-.001 (.018)
Female candidate in race	.024 (.022)	.050*** (.018)	-.003 (.017)	.038 (.039)	-.018 (.013)
District education	.005 (.004)	.002 (.003)	.003 (.003)	.010 (.007)	-.001 (.002)
District family income	-.012 (.017)	-.002 (.014)	-.020 (.013)	-.021 (.030)	.019* (.010)
District Black Population	.001 (.001)	.001 (.001)	-.000 (.001)	.000 (.002)	.001 (.001)
2004	-.008 (.028)	-.011 (.023)	-.052** (.022)	-.049 (.050)	-.005 (.017)
2006	.022 (.027)	.080*** (.023)	-.033 (.021)	-.084* (.048)	.045*** (.016)
District partisanship	-.001 (.001)	-.000 (.001)	-.001 (.001)	-.004** (.002)	.002** (.001)
House	-.036 (.024)	-.019 (.020)	.024 (.019)	-.118*** (.042)	-.013 (.014)
R ²	.043	.127	.038	.077	.089
n	323	323	323	323	323

Note: Cell entries are unstandardized coefficients with standard errors in parenthesis.

*** $p < .01$.

** $p < .05$.

* $p < .10$.

candidate engagement although it seems to play a particularly important role in determining engagement among strongly owned issues in that it might be the necessary motivator that leads disadvantaged candidates to engage on issues not owned by their party.

Regression Analysis

We now investigate the effect that other factors, namely race- and district-level variables, have on the degree of issue engagement in congressional elections. We start with a general model of issue engagement across the 3 years. We then break our analysis into models based on saliency and ownership to remain consistent with the preceding analysis. The results are reported in the Table 7.

The first column in Table 7 reports the results of an ordinary least squares (OLS) regression model predicting the amount of issue engagement (as a proportion of all issue mentions, as noted above) for all races in our data for 2002, 2004, and 2006. The results show that race- and district-level variables, despite our predictions, do not play much of a role in determining the general pattern of issue engagement on congressional candidate Web sites. Specifically, we fail to find any significant effects for open-seat races, races with at least one female candidate, or the office level of the race; nor do we find effects for

district education, income, partisanship, or African American population. The only significant predictor of issue engagement in our model is race competitiveness in that more competitive races generate a higher level of engagement. Presumably, this occurs because candidates have a real fear of losing critical votes by avoiding debate on issues.

Finding little evidence of race- or district-level effects in the general model, we now break our analysis into the four categories used above based on a median split of the 2002–2006 averages: high saliency and strongly owned, high saliency and weakly owned, low saliency and strongly owned, and low saliency and weakly owned.¹⁴

The second column in Table 7 reports the results of the regression predicting the level of engagement on high saliency and strongly owned issues which includes defense, health care, and environmental issues. These issues are, on the one hand, attractive to candidates because the public deems them important but, on the other hand, candidates may be cautious about engaging on them particularly if their party faces a disadvantage in terms of their perceived ability to deal with the issue. The results confirm that engagement on these issues is affected by a number of factors. To begin with, race competitiveness tends to increase engagement although the effect is only marginally significant ($p = .117$). We also find more engagement on these issues in races with incumbents (rather than open seat races) and/or at least one female candidate. Finally, engagement on strongly owned and highly salient issues was higher in 2006 than in 2002. These results suggest that candidates are often quite careful about engaging in debate on these issues and that certain factors, beyond saliency and ownership, will sway their decision.

The third column in Table 7 shows a different pattern of results for issues that are strongly owned but not considered salient (crime, Social Security, and group advocacy). There is relatively little dialogue between candidates on these issues (average of 6% of races between 2002 and 2006), in large part because candidates have few incentives to engage on issues that their party does not own when the issues are not salient. This is reflected in the results which show that the decision to engage on strongly owned, low saliency issues is not motivated by any of the factors in our model. The only significant result we find is that engagement on these issues is lower in 2004 than it was in 2002. In general, engagement is tepid on these issues regardless of any additional motivating factors.

When it comes to salient issues that are not strongly owned by one of the parties (jobs and the economy and education) we find a relatively high level of average engagement over the three elections with nearly a third (31.7%) of races featuring dialogue on these issues. Candidates seem generally interested in talking about these issues because they are important to the public and neither party has a clear advantage on them. This means, however, that, as our results show, there are few race- or district-level factors that will influence the degree of engagement. The only significant results we find show that direct dialogue on these issues is lower in House races than Senate races, is lower in 2006 than 2002, and decreases as districts become more partisan.

Finally, we look at those issues that are neither salient nor strongly owned (immigration, government spending, government reform, moral and ethical issues, and taxes). Although there is not a lot of risk in debating these issues due to their weak ownership, there is not a lot of incentive either given that the public does not see them as all that important. In fact, these issues were only mentioned, on average, in 5% of the races over 2002, 2004, and 2006. However, the results reported in the fourth column of Table 7 show that median

family income in the district is associated with higher levels of engagement on these issues—races in wealthier districts may be reacting to a demand effect from voters with higher incomes. There is also more debate on these issues in more partisan districts. We also find that, once again, engagement on these issues is higher in 2006 than in 2002.

Our regression analyses suggest that race- and district-level factors have some, albeit small and patchy, influence over the degree of issue engagement on congressional candidate Web sites. These factors have their most pronounced impact on issues that are highly salient and strongly owned, where at least one of the candidates needs to think strategically about the decision to engage in debate. Otherwise, the decision to engage seems largely driven by the public's impression of what is important to address.

Conclusion

We began this article by invoking the values that Democratic theorists place on politicians' responsiveness to the public and their engagement of each other in meaningful, issue-based debates. By expanding the type of data available to examine campaign behavior, we have been able to shed some light on the extent to which candidates for public office behave in accordance with these ideals. We used a unique new dataset drawing from the almost universal political tool of campaign Web sites to explore a wider sample of races than previous literature has analyzed.

We found that candidates engage each other on the issues more often online than we might expect if their engagement was more or less at random. But political theorists might still be disappointed in the frequency of these debates. Still, saliency of the issue in public opinion is the primary determinant of whether candidates will engage each other on a particular issue. This shows candidate responsiveness to the public rather than a uniform desire to shape public attitudes to favor the candidates' preferred issues. Candidates might otherwise have strong incentives to speak only about issues their parties own rather than engaging their opponents. In this way, issue salience plays an important role in SMOTIVATING hesitant candidates to engage opponents on issues their parties do not own.

Our findings have several important implications. First, despite the vast potential the Internet gives candidates to explain their positions at great length on almost unlimited numbers of issues, candidates still strategically limit the number and types of issues they are willing to discuss. This may be disappointing for proponents of more expansive policy debates, but it is not entirely a surprise given candidates' strategic use of other media. Second, there are relatively strong incentives for candidates to engage on the issues that are rooted in responsiveness to public opinion. Issue salience drives engagement which echoes the ideal of Democratic responsiveness valued by theorists. Third, our more representative dataset allowed a better picture of the full range of issues that candidates are likely to invoke on the campaign trail. Further analysis of candidate Web data will likely yield additional important findings.

This future work should concentrate on further expanding the data available for analysis. Adding more races and additional election cycles will allow analysts to see how the dynamics of issue engagement work at the campaign level. In addition attention to use of the Internet by candidates over the next few election cycles will allow analysts to observe

the salience of issues and issue ownership as presidential incumbency shifts from one party to another. New media provide an exciting way to expand the study of engagement in the arena of congressional campaigns.

Notes

1. We generally refer to this concept as “issue engagement” to highlight the extent to which candidates make strategic choices to directly address (or avoid) the same issues as their opponents. Other authors refer to “issue convergence” (Kaplan, Park, & Ridout, 2006; Sigelman, & Buell, 2004) and “issue dialogue” (Simon, 2003).

2. In fact, rather than assigning it ownership, Petrocik et al. (2003: 619) place “economy” in a separate “performance” category because its ownership often changed between parties from 1952 to 2000.

3. According to Petrocik (1996: 828), “the goal is to achieve a strategic advantage by making problems which reflect owned issues the programmatic meaning of the election and the criteria by which voters make their choices.”

4. To assess the validity of our claim that Web sites capture the aggregation of campaign communications, we conducted a survey of individuals involved in the design and maintenance of congressional candidate Web sites during the 2008 campaign ($n = 137$). Among other things, we asked respondents to rate how well various forms of communication “capture the campaign’s overall strategy (e.g., the message your campaign hopes to relay to voters at large, as opposed to more targeted messages),” on a 7-point scale with higher scores indicating more fully capturing the overall strategy. Our findings echoed those from Stromer-Galley et al. (2003) in that respondents rated their Web site (mean = 5.88; $SD = 1.50$, $N = 109$) as significantly more representative than all other media, followed by speeches (5.63; 1.54, 111), informal conversations (5.57; 1.66, 109), television advertisements (for those campaigns that had ads; 4.99; 2.19, 69), direct mail (4.86; 1.91; 98), and media coverage (4.72; 1.81, 107; e.g., comparing the Web to speeches gives $t_{108} = 1.63$, $p < .11$ for a two-tailed difference of means test).

5. More generally, Lau and Pomper (2004, p. 134) note, “a campaign goes well beyond its televised political advertisements . . . To examine the effects of the campaign more broadly, we need a more comprehensive view beyond political advertisements.”

6. We do not mean to minimize the importance of studying television advertisements and media coverage, particularly for research focused on the effects of mass communication on voters. Rather, our point concerns using these media as unbiased measures of campaign strategy.

7. Our interest in major party competition led us to exclude from this study our data on Independent Bernard Sanders of Vermont who was a 2002 House incumbent and 2006 open seat Senate candidate, as well as incumbent Democrat turned Independent Joe Lieberman in 2006.

8. It is necessary to subtract the overlap from the denominator because those issues would otherwise be counted twice. Consider the case in which two candidates mention three issues each, but only overlap on one. When we count the number of issues (e.g., health care, education, and environment for the Democrat and taxes, defense and education for the Republican) we might say that the candidates mentioned $3 + 3 = 6$ issues, but that would count education twice. When we calculated their proportion of overlap we would only want unique issues. So, our expression for calculating the proportion should be $1/(3 + 3 - 1) = .20$ rather than $1/6 = .17$.

9. To confirm gender of the candidates, we also relied on the data at the Center for American Women and Politics at the Eagleton Institute of Politics at Rutgers University (<http://www.cawp.rutgers.edu/>).

10. The iPoll databank can be accessed through the Roper Center for Public Opinion Research, University of Connecticut. Further details are available from the authors.

11. This is a distribution based on the numbers of issues candidates in our Web site sample selected.

12. To run this correlation, we created a small dataset that included the 13 issues in each of the three elections as the cases ($n = 39$). We created variables for each issue’s saliency score, ownership score, and engagement percentage, for each year.

13. Here again, we use the small dataset mentioned in the previous footnote.

14. We ran regressions with the same independent variables for each individual issue although they are not included here due to presentation constraints and their instability for less popular issues.

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James N. Druckman is an associate professor of political science at Northwestern University in Evanston, Illinois.

Cari Lynn Hennessy is a graduate student in political science at Northwestern University in Evanston, Illinois.

Martin J. Kifer is a survey researcher at Mathematica Policy Research, Inc.

Michael Parkin is an assistant professor of politics at Oberlin College in Oberlin, Ohio.