Campaigning Online: Web Display Ads in the 2012 Presidential Campaign

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ABSTRACT Although much of what we know about political advertising comes from the study of television advertising alone, online advertising is an increasingly prominent part of political campaigning. Research on other online political communication—especially candidate websites, blogs, and social media—tends to conclude that these communications are aimed primarily at turning existing supporters into campaign donors, activists, and volunteers. Is a similar communication strategy found in online display ads—those ads placed adjacent to website content? In one of the first systematic analyses of the nature, content, and targets of online display advertising, we examined 840 unique online display ads from the 2012 presidential campaign. We show that the policy content, ad location, and interactive elements of the ads varied based on the audience, with persuasive appeals aimed at undecided or persuadable voters and engagement appeals aimed at existing supporters. Comparing ad content across candidates also found that each side focused on those issues for which the candidate had a strategic advantage. As a consequence, and in contrast to the conclusions of previous research that examines television advertising, we found minimal issue engagement in online advertising.

he study of political advertising has largely been the study of television advertising. Scholars have given relatively little attention to understanding the nature, content, or targets of digital political advertising, despite the fact that campaign spending online is increasing (Barnard and Kreiss 2013). In 2012, presidential candidates spent \$78 million on online ads, including \$52 million by the Obama campaign alone; this is more than three times what was spent in 2008 (Stampler 2012). The growing body of research examining other online communication platforms-candidate websites, political blogs, and social media-tends to conclude that online campaign strategy is aimed primarily at turning existing supporters into donors and activists (e.g., Herrnson, Stokes-Brown, and Hindman 2007). As Baum (2013, 195) explained, "[t]he new media are ideal vehicles for preaching to the choir." Does this statement hold true for online political display ads, those that are placed alongside website content?

Given differences in the potential audience of web ads compared to other online (and offline) communications, we might expect that online political ads could be used for both engaging the base and persuading undecided voters. In this article, we analyze a sample of 840 unique campaign display ads from the 2012 presidential campaign to shed light on the communication strategy used in digital political advertising. Our analysis suggests that the campaigns pursued a diverse communication strategy that targeted different messages to different audiences, reaching far beyond core supporters. As one consequence of this strategy, we see minimal issue engagement—that is, candidates talking about the same policy issues in online political ads—contrary to what scholars have observed in television advertising (Kaplan, Park, and Ridout 2006).

BACKGROUND AND EXPECTATIONS

With the rise in Internet campaigning since the late 1990s, a rich scholarship has emerged that examines a diverse set of online communication platforms, including candidate websites, campaign e-mails, political blogs, Twitter feeds, and Facebook pages (Cogburn and Espinoza-Vasquez 2011; Druckman et al. 2010; Foot and Schneider 2006; Gibson et al. 2003; Gulati and Williams 2009; Williams and Trammell 2005; Williams et al. 2005; Xenos and Foot 2005). One of the most consistent conclusions from this research is simply that individuals who encounter online candidate messages tend to be the most politically knowledgeable and partisan (Baum 2013; Bimber and Davis 2003). Therefore, it is thought that messages

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are aimed primarily at turning these existing supporters into campaign donors and activists (Foot and Schneider 2006; Kaye 2010).

Candidates understandably will "preach to the choir" on campaign websites or social media because they mostly reach an audience of supporters on these platforms. However, we contend that the pervasiveness of the Internet, coupled with declining television audiences, has made online ads an increasingly attractive medium imperfect sample. First, our dataset captured only a subset of display ads—that is, contextual display ads rather than those behaviorally targeted via browsing history, search-engine results, and Facebook "likes." Second, we did not capture every display ad produced or placed by the candidates—arguably an impossible undertaking although all data-quality checks, reported in the online appendix, provide reassurance that we do not have systematic biases in our

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for reaching beyond the base, including nonvoters and undecided voters. It is much less expensive to create and distribute ads on the Internet than on television. It also is much faster to do so, allowing campaigns to react quickly to opponent attacks and current events. Most important, the fragmentation of the Internet allows for flexibility in targeting. The vast number of active websites, projected to surpass 1 billion in 2016 (Lafrance 2015), allows for sophisticated microtargeting of specific messages to narrow audiences, not unlike ground-war strategies (Hillygus and Shields 2008).¹ Of course, some websites attract a broad audience, necessitating a more general campaign message. Thus, web ads have the potential for a diverse communication strategy that includes both engagement and persuasion messages, tailored to particular audiences.

As one of the first of its kind, this analysis is exploratory. However, the constraints and capabilities of this communication medium offer specific expectations about the patterns of campaign messages that we should observe. Messages aimed at engaging core supporters and persuading undecided and swing voters should differ not only in their intended goal, but also in their content and site placement. Given the targeting potential of digital political advertising, we expected to find mentions of divisive wedge issues as well as broad valence issues on which the candidate might have a strategic advantage.² This should lead to candidates talking past one another, in contrast to the issue convergence found in offline campaign communications (Sigelman and Buell 2004; Simon 2002).

DATA

The fleeting nature of Internet advertising makes studying online political ads difficult. As one journalist stated, "It is near impossible to get a comprehensive view of which online ad messages the campaigns are targeting where and to which voter segments" (Kaye 2012). We explored online advertising strategy using a set of 840 unique online display ads from the 2012 presidential campaigns compiled by Moat Ad Search, a search engine that aggregates online advertisements.3 Moat compiled daily indexes of media advertisements (i.e., "creatives") from the web, cataloged the unique ads, and reported the two websites on which an ad was most recently placed. We captured all of the indexed Obama and Romney ads from June 2011 until Election Day, November 6, 2012. The resulting 737 Obama ads and 103 Romney ads were then coded using a set of criteria similar to that used by the Wisconsin-Wesleyan Advertising Project to code television ads.4 Figures 1 and 2 offer examples of web display ads used by Obama and Romney, respectively.

This dataset enabled one of the first explorations of communication strategy in online political ads, but it is admittedly an sample.⁵ Third, although we know the last two websites on which a certain ad was captured, we do not have exhaustive information on either ad placement or frequency of views. The unique ads in our sample may have been shown a few times or dozens of times, on a wide range of websites or only a few.⁶ As such, our analysis focuses on the nature and content of unique ads rather than the quantity of advertising online. While not ideal, this approach parallels some television advertising research (e.g., Spiliotes and Vavreck 2002).

IMPLICATIONS OF THE CHANGING COMMUNICATION ENVIRONMENT

The balkanization and fragmentation of the modern communication environment creates serious challenges for the study of campaign communications. While television advertising may be easier to capture and analyze, its importance compared to new forms of campaign communication is diminishing with each subsequent election cycle. The accessibility, usability, and accuracy of "big data" about the electorate means that campaigns are better able to individualize and disseminate messages to ever smaller and more narrowlytargeted audiences across an ever-growing number and diversity of online and mobile platforms. Digital political ads are projected to be the fastest growing campaign communication (Lapowski 2015).

Unfortunately, digital ads are especially difficult to capture, due in part to the sheer number of websites, the fleeting nature of ads, and the low cost of ad production and placement. Perhaps most critically, online surfing patterns remain mostly (but not always) anonymous, with consequences for the analysis of both advertising *strategy* and advertising *effects*. Our sample of online ads, for example, was generated by robo-crawling the web from a 'neutral machine,' meaning that ads based on Facebook "likes," Internet search queries, or cookies from a visit to the candidate's website are missing in our sample. An online appendix details our efforts to evaluate the validity of the sample and the subsequent coding of ad content.

These challenges mean our study provides an imperfect first look at digital political advertising, but there is hope that recent developments in online tracking technology will provide an even more precise and granular tracking of ad placement and real-time exposure in the near future. Notably, Moat Analytics has recently teamed up with the established media tracking firm Nielsen and comScore has merged with Rentrak, allowing both companies to leverage wellestablished tracking technologies of non-digital media consumption. Specifically, likely innovations in the ability to connect online behavior with offline identities promise new opportunities for scholars in the emerging field of digital political advertising.



Source: moat.com/advertiser/barack-obama?report_type=display&creative_ md5=c7517b6a6d2973ba3905ec85d94a5735. Last accessed May 5, 2016.

THE NATURE OF CONTEXTUAL ONLINE DISPLAY ADS IN THE 2012 PRESIDENTIAL CAMPAIGN

We first discuss primary ad goals as coded into four mutually exclusive categories: get-out-the-vote (GOTV), persuasion, donation, and campaign recruitment.⁷ As reported in table 1, attracting donations was indeed an integral part of online advertising strategies in 2012 but far from the singular goal: only 25% of all ads attempted primarily to solicit donations. The three remaining goals accounted for the clear majority of all ads (i.e., 18% GOTV ads, 20% recruitment ads, and 37% persuasion ads). Obama ads were especially likely to have a diverse communication strategy with more GOTV and recruitment ads,

Figure 2 Example of Romney Display Ad

Romney



Source: moat.com/advertiser/romney-victory?report_type=display&creative_ md5=ad2e40b78929caf71f3cc04394a93940. Last accessed May 5, 2016.

Table 1 Distribution of Candidate Ads, Interactive Requests, and Site Placement by

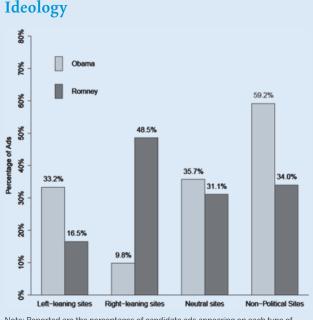
	GOTV Ads	Donation Ads	Recruitment Ads	Persuasion Ads
All Ads	18.0%	25.1%	20.0%	36.9%
Obama Ads	20.5%	19.1%	22.5%	37.9%
Romney Ads	0.0%	68.0%	1.9%	30.1%
"Sign Up" Request (39%)	0.3%	29.1%	49.4%	21.2%
"Find Out More" Request (29%)	0.5%	11.2%	0.0%	88.3%
"Donate" Request (18%)	0.0%	100.0%	0.0%	0.0%
Partisan-Leaning Website (30%)	10.7%	38.8%	28.0%	22.5%
Nonpolitical/Neutral Website (70%)	22.7%	18.5%	14.8%	44.0%
Note: Rows sum to 100%.				

perhaps reflecting the fact that some of his mobilization targets especially the young and minorities—could be easily reached online using particular websites. Nevertheless, the considerable percentage of persuasion appeals in both Romney and Obama ads suggests that online advertising was used to communicate beyond core supporters.

To verify this initial result, we next examine variation in the content and placement of the ads. It is worth noting that the majority of ads (i.e., nearly 80%: 77% for Obama and 91% for Romney) contained interactive elements, such as urging viewers to click on a link to "get the facts." The three most common interactive elements were a "sign up" request (39% of all interactive ads), a "find out more" request (29% of all interactive ads), and a "donation" request (18% of all interactive ads).⁸ Table 1 indicates that, as expected, these

Candidate Ad Placement by Website

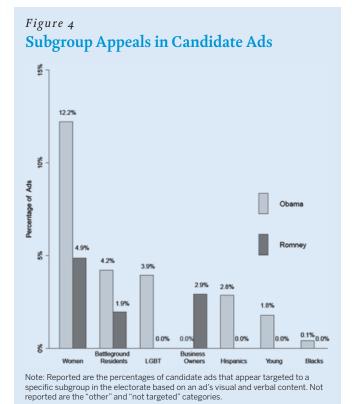
Figure 3



Note: Reported are the percentages of candidate ads appearing on each type of website. Because individual unique ads could appear on multiple website, percentages exceeded 100%.

requests corresponded with the coder classification of ad goals. "Sign up" requests were found most commonly in recruitment ads, "find out more" requests were more common in persuasion ads, and "donate" requests were obviously most common in donation ads. Ad placements also followed an expected pattern, with more donation ads placed on partisan-friendly websites and more persuasion ads placed on nonpolitical and neutral websites.9 Perhaps more telling is simply that the majority of all ads were last seen on a politically neutral or nonpolitical site.10

Figure 3 shows the overall distribution of ad placements by candidate. Reported are the percentages of candidate ads that were placed on partisan-friendly websites (left- or right-leaning), politically neutral websites, and nonpolitical websites. (The total percentages exceed 100% because ads could be seen on more than one website.) The pattern again highlights the broad communication strategy in Obama ads: only approximately 33% of all Obama ads were last seen on a partisan-friendly site, leaving the majority (67%) last seen on websites that could reach a broader swath of voters. Although this trend was less pronounced for Romney ads, 49% of ads were found on partisanfriendly websites at least once, which means that a slim majority appeared on other websites that would appeal to non-Romney supporters.



Analysis of the visual and verbal content of the ads also found that Obama ads were more likely than Romney ads to appeal to identifiable groups within the electorate. As shown in figure 4, 30% of Obama ads appeared to be targeted toward a specific group of voters, compared to just 10% of Romney ads.¹¹ For example, 12% of Obama ads appeared to appeal to women compared to 5% of Romney ads. Our sample of Obama ads also included many examples of ad content and ad placement being matched. For example, 20% of the Obama ads targeted to women were found on websites appealing to this demographic, such as cafemom.com, sheknows. com, and oprah.com.

Finally, we investigate the attention given to specific issues by each candidate in table 2. First, the range of issues mentioned in the fact that it did not clearly benefit either candidate in 2012.¹² Similar to Sides (2006), we found that the candidates framed the issue in ways consistent with party strengths. Romney economic ads focused on the general state of the economy, whereas Obama used a "middle-class" or "jobs" frame.

Additionally, the comparison of issue mentions found support for issue-ownership theory (Petrocik 1996; Petrocik, Benoit, and Hansen 2003). Romney ads were more likely than Obama ads to mention classic Republican issues, such as the federal budget deficit, American exceptionalism, and patriotism. Obama ads were more likely to mention classic Democratic issues, such as the environment and the wedge issue of reproductive rights and abortion.

It appears that digital political advertising is used for both engagement and persuasion appeals, tailored to specific website audiences.

Romney ads was far less diverse than in the Obama ads. Second, whereas mentions of the general economy were more common in Romney ads, ads for both candidates gave attention to the issue, which likely reflects its importance in every campaign and We also found less issue convergence for online campaigning compared to previous research on television advertising (Kaplan, Park, and Ridout 2006; Sides 2006). To more directly quantify the extent of issue convergence, we calculated the Sigelman and Buell

Table 2

Issue Cluster	Issue	Obama Ads	Romney Ads	Difference
Economic Issues	General Economy	8.6%	24.7%	-16.0%*
	Jobs	18.7%	15.1%	3.7%
	Middle Class	23.2%	6.9%	16.4%*
	Federal Budget	4.1%	12.3%	-8.2%*
	Government Spending	3.4%	12.3%	-9.0%*
	Taxes	21.4%	0.0%	21.4%*
	Small Business	1.1%	4.1%	-3.0%
	Corporations	2.2%	0.0%	2.2%
	Housing Crisis	1.5%	0.0%	1.5%
	Auto Industry	2.3%	0.0%	2.3%
Health/Education	Health Care	14.6%	15.1%	-0.5%
	Medicare	3.4%	0.0%	3.4%
	Education	7.1%	8.2%	-1.1%
	Reproductive Rights/Abortion	14.2%	0.0%	14.2%*
Social Issues	Gay Rights	10.9%	0.0%	10.9%*
	Women's Labor Rights	4.1%	1.4%	2.8%
	Minority Representation	5.2%	0.0%	5.2%
	Immigration	1.1%	0.0%	1.1%
	Energy	0.4%	0.0%	0.4%
	Environment	0.7%	0.0%	0.7%
Foreign Policy	Military	9.4%	0.0%	9.4%*
	American Exceptionalism	0.0%	12.3%	-12.3%*
Issue Convergence			49.44	

Percentage of Specific Issue Mentions among Ads with Issue Content

Notes: * = Significant at the 0.05 level. Ads could be coded for multiple issues with the exception of "general economy," which was selected only if the economy reference did not fall within one of the other economic-issue categories.

captures the extent to which competing candidates discuss the same issues.13 We found a convergence coefficient of 49.4 in online advertising in 2012—a value that is lower than those in presidential campaigns studied previously, which averaged 71.4 from 1960 to 2000 (Sigelman and Buell 2004), and is lower than that for television advertising in 2012. Using estimates from the Wisconsin–Wesleyan Media Project that coded television advertising in 2012 (Fowler and Ridout 2013), we found an issue convergence estimate of 57.9 for the 2012 presidential television ads.14 Thus, candidates are more likely today to talk past one another than in the past—and this is especially the case in digital political advertising, which better enables targeted messaging to narrow audiences.

(2004) estimate, a statistic that

DISCUSSION

Whereas previous studies examining online political campaigning concluded that candidates used mainly online communication to engage existing supporters, our analysis of contextual display ads in the 2012 election suggests a broader communication strategy in website ads. It appears that digital political advertising is used for both engagement and persuasion appeals, tailored to specific website audiences. Our analysis also suggests that online advertising—in contrast to previous conclusions about television advertising—fails to promote campaign dialogue on policy issues, instead contributing to a fractured and contentious campaign environment.

More generally, our analysis provides a first systematic perspective on strategies being used in online display advertising. Capturing and analyzing digital political advertising is a challenge, but it is critically important given its increasing role in campaign communications in contemporary elections.

NOTES

- Online advertising can be microtargeted only to the extent that information about site users is known. Although users' individual-level information might be unknown, there is an abundance of site-level statistics on users, including site ideology (Gentzkow and Shapiro 2011).
- 2. Previous research has shown that candidates are more likely to talk about divisive issues in microtargeted communications (e.g., direct mail) compared to broadcast advertising, in which they are more likely to emphasize valence issues for which there is widespread support for the policy goal (e.g., strong economy or national security)—even if there might be ideological differences in how that goal is achieved (Hillygus and Shields 2008).
- 3. Replication data are available on the Dataverse Network.
- 4. See the online appendix for details about sample and coding. Briefly, the content coding included 50 different fields, such as issue content, tone, goal, and group appeals.
- 5. According to author communications with a high-ranking Romney staffer, it would be "impossible" to know exactly how many unique online ads ultimately were placed, especially near the end of the campaign. The campaign produced many different versions of a creative, but final placement often was determined by a third-party intermediary. Campaigns simply specified placement factors such as specific websites, keywords on website, and audience characteristics. Reassuringly, the use of these placement criteria seems consistent with our interpretation of patterns in the observed sample of ads.
- 6. As reported in the online appendix, a robustness check replicating our results for only the subset of ads for which we have complete placement information found similar patterns.
- 7. Each ad was coded into one of four mutually exclusive categories based on ad content: fundraising, GOTV (if urged to vote), recruitment (if urged more active role in campaign), and persuasion (if gave rationale to vote a particular way). An ad that had any request for a donation was coded as a donation ad, even though these ads also had other message content. The primary goal variable had 93.6% agreement between the two coders, with a Cohen's Kappa coefficient of 0.902.
- 8. Ads were coded as having interactive appeals if they asked a viewer to take some action—such as sign up, find out more, or donate—rather than merely provide information. Categories are not mutually exclusive because ads can ask for more than one action. Interactive appeals yielded 88.1% agreement between two coders and a Cohen's Kappa coefficient of 0.847. See the online appendix for more details.
- 9. Moat reported the last two websites on which ads were seen. Website ideology was classified based on audience estimates from Gentzkow and Shapiro (2011). For those websites without audience measures, ideology was determined by political endorsements and, finally, on an evaluation of website content if neither endorsements nor audience measures were available. See the online appendix for more details.
- 10. Cutting the data another way found that the partisan-leaning websites in our sample saw more unique creatives on average (i.e., 4.2 unique creatives compared to 1.9 on nonpolitical or neutral sites).
- 11. Coding as a targeted appeal is based on visual and verbal content. For example, a Spanish-language ad would be coded as an appeal to Hispanics; an ad with a rainbow flag would be coded as an LGBT appeal.
- 12. Some argued that Romney had the advantage on economic issues (Pew Research Center 2012); see Sides and Vavreck (2013).
- 13. See the online appendix for details about the calculation of issue convergence. Some analysts treat jobs and general economy as one category (e.g., Gallup's "Most Important Problem" coding). Treating these issues as a single category changes the convergence statistic very little (49.2).
- 14. The comparison across years and medium is made with caution because estimates can be sensitive to differences in coding (e.g., Sigelman and Buell [2004] coded newspaper articles). Nevertheless, our results suggest that there is a marked difference in issue convergence for presidential campaigns between online and television ads, consistent with patterns observed in other microtargeted communications (Hillygus and Shields 2008).

REFERENCES

- Barnard, Lisa and Daniel Kreiss. 2013. "A Research Agenda for Online Advertising: Surveying Campaign Practices, 2000–2012." International Journal of Communication 7 (21): 2046–66.
- Baum, Matthew A. 2013. "Presidential Communication Strategies in the Age of Three Medias." In *IPolitics: Citizens, Elections, and Governing in the New Media Era*, ed. R. L. Fox and J. M. Ramos, 183–205. New York: Cambridge University Press.
- Bimber, Bruce and Richard Davis. 2003. *Campaigning Online: The Internet in US Elections*. New York: Oxford University Press.
- Cogburn, Derrick L. and Fatima K. Espinoza-Vasquez. 2011. "From Networked Nominee to Networked Nation." *Journal of Political Marketing* 10 (1): 189–213.
- Druckman, James N., Cari Lynn Hennessy, Martin J. Kifer and Michael Parkin. 2010. "Issue Engagement on Congressional Candidate Websites." *Social Science Computer Review* 28 (1): 3–23.
- Foot, Kirsten A. and Steven M. Schneider. 2006. *Web Campaigning*. Cambridge, MA: MIT Press.
- Fowler, Erika F. and Travis N. Ridout. 2013. "Negative, Angry, and Ubiquitous: Political Advertising in 2012." *The Forum* 10 (2): 51–61.
- Gentzkow, Matthew and Jesse M. Shapiro. 2011. "Ideological Segregation Online and Offline." *Quarterly Journal of Economics* 126 (4): 1799–839.
- Gibson, Rachel K., Michael Margolis, David Resnick and Stephen J. Ward. 2003. "Election Campaigning on the WWW in the USA and UK: A Comparative Analysis." *Party Politics* 9 (1): 47–75.
- Gulati, Girish J. and Christine B. Williams. 2009. "Closing Gaps, Moving Hurdles: Candidate Web Site Communication in the 2006 Campaigns for Congress." In Politicking Online: The Transformation of Election Campaign Communications, ed. Costas Panagopoulos. 48–76. New Brunswick, NJ: Rutgers University Press.
- Herrnson, Paul S., Atiya Kai Stokes-Brown and Matthew Hindman. 2007. "Campaign Politics and the Digital Divide: Constituency Characteristics, Strategic Considerations, and Candidate Internet Use in State Legislative Elections." *Political Research Quarterly* 60 (1): 31–42.
- Hillygus, D. Sunshine and Todd G. Shields. 2008. *The Persuadable Voter: Wedge Issues in Political Campaigns*. Princeton, NJ: Princeton University Press.
- Kaplan, Noah, David K. Park and Travis N. Ridout. 2006. "Dialogue in American Political Campaigns?" *American Journal of Political Science* 50 (3): 724–36.
- Kaye, Kate. 2010. "The State of Online Political Advertising." New Haven, CT: Yale Law School. Working Paper.
- —. 2012. "Digital Ad Spend Gap Widens Between Obama and Romney." ClickZ. Available at www.clickz.com/clickz/news/2192377/digital-ad-spend-gap-widensbetween-obama-and-romney.
- Lafrance, Adrienne. 2015. "How Many Web Sites Are There?" *The Atlantic.* Available at www.theatlantic.com/technology/archive/2015/09/how-manywebsites-are-there/408151.
- Petrocik, John R. 1996. "Issue Ownership in Presidential Elections, with a 1980 Case Study." *American Journal of Political Science* 40 (3): 825–50.
- Petrocik, John R., William L. Benoit and Glenn J. Hansen. 2003. "Issue Ownership and Presidential Campaigning, 1952–2000." *Political Science Quarterly* 118 (4): 599–626.
- Pew Research Center. 2012. "GOP Holds Early Turnout Edge, But Little Enthusiasm for Romney." *People-Press*. Available at www.people-press.org/2012/06/21/ gop-holds-early-turnout-edge-but-little-enthusiasm-for-romney.
- Sides, John. 2006. "Origins of Campaign Agendas." British Journal of Political Science 36 (3): 407–36.
- Sides, John and Lynn Vavreck. 2013. *The Gamble: Choice and Chance in the 2012 Presidential Election*. Princeton, NJ: Princeton University Press.
- Sigelman, Lee and Emmett H. Buell. 2004. "Avoidance or Engagement? Issue Convergence in US Presidential Campaigns." *American Journal of Political Science* 48 (4): 650–61.
- Simon, Adam F. 2002. The Winning Message: Candidate Behavior, Campaign Discourse, and Democracy. Cambridge: Cambridge University Press.
- Spiliotes, Constantine J. and Lynn Vavreck. 2002. "Campaign Advertising: Partisan Convergence or Divergence?" *Journal of Politics* 64 (1): 249–61.
- Stampler, Laura. 2012. "Obama Spent More on Online Ads Than It Cost to Build the Lincoln Memorial." *Business Insider*. Available at www.businessinsider.com/ infographic-obama-romney-final-ad-spend-2012-11.
- Williams, Andrew Paul and Kaye D. Trammell. 2005. "Candidate Campaign E-Mail Messages in the Presidential Election 2004." *American Behavioral Scientist* 49 (4): 560–74.
- Williams, Andrew Paul, Kaye D. Trammell, Monica Postelnicu, Kristen D. Landreville and Justin D. Martin. 2005. "Blogging and Hyperlinking: Use of the Web to Enhance Viability During the 2004 US Campaign." *Journalism Studies* 6 (2): 177–86.
- Xenos, Michael A. and Kirsten A. Foot. 2005. "Politics as Usual, or Politics Unusual? Position Taking and Dialogue on Campaign Websites in the 2002 US Elections." *Journal of Communication* 55 (1): 169–85.