The Dynamics of Campaign Issue Agendas*

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Abstract

I argue that candidates shape their issue agendas — the sets of related issues on which they focus — in part in response to the issue agendas of their opponents and that competitive campaigns stimulate candidates to respond to one another at higher rates. I test my theory of candidate interaction using weekly advertising data at the media market level from 146 statewide elections — 54 gubernatorial and 92 U.S. Senate contests — from six election years and across all 50 states. I find that candidates systematically respond to one another’s issue agendas and do so to a greater extent in competitive elections than in noncompetitive elections.

Keywords: Campaigns · Elections · Agenda convergence · Issue ownership · Candidate behavior · Political advertising · Political communication

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Candidates and their campaign staffs expend a great deal of effort attempting to shape the information environment voters face when choosing a candidate to support. Candidates want to set the agendas of their campaigns in ways that will maximize their chances of winning elections. One of the ways they might be able to exert agenda control is by focusing on issues that favor them and harm their opponents. While this approach is straightforward, several studies have shown that competing candidates often talk about the same issues even when one candidate holds an advantage relative to her opponent (e.g. Sigelman and Buell 2004; Kaplan, Park, and Ridout 2006; Sides 2006). What drives candidates to discuss the same sets of issues during campaigns?

I argue that the way in which candidates shape their issue agendas — the sets of related issues they discuss during campaigns — is informed by two factors: the issue agendas of their opponents and the competitiveness of the election environment they face. Candidates must obtain the support of the median voter in order to win elections. One of the ways they may attempt to do so is by responding to their opponents’ issue agendas by devoting more of their own campaign’s focus to those same sets of issues, or converging in terms of issue agendas.¹ Doing so may help candidates appeal to the median voter by, for example, broadening their perceived degree of expertise across a wider array of issues.

In addition, some scholars argue that the proclivity of candidates to respond to one another is conditioned by the competitiveness of their elections (e.g. Kaplan, Park, and Ridout 2006). Non-habitual voters are more likely to participate in competitive elections, so candidates in competitive races may face additional pressure to address one another’s issue agendas in order to appeal to occasional voters, who tend to be more persuadable than habitual voters.

I test these propositions using advertising data collected by the Wisconsin Advertising

¹By “converging,” I do not mean that candidates will increasingly take similar positions, merely that they will discuss the same sets of issues.
Project from 146 statewide campaigns — 92 of which were for U.S. Senate seats and 54 of which were for governorships — occurring during six election years across all 50 states. I use a dynamic modeling technique to test my theory and find strong evidence of issue agenda convergence in both noncompetitive and competitive campaigns, but a generally higher level in the latter. In other words, candidates respond to the issue agendas of their opponents and do so to a greater extent in competitive elections. These findings lead to important implications for our understanding of campaign dynamics, candidate strategy, and the importance of issues in statewide contests.

1 Campaigns, Candidates, and Issues

The principal finding of most contemporary research on campaigns and elections is that campaigns matter in fundamental ways that can shape election outcomes (see for example Carsey 2000; Stimson 2004; Brady, Johnston, and Sides 2006; Vavreck 2009). While there is evidence that electoral decisions at the system level are influenced by campaigns (Wlezien and Erikson 2002), there is less evidence that campaigns can persuade individual citizens to change their vote choices (but see Mutz, Sniderman, and Brody 1996; Hillygus and Shields 2008). One way that candidates may seek to influence citizens is by altering their campaign messages in an attempt to change the criteria citizens use when they evaluate candidates, a process known as heresthetic change (Riker 1990). Candidates may try to use their campaigns to induce these changes in a number of ways: they may attempt to stimulate underlying predispositions (Berelson, Lazarsfeld, and McPhee 1954), produce a sense of “enlightenment” about the state of the country among citizens (Gelman and King 1993), or act as a priming mechanism (Bartels 2006, but see Lenz 2009). Campaigns also alter the level of ambiguity in politics by reducing citizens’ feelings of uncertainty about political candidates (Franklin 1991; Alvarez 1997; Peterson 2004, 2009). In addition, candi-
dates may also attempt to change which issues the public finds most salient (Carsey 2000). Similarly, coverage of campaigns by the news media can affect the perceived importance of issues (Kinder 1998a, b; Iyengar and Simon 2000).

How then might candidates seek to win over potential voters during election campaigns? Candidates could use one of three broad strategies when attempting to win an election (e.g. Carsey 2000). The first broad strategy involves trying to change their positions on various issues so that their stated preferences are congruent with those of the median voter. While this is a sensible strategy in the abstract, it is problematic for at least three reasons. First, candidates may alienate their party’s activists by attempting to appeal to moderates. This is a potentially dangerous strategy because activists tend to hold more extreme policy preferences than other citizens and may sit out an election if they do not feel as if their interests are being represented (Wittman 1983; Miller and Jennings 1986; Erikson, Wright, and McIver 1993). Second, candidates may have well established records which might be difficult to escape because their opponents and the news media will likely discuss the weaknesses in candidates’ records. Finally, it may be difficult for candidates to change their positions on issues because people are motivated reasoners and are likely to respond to incongruent information about candidates by arguing against and discarding it (Kunda 1990). Information that confirms previously held beliefs is also unlikely to alter attitudes but is likely to be evaluated more positively than comparable incongruent information (Taber and Lodge 2006).

While candidates may attempt to improve their standing among their opponents’ partisans, they may find it quite difficult to do so because these partisans are already predisposed to dislike the candidates and may disregard messages suggesting that they hold positions on some issues that are congruent with their non-preferred candidates.

The second broad campaign strategy available to candidates is to try to persuade citizens to change their minds about one or more issues in ways that favor the candidate. Like changing one’s positions, persuading citizens is also a daunting task. Candidates have little
reason to try to persuade their own supporters and those of their opponent are predisposed to dislike them due to biased information processing brought on by partisanship. Trying to convince citizens that their current attitudes are incorrect is difficult to accomplish, especially given that to do so, citizens must admit that their previous attitude was incorrect (Riker 1990).

Because many candidates may find it difficult to change their positions or persuade large numbers of citizens, they may instead pursue a third strategy, that of heresthetic change, in which they attempt to affect the conditions under which citizens make their choices by altering the salience of issues in the electoral environment (Riker 1990). Carsey (2000) argues that candidates focus on the issues that advantage them the most relative to their opponents while avoiding those for which their position is less advantageous. By spending a great deal of time talking about the issues on which they are most advantaged, candidates hope to induce citizens to think about their vote choices in a manner that favors them.

1.1 Issue Selection

Much of the extant research on issues in campaigns suggests that candidates should try to focus on the issues that advantage them. There are several potential sources of candidate advantage on issues. First, candidates’ records and personal characteristics appear to play important roles in determining whether or not a candidate has an advantage on an issue (Sellers 1998; Brasher 2003). Sellers (1998) and Damore (2004), for example, find that candidates who hold popular positions on issues are advantaged relative to their opponents. A second source of advantage stems from the issue ownership literature, which suggests that the Democratic and Republican parties each “own” a set of issues; they are advantaged on these issues because citizens on average believe that they are better able to handle problems related to these issues than are members of the opposing party (Ansolabehere and Iyengar
These studies and others (see for example Budge and Farlie 1983; Carsey 2000) suggest that candidates should mostly focus on different sets of issues and should, for the most part, avoid engaging the same issues on which their opponents focus.\(^2\) Simon (2002) suggests that candidates should never discuss the same issues as one another, even in competitive campaigns when they may face pressure to do so. The logic underlying this argument is that candidates have little to gain from discussing issues on which their opponents are advantaged because doing so will likely remind citizens that the candidates’ opponents are more desirable on some dimensions. In other words, candidates can only harm themselves by addressing their opponents’ issues.

The results presented by scholars of issue convergence, however, suggest that candidates routinely discuss many of the same issues that their opponents talk about during election campaigns (Sigelman and Buell 2004; Kaplan, Park, and Ridout 2006; Sides 2006, 2007). “Issue convergence” in this literature refers to the process in which candidates increase the degree to which they discuss an issue in response to increases in their opponents’ focus on the same issue. It is about issue emphasis, not issue positions. There is also some evidence suggesting that candidates diverge — discuss different issues — from one another. Spiliotes and Vavreck (2002), for example, observe divergence among candidates from different parties within districts and states. They do, however, observe convergence among copartisans.

While the issue convergence literature focuses on individual issues, I focus on bundles of related issues — issue agendas — in this research. The issues that make up a given issue agenda may be related in a number of ways. First, the issues may be related to one

\(^2\)This notion is a bit of a simplification because Petrocik (1996) predicts some degree of dialogue between candidates during campaigns, but he expects this to occur mostly on performance issues such as the state of the national economy and national security. Performance issues are fundamentally different than party-owned issues because issue advantage on the former is fleeting while advantage on the latter is temporally stable. Valence is also central to performance issues; few would argue that a strong national economy and effective national security are superfluous.
another in that they are all part of a single broader issue category. For example, medical insurance for children, Medicare, and hospice services could all be viewed more broadly as being directly related to health care policy. A second type of issue agenda is broader still; issues relating to health care, education, and poverty programs are also similar to one another in that they are all social policies. A third potential form that issue agendas might take are through the relationships between issues and parties, i.e. issue ownership (Petrocik 1996; Egan Forthcoming). Given the strong ties between the bundles of issues that make up an issue agenda, candidates should not only respond to their opponents on individual issues as has been observed in the issue convergence literature, but also across groups of related issues that make up issue agendas.

1.2 Issue Agendas

There are several reasons to expect candidates’ issue agendas to converge over the course of a campaign. First, parties should try to reduce the support for their opponents by making overtures towards members of opposing coalitions (Downs 1957) and may do so by focusing on wedge issues (Miller and Schofield 2003; Hillygus and Shields 2008). Second, candidates who discuss their opponents’ issues may do so by reframing the issue in a way to emphasize the strengths of the candidate or her party (Sides 2006). Holian (2004) provides a clear example on the Republican-owned issue of crime. Republicans historically discussed crime in terms of punishment. When then Governor Clinton “stole” crime during his 1992 campaign

\[3\] Other examples of broad policy categories that can represent issue agendas are morality policies, economic policies, and foreign policies.

\[4\] Jerit (2008) shows that another reason to expect to observe some degree of issue agenda convergence is because providing a counterargument is more persuasive for citizens than reframing an argument or issue. Jerit’s research focuses on a political debate that occurred between rather than during an election campaign, but the logic of this argument also fits into a campaigns framework. A candidate’s opponent could, for example, discuss their support of additional expenditures on education in terms of leveling the playing field for children in less wealthy areas. Rather than reframing the issue to focus on the costs of the additional spending, the candidate may be better off arguing that additional expenditures will not improve educational outcomes.
for the Presidency, he did so by reframing the issue in terms of crime prevention, a dimension on which he was advantaged relative to his opponent. Third, candidates may also respond to their opponents’ attacks in order to defend their records and positions (Skaperdas and Grofman 1995; Theilmann and Wilhite 1998; Lau and Pomper 2004). Fourth, candidates may be more likely to discuss issues that are more salient, which would lead candidates to discuss the same sets of issues even if they were not attempting to directly respond to their opponents (Ansolabehere and Iyengar 1994). Last, salient elections generate more information for citizens to consider when choosing among candidates (Franklin 1991; Kahn and Kenney 1999) and citizens tend to use information about issues and ideology in addition to partisan cues in these kinds of elections (Basinger and Lavine 2005). More generally, engaging a larger set of issues also allows candidates to provide citizens with more information about their candidacies (Geer 2006; Franz and Ridout 2007).

1.2.1 Party-owned Issue Agendas

I focus more specifically in this research on issues that are owned by one of the two major U.S. parties, i.e. the candidates’ party-owned issue agendas. I concentrate on party-owned issue agendas rather than individual issues or other kinds of issue agendas because citizens associate candidates with the party that owns the issues they discuss (Banda 2010) and tend to associate specific issues with individual parties (Walgrave, Lefevere, and Tresch 2012). For example, citizens who are exposed to a candidate’s discussion of Republican-owned (Democratic-owned) issues tend to link that candidate more strongly with the Republican (Democratic) Party when forming attitudes about the candidate’s ideological and issue positions. Thus, if citizens form attitudes about candidates in response to the party ownership of the issues those candidates discuss, then candidates may respond to their opponents’ party-owned issue agendas by discussing issues owned by the same party. A candidate could, for example, respond to her opponent’s discussion of a set of Republican-owned issues
by discussing the same or other Republican-owned issues. Party-owned issues are related to one another because citizens bundle them together and this allows citizens to evaluate candidates on the same dimensions even when they discuss different — but related through party ownership — issues. Candidates, then, can communicate consistent signals to citizens across many related issues simultaneously rather than issue by issue.

I argue — contrary to strict proponents heresthetic change — that candidates should respond to one another’s party-owned issue agendas by converging. In other words, candidates should alter the degree to which they discuss Democratic or Republican-owned issues as their opponent alters their own attention to these sets of issues. Stated more formally:

\[ H_1: \text{The level of attention devoted to a set of party-owned issues by a candidate will increase as her opponent’s attention to the same set of party-owned issues increases.} \]

Issue ownership does not speak to candidate behavior on all issues, merely to those owned by a party. This is therefore a conservative test of issue agenda convergence because candidates on average are disadvantaged on the issues that are owned by the parties of their opponents. This disadvantage should lead candidates who do not own a set of issues to be less likely to discuss them. Put another way, it should be easier to observe issue agenda convergence on issues that are not owned by parties relative to party-owned issues because the former do not contain inherent advantages and disadvantages due to the countervailing influence of party ownership which should discourage issue agenda convergence. Additionally, because citizens bundle party-owned issues together, it is useful to observe the extent to which candidates (1) do so as well and (2) alter their strategies in response to their opponents’ strategies.5

5Scholars could also examine strategic interactions between competing candidates on other sets of related issues. For example, citizens and candidates may bundle economic issues together. These issues do not, however, consistently advantage one kind of candidate over another, so a test of issue agenda convergence on economic issues may be an easier than a test involving party-owned issues.
1.3 Electoral Competition

The extant literature suggests that the issue agendas of candidates will reflect one another to a greater extent when the campaign environment is competitive (Kaplan, Park, and Ridout 2006). Citizens may find competitive campaigns more interesting to follow because the outcome is not so obvious before Election Day. Citizens who are faced with a noncompetitive campaign may be more likely to ignore political information because they view it as both uninteresting — because the contest is fairly one sided — and irrelevant — because the outcome of the election is not in doubt. Competitive campaigns may stimulate citizens to become more interested in the campaigns, which may in turn lead them to want to learn more about the candidates and their views. Thus, the additional interest that competitive campaigns produce among citizens may lead candidates to feel compelled to respond to their opponents’ party-owned issue agendas to teach citizens about themselves and their opponents.

Kahn and Kenney (2004) found that competitive campaigns tend to be more negative than those that are noncompetitive, in large part because frontrunners will bother to spend time attacking their opponents in these contests. Competitiveness is key here for front-running candidates because they only have an incentive to respond to their opponent’s attacks when electoral conditions do not overwhelmingly favor them. More generally, when a candidate is attacked, they may feel compelled to respond by either defending themselves or by attacking their opponent on the same or a similar issue.

The news media should also be more interested in competitive campaigns for at least two reasons. First, competitive elections produce information that can be easily framed into a provocative narrative about an important political conflict. These narratives can then be communicated to citizens who will be more receptive to consuming stories about competitive elections than they will stories following lopsided contests, which do not lend themselves to
being repackaged as compelling narratives. The second reason is that journalists may not view noncompetitive elections as being particularly newsworthy. For this reason, they may be less likely to devote scarce resources to covering noncompetitive contests. Candidates are cognizant of the level of coverage the news media devotes to their campaigns and may feel pressured to respond to their opponents’ party-owned issue agendas in response to the additional coverage in order to avoid criticism.

Consistent with the work of other scholars (Kaplan, Park, and Ridout 2006), I argue that as competition increases, so too should the likelihood that candidates’ own strategies are informed by those of their opponents. In other words, candidates should converge on issue agendas to a greater extent in competitive elections than they should in noncompetitive elections. This potentially conditional relationship leads to the following hypothesis:

\[ H_2: \text{The issue agenda convergence predicted in } H_1 \text{ should be more pronounced in competitive campaigns than in noncompetitive campaigns.} \]

If strict proponents of heresthetic change are correct, candidates will not respond to their opponents’ party-owned issue agendas in competitive or noncompetitive elections because they will not want to engage in discourse about issues on which they are viewed as being weak.

2 The Dynamics of Campaign Advertising and Party-Owned Issues

I propose a dynamic test of issue agenda convergence in which I model Candidate A’s issue agenda as a function of their own issue agenda in the previous time period along with Candidate B’s issue agenda in the previous time period. This modeling strategy allows for
a direct test of campaign dialogue; if candidates respond to one another by engaging in
dialogue, they will increase their attention to their opponents’ previous agendas. If candi-
dates talk past each other, there will be no evidence that they respond to one another’s
party-owned issue agendas.

I examine the attention given by candidates to party-owned issues expressed through
television advertisements for three reasons. First, television advertising is ubiquitous in
statewide and national campaigns and is increasingly prevalent as the competitiveness of
a campaign increases. Second, studying television advertising allows me to bypass the the
news media’s filter that would be present in an analysis using newspaper coverage of cam-
paigns. The advertisements run by candidates should reflect the candidates’ overall campaign
strategies because the advertising messages do not have to pass through the filters of external
actors. Third, candidates may change their strategies over the course of their campaigns.
Advertising data allows me to observe these changes dynamically.

I analyze U.S. Senate and gubernatorial campaigns for two reasons. First, I argue that
candidate strategy may differ based on whether or not an election is competitive. There
is little variation in presidential election competitiveness; they are all competitive, at least
at the national level.6 I therefore need contests for which there are both competitive and
noncompetitive contexts. Statewide elections like U.S. Senate and gubernatorial contests fit
this requirement. Second, candidates for statewide offices rely on advertising to communicate
with citizens to a greater extent than do candidates running for the U.S. House and for offices
further down the ticket.

6There is much more variance in the competitiveness of presidential elections at the state level.


3 Research Design

I make use of the Wisconsin Advertising Project’s (WiscAds) 1998 through 2008\textsuperscript{7} U.S. Senate and gubernatorial advertising data sets to test my theory.\textsuperscript{8} These data contain information on the date, time, and television station on which each political advertisement ran in the 75 largest media markets in 1998, the 100 largest U.S. media markets from 2000 through 2004, and all U.S. media markets in 2008. I use all U.S. Senate and gubernatorial contests in which both major parties were represented by a candidate\textsuperscript{9} and in which both candidates ran general election television advertisements.\textsuperscript{10} Candidates who were sacrificial lambs were thus excluded from my analysis. This left me with 146 contests — 92 Senate and 54 gubernatorial races — spread across six election years and all 50 states. Given these constraints, advertisements aired in 161 media markets are included in my analysis. Table 1 lists the contests observed in this research.

[Insert Table 1 here]

Each advertisement airing was coded by members of the WiscAds teams for a large number of characteristics, the most important of which for this research are the issues discussed in the ads. Coders included up to four issues per advertisement and about 50 issues were included in the coding scheme.\textsuperscript{11} Some of these issues were transitory in nature, but many


\textsuperscript{8}The data were obtained from a project of the University of Wisconsin Advertising Project includes media tracking data from TNSMI/Campaign Media Analysis Group in Washington, D.C. The University of Wisconsin Advertising Project was sponsored by a grant from The Pew Charitable Trusts. The opinions expressed in this article are those of the authors and do not necessarily reflect the views of the University of Wisconsin Advertising Project or The Pew Charitable Trusts.

\textsuperscript{9}I treated Paul Wellstone and Walter Mondale as a single candidate in Minnesota’s 2002 Senate race due to the former’s death late in the campaign. Excluding the race from my analysis does not alter the substantive findings I report in this research.

\textsuperscript{10}I excluded contests in which one candidate ran only a trivial number of advertisements or only ran ads in a single week. Excluded elections include New Mexico’s 2000 Senate race and New Hampshire’s 2004 Senate contest. The losing candidates in these elections aired fewer than 10 advertisements during their campaigns.

\textsuperscript{11}Most advertisements were coded as mentioning only a single issue.
were included in every year of the data. I coded 31 of these issues as being owned by either the Republicans or the Democrats, each of which is listed in Table 2. I selected these issues because they fit Petrocik’s (Petrocik 1996) established descriptions of party-owned issues (see also Egan Forthcoming). These are issues for which the parties have long-standing advantages rather than issues that temporarily advantage one party or the other.\footnote{There is some scholarly debate about whether or not crime continues to be a Republica-owned issue. Sides (2006), for example, reports evidence suggesting that the Republican advantage on crime had largely disappeared by 1998. Egan (Forthcoming), on the other hand, finds that Republicans maintained their long term advantage on crime through 2008 and further finds a great deal of stability in party ownership of issues more generally.}

Next, I collapsed these advertising data by contest and media market and created weekly time series. In each observation I recorded the number of advertisements that week that mentioned at least one Democratic or Republican-owned issue.\footnote{While I opted to include crime as a Republican-owned issue, this decision did not affect the substance of my findings. Measures of the candidates’ weekly Republican-owned issue agendas including and precluding crime correlate with one another at very high levels — about 0.97 — for both Democratic and Republican candidates. Additionally, I also created measures of candidates weekly Democratic-owned issue agendas for which I excluded mentions of Social Security and Medicare. I did so because a large proportion of advertisements mentioning Democratic-owned issues involved these two issues. These new measures correlated with the old measures at .9 or higher for both Democratic and Republican candidates. The results of models using these new measures generated substantively identical results to those that I present.} The number of advertisements in a week that contained Democratic and Republican-owned issues for each of the candidates serve as the dependent variables in my analysis. They are also key independent variables in some of my models, as the attention given to them by a candidate’s opponent should affect the former’s issue agenda.

### 3.1 Contest and Candidate Level Characteristics

I use the Cook Political Report’s race ratings as an indicator of electoral competition. In its raw form, the ratings are a seven point measure for which competitiveness is strongest in the middle categories. Its seven values are “solid Democratic,” “likely Democratic,” “lean
Democratic,” “toss up,” “lean Republican,” “likely Republican,” and “solid Republican.” I collapsed this scale down to a simple dichotomous indicator of competition; contests coded as “leaning” or “toss up” were coded as being competitive (1) while the rest were coded as noncompetitive races (0).

I include dichotomous indicators of whether or not each candidate is an incumbent — because incumbents may be less apt to discuss party owned issues due to their electoral security — or a woman — because female candidates may be more likely to emphasize women’s issues (Windett 2011), which also tend to be associated with the Democratic Party — along with dummy variables indicating whether or not the contest was an open seat election and whether or not the election occurred in each election year. I include these latter two indicators to account for potential differences in candidate strategy in open seat elections and in each of the years for which I have data. I also include dichotomous indicators for whether or not each candidate is black and Latino. These indicators allow me to control for potential differences in campaign strategy driven by race, as candidates who are racial minorities may be more likely to spend time talking about racial issues, which are owned by the Democratic Party.

Approximately 36% of elections were open seat contests and just under 59% of the elections were competitive. Thirty percent of contests involved at least one female candidate while three and two percent contained at least one black or Latino candidate respectively. Thirty seven percent of the elections were for governorships. Table 3 contains summary statistics for each of the variables included in my analysis.

[Insert Table 3 here]
3.2 Modeling Campaigns as Dynamic Processes

I use pooled time series data in order to capture campaign dynamics. Because my theory predicts interaction between candidates and the behavior I want to model occurs simultaneously, I must control for possible simultaneous and unmodeled correlation in the behavior of the candidates.\textsuperscript{14} I do so using seemingly unrelated regression, which allows for multiple equations and for the error terms of each equation be contemporaneously correlated with one another (see Carsey et al. 2011 for a similar application).

I employ an error correction modeling framework, which allows me to calculate long and short term effects of time serial covariates on my dependent variables in my analysis and is appropriate for both stationary and nonstationary data (DeBoef and Keele 2008). The dependent variable of an error correction model is the first difference of the dependent variable rather than the value at time $t$. This framework also requires the inclusion of a lagged dependent variable, the coefficient of which estimates the rate of error correction, and both first differences and lagged levels of the remaining endogenous covariates.\textsuperscript{15}

I estimate four equations simultaneously which predict the Democratic candidate’s weekly number of advertisements containing (1) Democratic-owned issues, (2) Republican-owned issues and the Republican candidate’s weekly number of advertisements containing (3) Democratic-owned issues, and (4) Republican-owned issues. The equations follow:

\begin{equation}
\Delta DD_{it} = a_1 DD_{it-1} + b_1 RD_{it-1} + c_1 \Delta RD_{it} + (d_1 RD_{it-1} \ast \text{Comp}) + (e_1 \Delta RD_{it} \ast \text{Comp}) + j_1 \text{Comp} \\
+ k_q \text{Control} + \mu_1
\end{equation}

\textsuperscript{14}Failing to do so would lead me to violate the assumption that my data are independently and identically distributed, which can lead to insurmountable problems when trying to interpret statistical results.

\textsuperscript{15}I tested for unit roots using augmented Dickey-Fuller tests and for autocorrelation using Woolridge (2002) tests panel data in each of my dependent variables. The results of these tests suggested that these variables do not contain unit roots and that first-order autocorrelation is present in the data.
\[
\begin{align*}
\Delta DR_{it} &= a_2 DR_{it-1} + b_2 RR_{it-1} + c_2 \Delta RR_{it} + (d_2 RR_{it-1} \ast \text{Comp}) + (e_2 \Delta RR_{it} \ast \text{Comp}) + j_2 \text{Comp} \\
&\quad + k_q \text{Control} + \mu_2 \\
\Delta RD_{it} &= a_3 RD_{it-1} + b_3 DD_{it-1} + c_3 \Delta DD_{it} + (d_3 DD_{it-1} \ast \text{Comp}) + (e_3 \Delta DD_{it} \ast \text{Comp}) + j_3 \text{Comp} \\
&\quad + k_q \text{Control} + \mu_3 \\
\Delta RR_{it} &= a_4 RR_{it-1} + b_4 DR_{it-1} + c_4 \Delta DR_{it} + (d_4 DR_{it-1} \ast \text{Comp}) + (e_4 \Delta DR_{it} \ast \text{Comp}) + j_4 \text{Comp} \\
&\quad + k_q \text{Control} + \mu_4
\end{align*}
\]

In the preceding equations, each of the two letter long variables stands for one of the issue agenda covariates. The first letter refers to the party of the advertising candidate while the second refers to the party that owns the set of issues that were discussed in the candidates’ advertisements that week. “DD_{it},” for example, refers to the Democratic candidate’s emphasis of Democratic-owned issues while “RD_{it}” refers to the Republican candidate’s emphasis of Democratic-owned issues in media market \(i\) and at time \(t\). “Comp” refers to the dichotomous competition indicator. “Control” is a vector of control variables including whether or not the contest is for an open seat, a governorship, and the candidate is a woman, an incumbent, black, or Latino. I also included a series of dummies indicating the year in which the campaign took place.

The coefficients of the differenced covariates represent the average short term, or contemporaneous, change in the dependent variable that results from a one unit increase in the covariate. The contemporaneous changes occur at time \(t\). The coefficients of the lagged covariates correspond to a second short term effect, this time at time \(t + 1\). These effects at time \(t + 1\) are not necessarily theoretically interesting on their own, but when they are divided by the negative of the coefficient generated for the lagged dependent variable, they represent what is called the long run multiplier (LRM), which captures the total short and long run change in the dependent variable over future time periods given a one unit increase
of the associated covariate.\footnote{I calculate the standard errors of each long run multiplier using the Bewley (1979) transformation (see also DeBoef and Keele 2008).}

The theory I have outlined in this paper is agnostic as to whether candidates will respond to one another immediately or in the future. I will therefore focus on the total effects of each of the endogenous covariates of interest each dependent variable. In other words, I will focus on the long run multipliers.

### 3.3 Expectations

I expect that candidates will alter their issue agendas in response to those of their opponents. Candidates should increase the number of advertisements mentioning a set of party-owned issues as their opponents air more advertisements mentioning the same set of party-owned issues. In other words, I expect that coefficients $b_n$, $c_n$, $d_n$, $e_n$, and their associated long run multipliers will be positive and significantly ($p \leq .05$) different than zero. Should these expectations be met, these results would offer support for my agenda convergence theory rather than the various theories discussed above that predict non-response among competing candidates.

### 4 Results

Before I report the results of my seemingly unrelated regression model, I first present two brief examples of my data. Figure 1 contains four panels plotting the number of advertisements mentioning Democratic and Republican-owned issues in the 2002 Texas gubernatorial race and the 2004 North Carolina Senate campaign. In the case of the Texas contest, the data are from the Houston media market while the North Carolina data are from the Raleigh-Durham media market. The general pattern of these data suggests that candidates’
party-owned issue agendas shift in response to one another. When one candidate increases or decreases their attention to Democratic or Republican-owned issues, so too does the their opponent. The following analysis is an effort to determine whether this pattern is consistent across a large number of races.

4.1 Candidate Interaction and Party-Owned Issue Agendas

Table 4 contains the results of a four-equation seemingly unrelated regression model.\textsuperscript{17} The first two columns of results are for equations estimating the extent to which Democratic candidates emphasized Democratic and Republican-owned issues. Columns three and four show the same for Republican candidates.

\[\text{Insert Table 4 here}\]

Error correction models produce output that can be difficult to interpret directly. The model presented in Table 4 is further complicated by the presence of interaction terms. Rather than focusing on individual coefficients, I will instead focus on illustrating my findings from these models by generating predicted values of candidates’ total short and long

\textsuperscript{17}I ran a number of models with different specifications, measures, and levels of aggregation. In one, I included dummy variables for each of the media markets included in my analysis. Their inclusion did not alter the substantive character of my findings, so I report the model which does not include these dummies for ease of presentation. In another, I included an ordinal rather than dichotomous measure of electoral competition, which also did not alter my findings. I also ran models set up between winners and losers rather than Democrats and Republicans. Again, this did not affect the substance of my findings. I further ran single equation random effects models and models with random intercepts for the year, state, and media markets. These choices did not alter my findings. I also ran models using an alternate operationalization of my issue agendas in which I measured the percentage of ads candidates ran in a week mentioning Democratic or Republican-owned issues rather than the volume of advertising. This model also shows that candidates converge in response to their opponents, though the conditioning effect of competition that I report in the main text of this paper appears to be less powerful. I ran an additional model in which I only used data from the non-presidential years and found similar results to those presented in Table 4. I also ran my main model and those I described above with data aggregated at the daily rather than weekly level and at the state rather than media market level, neither of which altered the substance of my findings. See (Banda 2013) for an issue-by-issue analysis of the dynamics of issue convergence in a similar set of cases.
term campaign responsiveness as captured by the long run multipliers and presenting them graphically. First, however, note that the estimated coefficients for the short term effects — i.e. the differenced variables of the opponent’s advertising — suggest a general pattern of contemporaneous issue agenda convergence among candidates. The interaction terms further suggest that this tendency towards issue agenda convergence is stronger in competitive elections than it is in noncompetitive elections.

Figure 2 shows the total predicted effects of a one standard deviation increase in the number of opponent-sponsored advertisements mentioning party-owned issues on a candidate’s own volume of party-owned issue advertising. These effects were generated using the long run multipliers. Recall that the long run multiplier in an expression of the total short and long term effects of a change in an endogenous covariate on an outcome variable. As shown in Figure 2, a one standard deviation — about 74 advertisements — increase in the number of Republican-sponsored ads mentioning Democratic issues on average leads Democratic candidates to run an additional 36 ads about Democratic issues in noncompetitive elections. In competitive elections, Democrats instead respond by running approximately 42 more ads. Republican candidates in noncompetitive elections respond to a standard deviation — 87.5 ads — increase in the number of advertisements mentioning Democratic-owned issues by running about 26 more ads. In competitive elections, this number increases to just under 34 additional advertisements.

The pattern of response among candidates is similar for advertisements mentioning Republican-owned issues. A one standard deviation — 86.7 advertisements — increase in the number of Republican-sponsored ads mentioning Republican-owned issues on average

\[ Long \text{ run multipliers can either be estimated using the Bewley (1979) transformation — which also generates a standard error — or by dividing the coefficient of the lag of an endogenous variable by the negative of the coefficient estimated for the lagged dependent variable (see DeBoef and Keele 2008).}\]
leads Democratic candidates to run about 35 and 48 more ads respectively in noncompetitive and competitive elections. For Republican candidates, these increases are nearly identical: approximately 35 additional advertisements in noncompetitive elections and just shy of 48 more advertisements in competitive elections for a one standard deviation — just under 80 ads — increase in the number of Democratic-sponsored advertisements mentioning Republican-owned issues.

The pattern shown in Figure 2 is clear: Democratic and Republican candidates both respond to increases in the number of party-owned ads their opponents run by increasing the number of advertisements they air themselves mentioning the same set of party-owned issues. They do so to a greater extent in competitive elections, which suggests that candidates are more responsive to one another in more competitive campaign environments.\(^{19}\) The standard errors associated with the long run multipliers for competitive elections indicate that the quantities presented in the figure for competitive and noncompetitive elections differ significantly (\(p \leq .05\)) from one another.

I present a brief analysis of the correlation of the residuals generated by each of the equations of my seemingly unrelated regression model in Table 5. There is a surprisingly low level of correlation among the residuals; the strongest correlation between residuals is \(-.268\). Correlations this low indicate that I could have run separate models without risking biasing my results. Even so, given that I am modeling simultaneous candidate behavior over time, a seemingly unrelated regression was the correct choice both theoretically and methodologically.

\[\text{[Insert Table 5 here]}\]

\(^{19}\)I present a distributed lag plot of these effects over five weeks that interested readers may examine in the appendix. The vast majority of the total effects I present in Figure 2 occur contemporaneously.
5 Conclusion

The results of my analysis suggest that U.S. Senate and gubernatorial candidates react to one another dynamically by altering their party-owned issue agendas in response to those put forth by their opponents. These results provide support for the expectations generated by issue agenda convergence theory rather than the expectation of nonresponse generated by other theories of issue emphasis (e.g. Simon 2002). The convergence I observe in my analysis appears to be even stronger in competitive campaigns than it is in noncompetitive campaigns.

The results of this research lead to three implications. The first stems from the finding that candidates can be encouraged to engage sets of issues — in this case the issues that are owned by the party of their opponents — they might otherwise prefer to avoid if their opponents increase the level of attention they give these issues. Issue agenda convergence, while certainly not required for democracy to function, could be useful for citizens because they may find it easier to evaluate candidates who discuss related issues than candidates who talk about unrelated issues. Issue agenda convergence on party-owned issues allows citizens to assess candidates on the same dimensions — those implied by related issues — when they otherwise might be forced to do so on the basis of disparate dimensions — those implied by unrelated issues.

The second implication suggested by this research is that citizens may be presented with a choice between candidates who are more responsive to one another during more competitive campaigns. This may allow citizens to be better able to assess candidates using similar sets of considerations. Competition in this sense may be an important component of a democratic system because it encourages candidates to respond to one another more than

\[20\text{This finding does not mean that candidates must necessarily talk about issues in ways that will harm them. They may reframe the issues in an advantageous manner as shown by Sides (2006) or they may defend their position.}\]
they might in noncompetitive election environments. Candidates in competitive elections communicate more information to citizens about similar sets of issues. Citizens may then use this information to form attitudes about candidates and to make direct comparisons between them.

The third implication centers on what happens after elections. While there is some evidence that candidates’ issue agendas do not affect election outcomes (Sides 2007), the theory of issue uptake suggests that legislators often coopt the issue priorities of their opponents even after the campaign ends (Sulkin 2005). Winning candidates, then, continue to respond to the criticisms leveled against them and the issues discussed by their opponents once they reach office.

Taken as a whole, these results suggest that candidates are not blind to the election environments surrounding them. They react to their opponents and their responsiveness is conditioned by competition. Future research might examine the responsive nature of candidate strategy across other sets of related issues like social or economic issues, the dynamics of candidate behavior in multi-stage elections, or the responsive behavior of candidates across individual issues.
References


Windett, Jason Harold. 2011. “Gendered Campaign Strategies in U.S. Gubernatorial Elections: Women Running as Women... Sometimes.”.


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Table 1: U.S. Senate and Gubernatorial Election Contests Included in These Data

<table>
<thead>
<tr>
<th>Year</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>AR, CA, CO, CT, FL, GA, IL, IN</td>
</tr>
<tr>
<td></td>
<td>KY, MD, MO, NC, NV, NY, OH, OR</td>
</tr>
<tr>
<td></td>
<td>SC, WA, WI</td>
</tr>
<tr>
<td>2000</td>
<td>CA, DE†, FL, GA, IN†, MD, ME, MI</td>
</tr>
<tr>
<td></td>
<td>MN, MO†, NC*, NE, NH*, NJ, NV, NY</td>
</tr>
<tr>
<td></td>
<td>PA, RI, UT†, VA, WA†, WV*</td>
</tr>
<tr>
<td>2002</td>
<td>AL†, AR†, AZ*, CA*, CO†, CT*, FL*, GA†</td>
</tr>
<tr>
<td></td>
<td>HI*, IA†, ID, IL*, KS*, KY, MA*, MD*</td>
</tr>
<tr>
<td></td>
<td>ME†, MI*, MN†, MO, NC, NH†, NJ, NM†</td>
</tr>
<tr>
<td></td>
<td>NY*, OK†, OR†, PA*, RI*, SC†, TN†, TX†</td>
</tr>
<tr>
<td></td>
<td>VT*, WI*</td>
</tr>
<tr>
<td>2003</td>
<td>KY*, MS*</td>
</tr>
<tr>
<td>2004</td>
<td>CO, CT, FL, GA, HI, IL, IN*, KY</td>
</tr>
<tr>
<td></td>
<td>MD, MO†, NC†, NH*, OK, PA, SC, UT*</td>
</tr>
<tr>
<td></td>
<td>VT†, WA†, WI</td>
</tr>
<tr>
<td>2008</td>
<td>AK, CO, GA, ID, IN*, KS, KY, LA</td>
</tr>
<tr>
<td></td>
<td>MA, ME, MN, MO*, MS‡, MT*, NC†, ND*</td>
</tr>
<tr>
<td></td>
<td>NE, NH†, NM, OK, OR, SD, TX, VT*</td>
</tr>
<tr>
<td></td>
<td>WA*</td>
</tr>
</tbody>
</table>

* Gubernatorial election.
† Senate and gubernatorial elections.
‡ Two Senate elections; one regularly scheduled and one special election.
Table 2: Coding Scheme: Issue Ownership

<table>
<thead>
<tr>
<th>Democratic</th>
<th>Republican</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum wage</td>
<td>Taxes</td>
</tr>
<tr>
<td>Farming (friend of)</td>
<td>Government spending</td>
</tr>
<tr>
<td>Union (friend of)</td>
<td>Business (friend of)</td>
</tr>
<tr>
<td>Affirmative action</td>
<td>Capital punishment/Death penalty</td>
</tr>
<tr>
<td>Civil liberties/privacy</td>
<td>Moral/family/religious</td>
</tr>
<tr>
<td>Education/schools</td>
<td>Immigration</td>
</tr>
<tr>
<td>Health care</td>
<td>Terrorism</td>
</tr>
<tr>
<td>Child care</td>
<td>Assisted suicide</td>
</tr>
<tr>
<td>Other child related issues</td>
<td>Creationism</td>
</tr>
<tr>
<td>Social Security</td>
<td>Crime</td>
</tr>
<tr>
<td>Medicare</td>
<td>Narcotics/drugs</td>
</tr>
<tr>
<td>Welfare</td>
<td>Gun control</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>Defense/military</td>
</tr>
<tr>
<td>Women’s health</td>
<td>Missile defense</td>
</tr>
<tr>
<td>Environment</td>
<td>Veterans</td>
</tr>
<tr>
<td>Civil rights</td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Summary Statistics at the Weekly Media Market Level

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic candidates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># Democratic-owned ads</td>
<td>64.1</td>
<td>87.5</td>
<td>0</td>
<td>706</td>
</tr>
<tr>
<td># Republican-owned ads</td>
<td>44.3</td>
<td>74.1</td>
<td>0</td>
<td>599</td>
</tr>
<tr>
<td>Republican candidates</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># Democratic-owned ads</td>
<td>54.6</td>
<td>79.7</td>
<td>0</td>
<td>792</td>
</tr>
<tr>
<td># Republican-owned ads</td>
<td>58.4</td>
<td>86.7</td>
<td>0</td>
<td>663</td>
</tr>
<tr>
<td>Contest-level characteristics</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open seat</td>
<td>0.329</td>
<td>0.470</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Gubernatorial election</td>
<td>0.404</td>
<td>0.491</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Candidate is an incumbent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democrats</td>
<td>0.239</td>
<td>0.426</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Republicans</td>
<td>0.431</td>
<td>0.495</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Candidate is female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democrats</td>
<td>0.257</td>
<td>0.437</td>
<td>0</td>
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<tr>
<td>Republicans</td>
<td>0.042</td>
<td>0.200</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Candidate is black</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democrats</td>
<td>0.028</td>
<td>0.164</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Republicans</td>
<td>0.014</td>
<td>0.116</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Candidate is Latino/a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democrats</td>
<td>0.031</td>
<td>0.174</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Republicans</td>
<td>0.009</td>
<td>0.095</td>
<td>0</td>
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<tr>
<td>Year indicators</td>
<td></td>
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<tr>
<td>2000</td>
<td>0.146</td>
<td>0.353</td>
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<td>1</td>
</tr>
<tr>
<td>2002</td>
<td>0.329</td>
<td>0.470</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2003</td>
<td>0.014</td>
<td>0.116</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2004</td>
<td>0.228</td>
<td>0.420</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td>0.287</td>
<td>0.452</td>
<td>0</td>
<td>1</td>
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</tbody>
</table>
Table 4: Campaign Advertising and the Dynamics of Candidate Responsiveness

<table>
<thead>
<tr>
<th>Error correction rate</th>
<th>Democrats</th>
<th>Republicans</th>
<th>Democrats</th>
<th>Republicans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsor’s issue ads_{t-1}</td>
<td>-0.449* (0.012)</td>
<td>-0.521* (0.012)</td>
<td>-0.459* (0.012)</td>
<td>-0.515* (0.013)</td>
</tr>
<tr>
<td>Opponent’s behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Δ# Democratic issue ads</td>
<td>0.475* (0.026)</td>
<td>0.466* (0.026)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* competition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Δ# Democratic issue ads</td>
<td>0.029 (0.031)</td>
<td>-0.028 (0.030)</td>
<td></td>
<td></td>
</tr>
<tr>
<td># Democratic issue ads_{t-1}</td>
<td>0.205* (0.026)</td>
<td>0.136* (0.023)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* competition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LRM for # Democratic issue ads</td>
<td>0.456* (0.026)</td>
<td>0.296* (0.023)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LRM for # Democratic issue ads</td>
<td>0.075* (0.030)</td>
<td>0.100* (0.026)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Δ# Republican issue ads</td>
<td>0.286* (0.022)</td>
<td>0.424* (0.037)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* competition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Δ# Republican issue ads</td>
<td>0.173* (0.025)</td>
<td>0.201* (0.041)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>° Republican issue ads_{t-1}</td>
<td>0.211* (0.022)</td>
<td>0.245* (0.038)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* competition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LRM for # Republican issue ads</td>
<td>0.405* (0.022)</td>
<td>0.476* (0.037)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LRM for # Republican issue ads</td>
<td>0.128* (0.024)</td>
<td>0.178* (0.040)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Election is competitive: 0.091 -1.773 -1.040 -1.303
(3.214) (2.699) (2.835) (2.970)
Open seat: 11.162* 18.317* 8.072* 5.191†
(2.580) (2.227) (2.669) (2.911)
Candidate is an incumbent: 20.665* 18.057* 15.882* 16.835*
(2.859) (2.428) (2.648) (2.870)
Candidate is female: -4.336 -3.920 4.962 6.192
(2.336) (2.000) (4.797) (5.178)
Candidate is black: -3.977 -13.678* -25.255* -23.191*
(6.738) (5.811) (8.353) (8.964)
Candidate is Latino/a: -13.115* -14.802* 11.403 23.877*
Gubernatorial election: 5.127* -0.258 -4.028† -4.467†
(2.459) (2.102) (2.295) (2.599)
Year: 2000: 5.143 -7.100† -3.082 -6.001
(4.756) (4.060) (4.431) (4.846)
Year: 2002: 2.038 -0.469 -8.475* -7.490
(4.590) (3.920) (4.217) (4.608)
Year: 2003: 32.730* -22.574* 1.476 46.193*
(10.138) (8.702) (9.491) (10.298)
Year: 2004: 0.486 -1.225 -6.148 3.499
(4.785) (4.094) (4.483) (4.906)
Year: 2008: -7.202 3.540 -9.865* 0.648
(4.487) (3.852) (4.079) (4.474)
Intercept: 11.020* 0.346 14.908* 14.318*
(4.313) (3.573) (4.078) (4.309)
R²: 0.238 0.263 0.228 0.252
BIC: 198,787.4
N: 4,531

Note: Dependent variables are the first difference of a given candidate’s number of ads mentioning Democratic or Republican-owned issues in a week. Estimated OLS coefficients from a seemingly unrelated regression model are reported along with standard errors in parentheses. Long run multipliers are estimated using the Bewley (1979) transformation.
† p ≤ .05 (one tailed), * p ≤ .05 (two tailed).
Table 5: Correlation of Residuals

<table>
<thead>
<tr>
<th></th>
<th>Democratic candidates</th>
<th>Republican candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Democratic issues</td>
<td>Republican issues</td>
</tr>
<tr>
<td>Democratic</td>
<td>1.0000</td>
<td>0.2715</td>
</tr>
<tr>
<td>Republican</td>
<td>1.0000</td>
<td>0.0816</td>
</tr>
</tbody>
</table>

|                | Democratic issues     | Republican issues     |
| Democratic     | -0.2477               | 0.0038                |
| Republican     | 0.2368                | 1.0000                |

Note: The cells are correlations of the residuals between the equations reported in Table 4.
Figure 1: Party-Owned Issue Agendas in Two Contests
Note: The predicted effects plotted here are generated by one standard deviation increases in a candidate’s opponent’s party-owned issue emphasis.

Figure 2: Total Short and Long Run Predicted Effects of Candidates’ Volume of Party-Owned Issue Ads on the Advertising Behavior of their Opponents