

Cross-ideological discussions among conservative and liberal bloggers

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Abstract With the increasing spread of information technologies and their potential to filter content, some have argued that people will abandon the reading of dissenting political opinions in favor of material that is closely aligned with their own ideological position. We test this theory empirically by analyzing—both quantitatively and qualitatively—Web links among the writings of top conservative and liberal bloggers. Given our use of novel methods, we discuss in detail our sampling and data collection methodologies. We find that widely read political bloggers are much more likely to link to others who share their political views. However, we find no increase in this pattern over time. We also analyze the content of the links and find that while many of the links are based on straw-man arguments, bloggers across the political spectrum also address each others' writing substantively, both in agreement and disagreement.

Keywords Blogs · Bloggers · Communication · Fragmentation · Ideology · Internet · Polarization · Political communication · Web

1 Introduction

Ever since the early days of the Internet's mass diffusion, commentators have wondered about the medium's potential for political communication (e.g., Browning 1996; Hill and Hughes 1998). Like most work examining the implications of new media on social processes, the initial explorations went through a phase of early euphoria, sudden skepticism and alarm, and finally the realization that new technologies may have the potential to make unique contributions to the political process (DiMaggio et al. 2001). In this piece, we are most concerned with the line of work in this realm that addresses the fragmenting potential of information technologies (Sunstein 2001).

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Because the Internet allows for both interpersonal communication and the broadcasting of messages from a few to many, it has the potential to influence political discourse both in ways that person-to-person technologies might do so and ways in which mass media may shape people's political views. A significant feature of the Internet that makes it distinct from other communication technologies is that these two types of communication have the opportunity to merge. That is, communication that starts out between just a handful of people has the potential to reach a large audience quickly without necessarily having to go through traditional mediating and filtering processes. While this has been the case since millions started using the medium in the mid-1990s, these features became especially pronounced with the rise of blogs.

Blogs are an important example of how online communication can take place either between just a few participants or hundreds of thousands of interested parties. Blogs are authored by just one or a few people who are usually publishing content independently without any editorial oversight, yet with the potential to reach a very wide readership. Political blogs are some of the most popular in the genre. Their focus is on offering commentary about national and global political events.

Some unique features of the Internet make contrasting outcomes possible regarding the diversity of material to which people expose themselves. Thanks to the low cost of entry to sharing material on the Web, an endless number of viewpoints can compete for readers' attention. In contrast, new information technologies make it possible, to an unprecedented extent, for people to expose themselves exclusively to opinions that mirror their own. Thanks to customization options, users can easily filter out material with which they disagree. Accordingly, some have argued (Sunstein 2001) that with the increasing spread of the Internet, people's political conversations will occur in isolation of dissenting points of view. This perspective suggests that people who frequently discuss political topics online will do so in a vacuum without engaging in a dialogue with others from opposing positions.

It is this question about the exposure to diverse types of content that we address in this chapter. In particular, we are interested in seeing whether conservative political bloggers ever mention or link to liberal bloggers and vice versa. We analyze linkages among the writings of such bloggers to see whether widespread use of the Internet has led to dissenting views to flourish online or whether it merely offers a safe haven for everyone by isolating people with different opinions from each other.

In the sections that follow, we first briefly review the literature on the Internet's implications for political discussions online with particular focus on recent work regarding the medium's potential consequences for discussions across ideological lines. We then discuss our decision to focus on the most popular political blogs as an empirical test case for exploring theories advanced by others on this topic. We follow by giving a detailed description of how we identified our population, constructed our sample and collected the data. We then discuss findings about cross-ideological online discussions. We end with suggestions for avenues for future research.

2 The Internet and political communication

Ever since the Internet's mass diffusion, scholars have expressed an interest in the medium's potential implications for political communication. Most initial speculations were not based on empirical evidence as systematic data were especially hard to come by during the initial years of the medium's diffusion. Moreover, the unique characteristics of early adopters made it hard to generalize the potential implications of the Internet given that it was still very much a moving target (DiMaggio et al. 2001).

Studies have considered the extent to which new media may be allowing people to become more informed about political matters (Katz and Rice 2002; Norris 2001). Particular focus has been paid to the use of IT during elections, e.g., how political candidates are using the Web to represent themselves, how campaigns utilize new services for communicating with constituents in a more targeted manner, and how citizens are reacting to these new sources of information (e.g., Bimber and Davis 2003; Howard 2003; Rainie et al. 2005; Stromer-Galley et al. 2000; Xenos and Foot 2005). Others have looked at the extent to which people are using IT to communicate with their government representatives (e.g., Katz and Rice 2002). There is also a line of research that examines the use of IT by political institutions and what changes they may be bringing about (Bimber 2003; Fountain 2001; Norris 2001).

Most relevant here is work that has considered how information technologies may influence political discussions among citizens (see Dahlgren 2005 for a review of this literature). One main area of inquiry concerns whether IT are going to lead to more isolated or more diverse conversations. Here, we briefly review these two perspectives and consider what hypotheses they suggest for the types of communication we may see among conservative and liberal bloggers.

3 The fragmenting versus diversifying potential of information technologies

One particularly important issue that has come up in the literature on the political implications of information technologies concerns the potential fragmenting and polarizing role of digital media. Cass Sunstein (2001), in his book *Republic.com*, specifically addresses the question of fragmentation as a potential outcome of new communication practices made possible by new information technologies. Drawing on Nicholas Negroponte's idea about the customized "Daily Me" afforded by new technologies (Negroponte 1995), Sunstein (2001) argues that "the most striking power provided by emerging technologies [is] *the growing power of consumers to filter what they see*" (p. 8) [emphasis in the original].

Sunstein argues that due to the customization made possible by new IT people will be increasingly capable of isolating themselves from views with which they disagree. He considers the negative implications of this for a healthy democracy. He argues that "there are serious dangers in a system in which individuals bypass general interest intermediaries and restrict themselves to opinions and topics of their own choosing" (p. 16). Traditional communication media such as newspapers allowed people to be exposed to differing viewpoints "quite involuntarily" (p. 15).

This idea mirrors Benedict Anderson's argument about an imagined community that congregates around topics highlighted due to a shared reading of mainstream media (Anderson 1991) regardless of people's location and exact ideological stance. So the question for new media is whether the special features of emerging technologies are *allowing* people to isolate themselves and *resulting* in people isolating themselves into groups based on political ideology leading to a fragmented society.

This line of thought is reminiscent of work on the types of people who tend to make up individuals' social networks (McPherson et al. 2001). Already in the 1950s, Lazarsfeld and Merton noted that people tend to associate with others like them (Lazarsfeld and Merton 1954) and used the term "homophily" to describe this tendency. Over the years, with advances in methodology, similar results have been found about people's networks at a larger and more generalizable level (Marsden 1987). This idea of homophily has also been explored by scholars specifically interested in political communication (Huckfeldt and

Sprague 1995). Overall, these findings about people associating with others like them would suggest that political bloggers are more likely to link to those who share their ideological perspective than engage in conversations with those who disagree with them.

A contrasting approach to these concerns about fragmentation would suggest that the vast amounts of information available thanks to the Web are enabling people to sidestep mainstream media and seek out numerous sources of information previously less accessible to them. Instead of having to rely on a handful—or even a few hundred—television channels, radio stations and print media, people have millions of sources at their fingertips from which to choose likely representing more diverse viewpoints than mainstream sources ever made possible. This may lead people to consume more varied types of content than before. This alternative perspective suggests that thanks to the easy availability of diverse viewpoints online, bloggers will engage with others including ones representing differing ideologies.

4 The rise and relevance of political blogs

Drezner and Farrell (this issue) have made a convincing and strong argument for the importance of studying the political science and power of blogs so we only briefly touch upon this question here. In addition to providing tens of thousands (if not more) of daily readers frequently updated content on a spectrum of political topics, political blogs have also started to have direct influence on political actors through their ability to shape the content of mainstream media (Drezner and Farrell, this issue) and thereby political figures, too. Examples of events directly affected by blogger input include Trent Lott's resignation from his position as Senate Majority Leader (Bloom 2003) and the reactions to Dan Rather's memo story questioning the president's National Guard Service (Olasky 2004).

Not much data exist on the demographics of bloggers or blog readers. The little information we have suggests that only a tiny portion of Internet users write their own blogs and although a somewhat larger, but still small segment read them (Lenhart et al. 2004; Rainie et al. 2003). The latest figures suggest that nine percent of Internet users turned to political blogs during the 2004 U.S. presidential elections (Rainie 2005). Nonetheless, this does not diminish the potential implications of blogs for the political process. If this form of political communication influences other, more widely read media, and in turn the actions of political actors then it is of less concern how many people read them directly.

During the events leading up to the 2004 presidential elections the main political parties also recognized the importance of bloggers by granting them passes to their conventions (Klam 2004). The mainstream media also started to publish articles referring to bloggers without the blogs themselves being the sole focus of the pieces attributing, yet again, legitimacy to this new mode of political communication. Given these ways in which political blogs have entered mainstream discussions of political affairs, we find them an ideal case for empirically testing the hypothesis about the Internet's implications for fragmenting and segmenting people by their ideological views (Sunstein 2001).

While there has been considerable theorizing about the Internet's implications for cross-ideological political discussions (e.g., Lev-on and Manin 2005; Sunstein 2001), there has been much less empirical investigation of this question. The study closest to our own is by Adamic and Glance (2005) on the automated collection and analysis of links among political blogs during the 2004 presidential elections. Similarly to our project, the authors looked at top political blogs and their cross-linking by political affiliation. They found considerable fragmentation by ideological lines showing that conservatives are much more likely to link to conservatives and liberals to liberals. A subsequent study on the same topic by Ackland (2005) found similar linking patterns across conservative and liberal blogs.

Our study builds on these works in three important ways. First, thanks to our manual coding, we are able to distinguish clearly between blogroll linkages and links within posts. (A blogroll is a list of blog links permanently featured on the sidebar of blogs often replicated on each page in the archives.) We have no error from misidentifying links in our data since we looked at the context of each link individually thereby allowing us to verify individually whether it was on a blogroll, as a mere quote on a sidebar (e.g., an advertisement) or within a blog post. Moreover, as we will describe in our methodology section below, we were able to account for some other factors (e.g., presence of multiple links within one post) in our tabulation of the data.

Second, we move the agenda forward by analyzing the content and context of all the cross-ideological links in our sample. In addition to establishing the amount of interlinking among conservative and liberal blogs, we are also able to ascertain the types of conversations in which bloggers engage with those not in line with their ideological positions. Third, our study is able to account for changes over time. Because our data collection is by time segments, we are able to calculate figures about insularity over time and thus test whether there is a change in the amount of cross-ideological conversations as time progresses.

A recent report released by the Pew Internet and American Life Project on online deliberative democracy (Horrigan et al. 2004) does not find evidence to support Sunstein's hypothesis about fragmentation and polarization. Although that paper does not look at blogs in particular, it looks at how Internet users consume political information online. Findings from a nationally representative survey of both Internet users and non-users suggest that the former are more likely to expose themselves to political opinions not in agreement with their own than those who are not online. These findings are robust when controlling for important factors such as predisposition to have an interest in political affairs. The study is in line with findings from decades earlier about people's interests in views that oppose their own (Freedman and Sears 1965; Frey 1986). Our project complements this one by testing the polarization hypothesis using data about large-scale online political discussions with a focus on blogs.

5 Hypotheses

Based on the literature reviewed above, we derive the following hypotheses about how information technologies, and in particular blogs, may be influencing political conversations.

H1: Blogs are more likely to link to blogs that match their ideological persuasion.

H2: The amount of cross-ideological linking among blogs will decline over time.

6 Studying blog content

The study of blogs and bloggers is still in its infancy and so are the methods used for their analyses. In this section, we discuss how we decided on which blogs to include in our study, how we sampled content from them and what methodologies we used for analyzing the material.

6.1 Defining our population

In order to create a sample of most widely read U.S. political blogs, we first had to determine our population. We started by defining political blogs. For the purposes of this study, blogs

are considered to be regularly updated Web sites that post entries in a reverse-chronological order without editorial oversight. For our purposes a blog is considered a “political blog” if a significant amount of content—enough that it is clearly noticeable to an infrequent visitor—posted by its author(s) relates to U.S. politics and U.S.-related political issues.¹ Political commentary need not be the sole focus of a blog in order to be included, but it has to make up a substantial amount of its content.

Due to the particular focus of this study, we aimed at gathering a representative sample of the two predominant ideological opinions represented in the U.S. political blogosphere: conservative and liberal viewpoints. We recognize that there are as many diverse political opinions among bloggers as there are among citizens in general and these categories do not do the mix of perspectives justice. Nonetheless, some such classification is necessary if we are to test the hypotheses outlined above.

6.2 Identifying our sample

In order to draw a sample, we needed to figure out the whole population of political blogs. As with all manners of Web site sampling, it is impossible to get a full list of any population of sites as no comprehensive list of sites exists. Since we are primarily concerned with the most popular political blogs, our goal was not to identify the entire population of political blogs, rather, to identify the ones that are most widely read.²

To determine the list of most widely read U.S. political blogs, we engaged in a multi-step process to arrive at our target of forty political blogs with a rough balance between conservative and progressive/liberal sites. We sampled three blog ranking sites: (1) Technorati; (2) The Truth Laid Bear Blogosphere Ecosystem; and (3) Blogstreet. We started by reviewing their top-one-hundred lists. The ranking of Weblogs is an imperfect science and in order to eliminate the bias of any one method we chose to examine these three ranking sites since they each employ different methodologies to establish their rankings. We describe these in turn below.

Technorati is a blog-specific search engine that adds content from blogs to its search service minutes after material is posted. In early 2007, it indexed over 70 million blogs, at the end of 2005 over 22 million. In 2004 (the time we began our data collection), Technorati was monitoring over a million unique blogs with millions of links among them. According to information available on the site, Technorati ranks blogs in its top 100 list by the number of inbound hyperlinks that each blog has pointing to it.

The Truth Laid Bear Blogosphere Ecosystem (TTLB) is an application that “scans weblogs once daily and generates a list of weblogs ranked by the number of incoming links they receive from other weblogs” on the TTLB list. The automated application that TTLB runs records “all links from a scanned weblog to any other weblog” (<http://www.truthlaidbear.com/EcoFAQ.php>). The TTLB list was initially started in 2002 with the author’s compilation of 175 “top” blogs and grew to include over 4,700 unique blogs by September 2004.

¹To clarify, a blog need not be based in the United States nor have American authors to qualify. The main criterion is that the content on the blog is related to the U.S. political system.

²Undoubtedly one could focus on less widely-read political blogs as well for a study of this kind. We believe that these are the blogs with the most potential to influence public debate by those beyond their readership through influencing larger conversations through more traditional media. For this reason we feel justified in our decision to narrow our study to this group. See Drezner, Daniel, and Henry Farrell (2004). “The Power and Politics of Blogs” in *American Political Science Association*. Chicago, IL.

Blogstreet, another source of information on top blogs, was actively measuring over 140,000 individual blogs by September 2004. The Blogstreet “Top 100 Most Influential Blogs” measures the relative importance of blogs based upon their “Blog Influence Quotient” (BIQ), which was derived from a measure of what Web sites include a specific blog on their blogroll. The BIQ of a specific blog increases if a highly ranked—by Blogstreet—blog includes that blog in its blogroll (<http://www.blogstreet.com/biq100.html>). Such ranking systems are not unique to the blog world, in fact, Google’s popular search algorithm also depends on similar analysis of Web sites’ linking structure (Brin and Page 1998).

In June, 2004 we looked at the top 100 lists of Technorati, the TTLB Blogosphere Ecosystem, and Blogstreet and eliminated all non-political blogs from their lists. We only kept blogs that had a majority of their posts dedicated to U.S. politics and U.S.-related political issues. In order to further concentrate the sample, we ranked blogs based upon their inclusion on all three lists, then their inclusion on two out of three lists, and finally if they were included only on one of the three lists. From this resulting list we removed all blogs that were no longer operational at the time of our sampling. Two of us reviewed the list independently and discarded what we considered marginally political blogs.

To determine political affiliation for each blog we visited each site to look for obvious indications of association. Often this could be established through the presence of banners or buttons directly advocating support for either George W. Bush or John Kerry in the then upcoming November 2004 U.S. presidential election. Another indicator of affiliation was the inclusion of links or banners to the campaigns of politicians of either party running for various positions (Senator, Congressional Representative, Governor, etc.) throughout the U.S., or links and banners expressing disapproval of a candidate or politician of a specific party.

Other clues to political affiliation included statements that unequivocally announced the allegiance of the blog or blog author (i.e., “I am a proud [insert ideological alignment].”). Finally, the written content of the blog often allowed for categorizing the author or blog as falling into one of the two general political categories: conservative or liberal. Most blogs on the initial list were easily categorized through a combination of these indicators. Those that defied categorization were designated as “independent/unaligned” and were not included in this study. Similarly, blogs with a strong independent/libertarian leaning were also excluded.³ To verify our own classification, we asked for feedback from half a dozen avid readers of political blogs regarding our decisions about categorizations. Based on their responses we refined our classification.

We then picked the top liberal and conservative blogs on our list. We checked to see if their archives were accessible. In some cases, the software of blogs or the archiving decisions of bloggers makes it next-to-impossible to find earlier content from sites. We had to exclude such blogs from our sample due to our lack of access to their archived contents.⁴ Finally, we double-checked the importance of our list of 40 blogs (20 liberal, 20 conservative) through the use of the Google “link:” search function, which returns the number of links to an individual URL (Uniform Resource Locator or Web address) as recorded in the

³We recognize that by not allowing such blogs to be part of our sample we undoubtedly exclude some of the most popular political blogs at the time (e.g., Daniel Drezner’s blog, Virginia Postel’s blog). Future iterations of such a study could include a third category of blogs and thus test the fragmentation hypotheses more broadly.

⁴This explains why a site such as Kaus Files is not on our list.

Table 1 List of blogs included in the analyses

| Conservative blogs | Liberal blogs |
|------------------------|---------------------|
| Andrew Sullivan | America Blog |
| Belmont Club | Atrios |
| Blogs For Bush | Body And Soul |
| Captains Quarters | Crooked Timber |
| Deanes May | Crooks And Liars |
| Evangelical Outpost | Daily Kos |
| Hugh Hewitt | Decembrist |
| In DC | Digbys Blog |
| Instapundit | Juan Cole |
| Little Green Footballs | Matthew Yglesias |
| Lashawn Barber | Max Speak |
| Michelle Malkin | Oliver Willis |
| Pejmanesque | Pandagon |
| Powerline | Prospect |
| Right Wing News | Talking Points Memo |
| Roger Simon | Talk Left |
| Tim Blair | Tbogg |
| Vodkapundit | This Modern World |
| Volokh Conspiracy | War and Piece |
| Wiz Bang | Washington Monthly |

Google cache. This way we verified that the blogs we included in our data set were, in fact, very highly linked-to political blogs. Table 1 presents the full list of blogs in our sample.⁵

6.3 Data collection

We collected the content of each blog in our sample for three week-long periods spread across ten months. We sampled material for the week of June 6–12, 2004 (a week before either party's national conventions), October 24–30, 2004 (the week before the presidential elections) and March 13–19, 2005 (a week without any special political events). We picked these weeks to represent different types of time periods from a political perspective: one before the major events of the 2004 presidential campaigns, one just before the elections and a third well after the these intense political events.

We manually visited each blog and using their archive features accessed the weeks for our study.⁶ We downloaded the content of the sites as text files thereby maintaining all aspects of the Web site including information in the site's underlying code about Web links to other sites.⁷ Blogs differ considerably in how they archive their material. Although many do it by

⁵One of the authors, Hargittai, is a member of the Crooked Timber group blog included in this study. However, few of her posts are political in nature and she did not blog about political topics during this time to make sure that her participation would not bias study results.

⁶On occasion, the archives of a blog were not available on the blog's site. In such instances we tried alternatives for accessing the content. The most fruitful way was to consult the Web Archive's data base for material at <http://web.archive.org>.

⁷In one instance, it was not possible to retrieve the archives of a blog in our sample. Thus, we have missing data for one of the liberal blogs in our sample for the June week.

week, a considerable number do it by month, by day or by post. In cases where the archives were available on a monthly basis, we downloaded the entire month's text and then deleted the days that were not in our study.

6.4 Data coding

Of interest to us are connections between blogs of different ideological persuasion. We counted the number of links on each blog (for the three weeks in our sample) to other blogs in our sample.⁸ We excluded all self-referential links, that is, links to other pages on the blog itself. Our coding resulted in three matrixes with forty columns and forty rows each. The diagonals in each matrix only contain zeros since we excluded all self-referential links. Each cell can contain a zero or a number representing how many times a blogger linked to another blogger in the sample during each respective one-week period.

We distinguish between links on blogrolls and links in posts. Blogrolls are lists of links usually on the sidebar of blogs pointing to other blogs of interest. These are often replicated on every entry page. They are updated with differing regularity, but for the most part tend to be quite stable over time. Links in posts are pointers to other Web sites that blog authors insert into the text of their daily writing. We consider these qualitatively different from blogroll links as they signal active engagement with another blogger. It is less clear how often people visit links on their blogrolls.

If an author linked to another blog in our sample more than once in one post we count that as one link only. The guiding factor here is that while multiple links may suggest a more intense engagement with others' material, the post is still one instance of writing and communication so we do not want to assign too much extra weight to multiple citations.⁹

6.5 Sample descriptives

In sum, the authors of these forty blogs posted 5,709 entries during the time period under investigation. These posts included 883 links to other blogs in our sample. (See Table 2 for these figures broken down by week.) These figures suggest that, on average, 15 percent of posts in our sample have a link to another blog in our sample. This is a testament to the vast amount of linking among top political blogs. There are many more links present in the posts themselves as our figures do not account for links to blogs not in our sample, mainstream media coverage of topics and links to any other Web sites.

The forty blogs show up on each others' blogrolls 421 times. This signals that there is considerable connection at this basic level across the blogs in our sample. If all 40 blogs

Table 2 Number of posts and links in the three one-week periods

| | June 6–12, 2004 | October 24–30, 2004 | March 13–19, 2005 | Total |
|----------------|-----------------|---------------------|-------------------|-------|
| Posts | 1448 | 2376 | 1885 | 5709 |
| Links in posts | 176 | 384 | 323 | 883 |

⁸We only count the presence of actual links, we exclude the mere mention of other bloggers. We used the search function of a text editing program to find the presence of links in files. The use of such a feature insured that we would not miss links by glancing over them.

⁹It is rare that such instances occur. More common—although still an anomaly—is when an author links to the same blog post of another blogger multiple times within the same post.

linked to all other 39 blogs in our sample then we would have 1560 blogroll links. Accordingly, twenty seven percent of all possible links are present on the blogrolls.

6.6 Methods of analysis

First, we counted the number of links going to and from blogs of different political persuasions and created summary statistics about the amount of linking to and from conservative and liberal blogs, both among themselves and across the two types.

In order to compare the level of insularity within groups of blogs (conservatives and liberals respectively), we calculate $E-I$ ratios that tell us about the level of insularity in a group. These ratios are based on the number of external (E) and internal (I) links to and from blogs of similar affiliation when comparing different groups in a network. The ratios are calculated as follows:

$$EI = \frac{E - I}{E + I},$$

where E = number of external links, I = number of internal links.

EI ratios run from -1 to 1 . The closer the figure is to -1 , the more insular is the network. Insularity refers to group members' tendency to link to, or engage with, members of their own group much more than with those outside of their group affiliation. If conservative blogs only link to conservative blogs and liberal blogs only link to liberal blogs then both of their EI ratios would be -1 suggesting that there are extremely high levels of insularity where all conversations occur in an enclave.

We use the social network analysis program InFlow to calculate these figures. We also rely on InFlow for visualizations of the networks.¹⁰ Arc graphs (see Figs. 1 and 2) represent the data by plotting the members belonging to the ideological categories separately from each other for increased ease of visualization. We depict links among blogs of similar positions in light gray color and links across conservatives and liberals with black lines.

The thickness of these lines on Fig. 2 depends on the frequency with which the linking occurs (i.e., the thinnest lines represent just one link each whereas the thickest lines represent five or more links). Linkages are not symmetrical. That is, a connection from Blog A to Blog B (signaled by a directional arrow on the line) signifies that Blog A has a link to Blog B. If there is no arrow in the reverse direction then we know that blog B does not have a reciprocal link to Blog A.

7 Cross-ideological linkages in the political blogosphere

In this section, we first look at linkages based on blogroll data and then consider the level of interaction between the two groups based on links within posts.

7.1 Blogroll connections

As noted earlier, 27% (or 421 links) of all possible connections on blogrolls are present in the network. However, the vast majority (91%) of these blogroll links is to sites that resemble blogs' ideological positions, that is, conservatives mostly display links to conservative blogs, and liberal blogs mostly features pointers to other liberals on their blogrolls. Only nine

¹⁰We thank Valdis Krebs, the creator of InFlow, for his assistance with using the program.

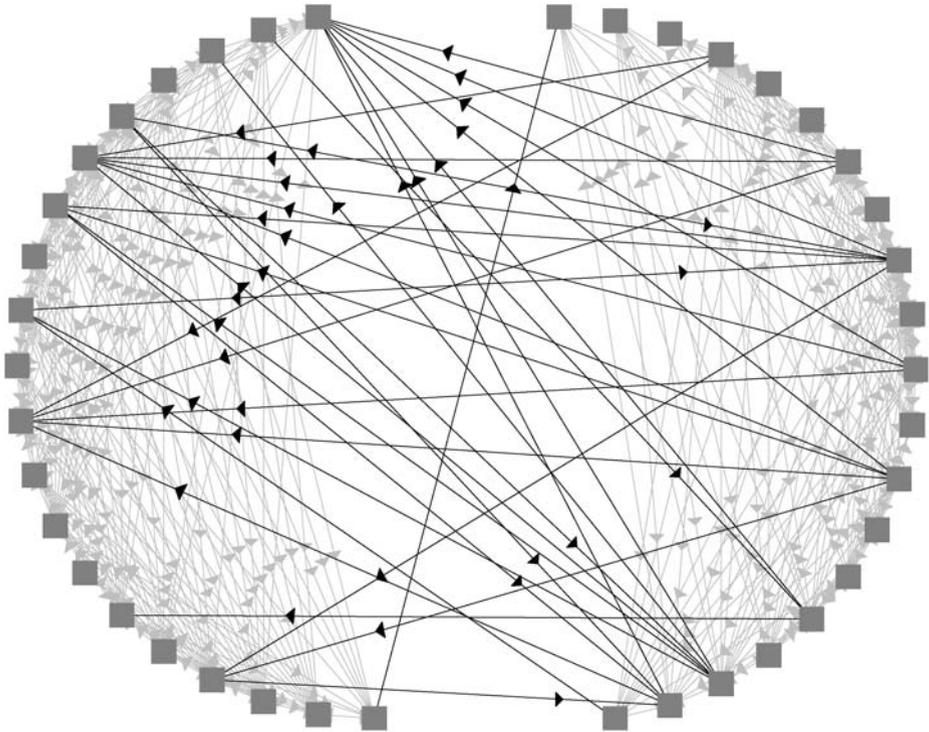


Fig. 1 Blogroll linkages among forty top political blogs. The *squares on the left* depict liberal blogs, the *squares on the right* represent conservative blogs. The *light gray lines* signify links among blogs of similar ideological leanings. The *black lines* in between the liberal and conservative blogs stand for blogroll links between blogs of different persuasions. (These links are not symmetrical, that is, just because one blog links to another does not mean that the other blog links back.)

Table 3 Blogroll links among blogs in our sample

| | C to C | C to L | L to C | L to L | Total |
|--|--------|--------|--------|--------|-------|
| Percent of blogroll links by affiliation | 42 | 7 | 2 | 49 | 100 |
| (raw frequencies in parentheses) | (176) | (29) | (8) | (208) | (421) |

percent of all blogroll links go to sites of differing viewpoints. Conservatives are more likely to display connections to liberal blogs than the other way around with the former sending 29 links to liberals whereas the latter only linking to conservatives twice on their blogrolls. See Table 3 for details.

Figure 1 is a visual representation of the blogroll linkages among our forty sites. Liberal blogs are on the left arch, conservative blogs are on the right arch. The light gray links represent links within groups, the black lines stand for links across groups. Of the 205 links on conservatives' blogrolls, 14% point to liberal blogs. In contrast, less than 1 percent of the 216 links on liberals' blogrolls point to conservatives. This insularity is also reflected in the EI ratio of liberal blogs. Not surprisingly, it is close to -1 at -0.93 . Conservatives display less insularity with an EI ratio of -0.72 mirroring their higher tendency to link to liberals.

7.2 Links in posts

Table 4 presents the frequency of links in posts across the blogs in our sample. We break down the outbound links by political affiliation. As expected, it is certainly the case that conservatives are more likely to connect to conservatives and liberals to liberal blogs. That said, we also observe cross-ideological linkages. During the three weeks in our data set, we document over 50 links from conservatives to liberals and over 70 links from liberals to conservatives. Put in another way, twelve percent of all outbound links from conservatives is sent to liberal blogs while 16% of all outbound links from liberals points to conservative bloggers.

It may be, however, that only a handful of bloggers are accounting for most linking in our sample. In Table 5 we address this point by presenting data on the number of blogs that do *not* link to other blogs, by political affiliation, during the three one-week segments in our data set. We find that in all weeks, it is rare that blogs do not link to other blogs whose ideological position matches their own. That is, in June, only three of the twenty conservative blogs did not link to other conservatives and only two of the twenty liberal blogs did not link to other liberals. We see similar figures for March. In October, linking is even more popular with only one in each group neglecting to send a reference to another blog within its group.

Linking is less common across ideological lines, but still, it is certainly not the case that only one blog is doing all of the cross-linking. In fact, by looking at the totals in the last row of Table 5, we find that only five conservative blogs *never* link to a liberal blog during our three-week period, and only three liberal blogs *never* link to a conservative blog during this time.

Overall, this is a testament to the amount of linking and cross-referencing that occurs in this form of writing. It is in no way the case that a tiny portion of blogs account for all cross-linking in the sample. Rather, at one point or another, the majority of blogs in the study do engage the content of a differing blog in their writing with a hyperlink reference. Among blogs of similar affiliation, there is not one (either among conservatives or liberals) that never links to another.

Figure 2 presents all this information in graphical form. While the density of gray lines depicted within-group links (among the arches on both the left and right) is high, there is also considerable linking across the two halves of the circle. The black lines in the middle show linking from liberals to conservatives and vice versa depending on the direction of the arrow. Their thickness depicts frequency of sending references to others. We see that in several instances blogs engage other blogs with some regularity.

Next, we turn to the analyses of insularity during the three weeks of political conversations among the blogs in our sample. Table 6 presents the EI ratios for all three weeks. We see a fluctuation between -0.66 and -0.79 for conservatives and a move between -0.56 and -0.75 for blogs with liberal affiliation. While certainly a sign of insularity, none of these figures suggest complete isolation.

Sunstein's theory about political fragmentation and polarization suggests that information technologies will lead to more isolation and insularity over time. While it is hard to compare today's political conversations to times previous due to lack of comparable data, it is possible to look at the change in insularity figures over time within our data set. As the rows going from June to October in Table 6 indicate, there is little evidence of increasing fragmentation over time for conversations in our sample. Among conservatives, we observe some amount of fluctuation as a more insular network in June gets less insular by October but then goes back to summer levels in March. In contrast, we see a continuous decline

Table 4 Number of links to conservative and liberal blogs by affiliation

| Affiliation | Conservative | | Liberal | |
|-------------|---------------|------------------|---------------|------------------|
| | Links to Cons | Links to Liberal | Links to Cons | Links to Liberal |
| June | 76 | 8 | 15 | 77 |
| October | 163 | 29 | 25 | 167 |
| March | 135 | 15 | 33 | 140 |
| Total | 374 | 52 | 73 | 384 |

Table 5 Number of blogs with no links to conservative and liberal blogs by affiliation

| Affiliation | Conservative | | Liberal | |
|----------------------|------------------|-----------------|------------------|-----------------|
| | No Links to Cons | No Links to Lib | No Links to Cons | No Links to Lib |
| June | 3 | 16 | 12 | 2 |
| October | 1 | 8 | 12 | 1 |
| March | 3 | 16 | 12 | 2 |
| Total who NEVER link | 0 | 5 | 3 | 0 |

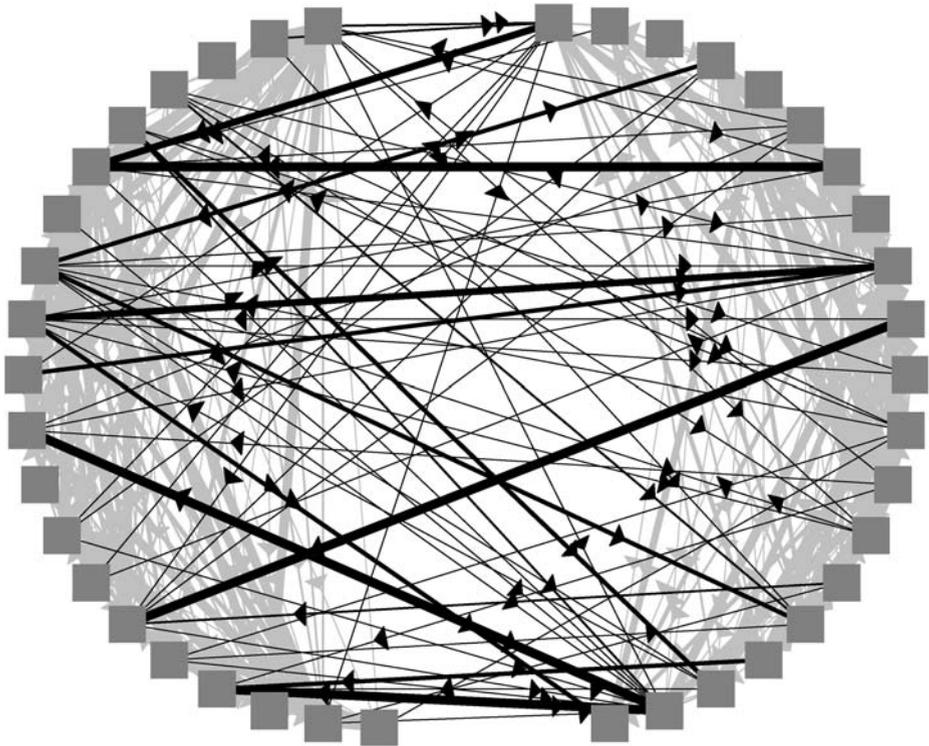


Fig. 2 Links among forty top political blogs during three weeks of blogging. The *squares on the left* depict liberal blogs, the *squares on the right* represent conservative blogs. *Gray links* signal within ideological connections. *Black links* depict links among blogs of differing perspectives. (The links are not symmetrical, that is, just because one blog links to another does not mean that the other blog links back.)

Table 6 EI ratios

| | Orientation | |
|---------------|--------------|---------|
| | Conservative | Liberal |
| Blogroll | -0.72 | -0.93 |
| June, 2004 | -0.79 | -0.75 |
| October, 2004 | -0.66 | -0.66 |
| March, 2005 | -0.75 | -0.56 |

Table 7 Types of links between conservative and liberal blogs

| | Strawman | Disagree | Non-political | Redirect | Agree | Total |
|--|----------|----------|---------------|----------|-------|-------|
| June | | | | | | |
| Conservative to Liberal | 2 | 1 | 0 | 0 | 3 | 6 |
| Liberal to Conservative | 3 | 1 | 2 | 5 | 2 | 13 |
| October | | | | | | |
| Conservative to Liberal | 11 | 2 | 2 | 4 | 3 | 22 |
| Liberal to Conservative | 17 | 0 | 2 | 3 | 1 | 23 |
| March | | | | | | |
| Conservative to Liberal | 5 | 2 | 0 | 7 | 0 | 14 |
| Liberal to Conservative | 14 | 9 | 0 | 4 | 0 | 27 |
| Total | | | | | | |
| Conservative to Liberal | 18 | 5 | 2 | 11 | 6 | 42 |
| Liberal to Conservative | 34 | 10 | 4 | 12 | 3 | 63 |
| Total by percentage of all links by type of blog | | | | | | |
| Conservative to Liberal | 43 | 12 | 5 | 26 | 14 | |
| Liberal to Conservative | 54 | 16 | 6 | 19 | 5 | |

in insularity among liberals with EI ratios going from -0.75 (in June) to -0.66 (in October) and -0.56 in March. These findings lend no support for the claim that IT will lead to increasingly fragmented discourse online.

Given the data reported in this section, we find that among some of the most widely read political bloggers, commentators do engage in conversations with others representing different viewpoints from their own. While aggregating figures helps us establish general trends, looking at some of the conversations in detail should help shed light on the exact nature of these linkages. Accordingly, now we turn to qualitative analyses of political blog content to examine the particular context and nature of cross-ideological discussions among bloggers.

8 The nature of discussions across ideological lines

8.1 The added value of qualitative analysis

Analyzing aggregate patterns of linkages across blogs is helpful for understanding the overall relationships among members of the political blogosphere. Similarly important, however, is a more in-depth look at the cross-ideological discussions in which participants engage. The aggregate statistics provided by the quantitative analyses do not provide enough nuanced information to help us understand the exact nature of how people engage others' differing viewpoints. We turn to an analysis of link context to address this point.

It may be that linking only happens for the purposes of criticizing others' views in a very simplistic manner. If this is the sole type of cross-linking that happens in the political blog world across ideological lines then Sunstein's argument about polarization may still hold true. If people are only turning to others' dissenting views for constructing straw-man arguments without really engaging with them in serious discussion then one may question the true value of cross-referencing others' writing. It is this limitation of the quantitative data analysis that our look at qualitative data addresses.

8.2 Types of links

We analyzed every cross-ideological post contained in our three-week sample. This provides us with over one hundred cases (42 conservative-to-liberal links and 63 liberal-to-conservative links). Five types of links emerged from our reading of the entries: (1) straw-man argument, (2) disagreement on substance, (3) neutral non-political, (4) redirect, and (5) agreement on substance. We explain these in turn below.

Straw-man arguments are posts in which one blogger links to another in order to point out the fallacy of an opponent's position without actually addressing the substance of that position in more than a cursory manner. An example of the straw-man argument is this entry posted by Oliver Willis in which he links to Glenn Reynolds of Instapundit:¹¹

Glenn Reynolds reclaims his jackass mantle in this idiotic post about the war in Iraq:

a proper way of marking the date would be with a mass apology to the Iraqi people, and to George W. Bush, for taking the wrong side at a crucial moment in history.

Hey, Reynolds, how about you warmongers apologize to the wives and families of the 1,500+ who died (plus the thousands of additional Iraqis)?

Sickos.

– Oliver Willis, March 18, 2005, 2:47pm

Post reproduced in full

Originally at: <http://www.oliverwillis.com/node/2096>

Now available at: <http://web.archive.org/web/20050321040932/http://www.oliverwillis.com>

The straw-man argument is meant for ideologically like-minded blog readers and serves to direct attention to the “obvious” deficiencies of the ideological opposition. While most straw-man arguments attack a specific position or argument posted to an opponent's blog,

¹¹ We use underlining to indicate where the link was present in the original post.

some straw-man arguments are generalized attacks on ideological opponents. This is most often accomplished by linking to the main page of an opponent rather than a specific post, as the example of this post by Hugh Hewitt illustrates. The writer links to Josh Marshall of Talking Points Memo and Kevin Drum of the Washington Monthly:

[...] As for the bin Laden tape – it ticks off Republicans across the board because it is rightly viewed as a butcher’s threat to kill some more if Bush is re-elected. Whether it changes even one vote remains to be seen, but it certainly raises an already intense level of commitment to the president’s re-election among his supporters to impossible-to-surpass levels. As a result, look for the surfacing of “Rove-did-it” theories at [TalkingPointsMemo](#) and [WashingtonMonthly](#) sometime soon, in the same category of the nutter “Bush was wired” postings. [...]

– Hugh Hewitt, October 29, 2004, 10:15pm

http://www.hughhewitt.com/old_site/cgi-bin/calendar.pl?month=10&year=2004&view=Event&event_id=537

The second category of posts, *disagreement on substance*, represents posts where one blog author links to a specific post of another author and uses that post to challenge the claims made in the linked-to post. An example is this post on the blog Pejmanesque pointing to an entry by Kevin Drum of the Washington Monthly’s Political Animal:

And relatedly, [Kevin Drum](#) is apparently demanding that conservatives show their bona fides regarding the issue of anti-Semitism through condemnations of Blankley’s statement by conservative bloggers.

Well, first of all, we can turn Kevin’s argument on its head and apply it just as well. Instead of saying the following (as Kevin does):

Conservatives routinely jump on every alleged piece of anti-Semitism out of France as proof of European moral decrepitude, and here at home they can get seriously bent out of shape by nothing more than liberals using Jewish names as examples of neocons (i.e., Kristol, Feith, Perle, Wolfowitz). But Blankley’s transparently racist imagery hasn’t caused much of a ripple.

We could say this:

Liberals routinely jump on every alleged piece of anti-Semitism out of the mouths of individual conservatives as proof of conservative moral decrepitude, and here at home they can get seriously bent out of shape by nothing more than conservatives using Jewish names as examples of political opponents (i.e., Soros). But Europe’s transparently racist imagery hasn’t caused much of a ripple.

– Pejman Yousefzadeh, June 7, 2004, 11:53am

<http://www.pejmanesque.com/archives/006824.html>

Blog posts that fall into this category directly address the content of the linked-to post and offer either a critique or refutation of the argument made therein.

The third set of blog posts fall into a category best characterized as *neutral or non-political*. Since the goal of this paper is to examine communication across ideological divides in the political realm, it is important to document all links between political blogs, even those that are not explicitly political in nature. A link from the Volokh Conspiracy to Talk Left illustrates this type of referencing.

BIRDBRAINS: [Talkleft](#) links to this story about thieves who came back to the scene of a crime to silence a talking parrot:

Fearing a parrot named Marshmallow could identify them, three thieves returned to the scene of the crime to silence the bird – only to be caught by police.
[...]

– Orin Kerr, October 28, 2004, 6:10pm
http://volokh.com/archives/archive_2004_10_24-2004_10_30.shtml#1099001438

The commentary is not political in nature. By linking to the post where he first saw the account of this event, the author is following the unwritten courtesy rule of blog writing whereby one gives credit to the source where one first encountered a story.

This type of linking is not irrelevant to the focus of our paper despite the lack of political content in the posts. The mere fact that bloggers are linking to others whose views do not agree with their own, regardless of the political nature of the writing signifies that the writer is staying up-to-date on what the other side covers, whether it be about parrots or presidential elections.

The fourth category of posts is a collection of links that *redirect* a reader from the post of one blogger to the writing of another. Redirection links differ from neutral non-political links for the purposes of this paper in so far as they deal with political issues. They are different, however, from disagreement or agreement on substance, because they do not express a clear opinion nor are they of the straw-man variety since they are not attacking a particular position. A redirection link can be viewed as a footnote of sorts, as a blogger cites the “source” of a story or references the work of another blogger without tackling the specifics of the original author’s commentary. In this post, Andrew Sullivan references an entry on Josh Marshall’s Talking Points Memo blog:

Maybe Not So Big A Deal: The tracking polls do not show big Bush movement after Osama’s intervention in the election. Hmmm. Josh has the [details](#).

– Andrew Sullivan, October 30, 2004, 7:15pm
http://www.andrewsullivan.com/index.php?dish_inc=archives/2004_10_24_dish_archive.html#109917791517974348

The use of the redirection link implies that the author is following the linked-to writer’s blog.

The final group of blog posts falls into a category we call *agreement on substance*. Opinions expressed in such posts are explicitly in agreement with the writing of the linked-to entry. An example of this is a post on the Evangelical Outpost pointing to Daily Kos:

Over the weekend the blogosphere was abuzz with anticipation after Powerline teased that a major newspaper would be breaking a story that would be damaging to the Kerry campaign. This morning the Washington Times broke the news that John Kerry is a liar?

U.N. ambassadors from several nations are disputing assertions by Democratic presidential candidate Sen. John Kerry that he met for hours with all members of the U.N. Security Council just a week before voting in October 2002 to authorize the use of force in Iraq.

While I hate to admit it, I have to agree with the [Daily Kos](#) on this one. This story won’t matter.

– Joe Carter, October 25, 2004
<http://www.evangelicaloutpost.com/archives/000967.html>

8.3 The context of linking among political blogs

Here, we turn to presenting the breakdown of the 105 posts by type of substance. The straw-man argument is the most prevalent method of cross-ideological linking and is often used to dismiss simply the positions of the “other side”. Straw-man arguments account for 43% of the 42 links from conservative blogs to liberals in our sample, and 54% of the 63 links from liberal blogs to conservatives in our group of entries that include cross-ideological linkages.

These straw-man arguments represent a basic repudiation of the “other side” and do not contribute to a substantive discussion of political issues. These arguments serve to reinforce the ideological position of the author by highlighting the “obvious” illogic of the political opposition. Nevertheless, straw-man arguments do represent cross-ideological communication in the political blogosphere, in so far as they establish a link between blogs of different political persuasions. Despite the negative tenor of straw-man attacks, it is important to bear in mind that these arguments represent a conscious choice of the author to follow and then link to others across the ideological divide, potentially increasing traffic and awareness of opposing opinions.

Posts that concretely address the content of a blog entry from an ideological opponent represent about a quarter (26%) of all conservative and about one fifth (21%) of all liberal posts with cross-ideological links. Substantive disagreement accounted for 12% of links from conservative to liberal blogs and 16% of links from liberals to conservatives, while substantive agreement accounted for 14% of links from conservatives to liberals and 5% of pointers from liberals to conservatives. The posts in this category are posts that specifically address the content of the blog entry to which they link and offer an opinion on validity of that content. Interestingly, conservative bloggers in our sample are not only more likely than liberals to agree with blogs from the other end of the ideological spectrum, they are also more likely to express agreement (14%) than disagreement (12%).

Posts that included links that redirect a reader to the writing of a blogger of a different ideological persuasion accounted for 36% of links from conservatives to liberal and 19% of links from liberals to conservatives. This suggests that conservatives are either more likely than liberals to find material that inspires them to post an entry in the writing of those who do not share their political affiliation, or simply that they acknowledge such sources more often. Neutral non-political links represent five percent and six percent of links respectively.

One interesting phenomenon that has direct bearing on the question of redirection links is the practice of guest blogging. Guest blogging entails authors posting, under their own name, on a blog other than their own. During our March sample week liberal blogger Jeralyn Merritt of Talk Left was asked to guestblog at Stephen Green’s conservative Vodkapundit. In this case, Merritt was one of four guest bloggers to post to Vodkapundit during Green’s absence.¹² Stephen Green, as the author of Vodkapundit and the individual with whom the site is personally identified, made the editorial decision to invite Merritt to guestblog in his absence, certainly with prior knowledge of her political leanings. Therefore, by inviting Merritt to be a guest on his blog, Green actively encouraged the posting of potentially liberal content to his site testifying to some bloggers’ interest in crossing over ideological lines.

¹²Her inclusion on Vodkapundit provided us with the methodological challenge of determining how to score her posts to that site. The question that we faced is whether we should score her posts as those of a liberal author or as those on a conservative blog. We opted for the latter.

9 Conclusion

The motivation for our project was to see how new communication technologies and the interactive services afforded by them are influencing people's political communication. Based on theories put forth by Sunstein (2001) in his book *Republic.com* about the potential isolating effects of new communication technologies, we tested empirically people's tendencies to isolate themselves from or engage themselves with political opinions different from their own. We focused on the most popular political blogs in a time period when political blogs rose to a significant level of popularity.

We find that although these political commentators are much more likely to engage those with similar views in their writing, they also address those on the other end of the ideological spectrum. The empirical results support Hypothesis 1 in that there is much more linking to those who share a blogger's ideological stance. That said, there is also some amount of linking to opposing points-of-view. As the qualitative analyses of the data showed, while a considerable proportion of these links are for straw-man arguments, numerous links substantively engage others' arguments or, in the least, politely acknowledge them as the source of some information discussed by the blogger.

Moreover, we find no support for Hypothesis 2 regarding the increasingly isolating role of the Internet. Over the ten-month span included in our data set, we find no evidence that conservative or liberal bloggers are addressing each other less at the end of our time period than at the beginning. If Sunstein's prediction was correct about an increase in fragmentation due to IT then we would observe EI ratios getting closer to -1 over time. However, we do not find this to be the case.

Comparing the blogroll data with the structure of connections in posts, we see that people tend to engage in conversations with blogs that may not appear on their links lists. This suggests that while blogrolls are one indicator of the types of content with which bloggers engage, it would be too simplistic to rely solely on such information for an understanding of bloggers' reading habits. Interestingly, while liberals seem more insular based on blogroll data, they are less so based on links in posts.

Future studies of political blog conversations could improve on what we presently know by expanding the extent of their data collection and analysis. Analyses could include more information about the blogs themselves such as number of contributors, how long since the blog was started, and demographic information about its authors and possibly readers. Data sets could include information about comments left in response to blog posts and the links and references mentioned in these contributions. The analyses could also be extended to links posted to blogs not included in the sample or mainstream media sources. All of these could add more nuanced information to the types of cross-ideological conversations occurring in the political blogosphere.

Taking these studies to a next level would require a more in-depth study of who is more likely to blog and engage in political discussions online in the first place. People are not homogeneous with respect to their blog uses. While some may be more likely to read or link to others who are in disagreement with their positions, other users may exhibit more isolating tendencies. Future work also needs to address this diversity in the Internet-user population.

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References

- Ackland, R. (2005). Mapping the U.S. political blogosphere: Are conservative bloggers more prominent? Australian National University.
- Adamic, L., & Glance, N. (2005). The political blogosphere and the 2004 U.S. elections: Divided they blog.
- Anderson, B. (1991). *Imagined communities: Reflections on the origin and spread of nationalism*. New York: Verso.
- Bimber, B. (2003). *Information and American democracy: Technology in the evolution of political power*. Cambridge: Cambridge University Press.
- Bimber, B., & Davis, R. (2003). *Campaigning online: The Internet in U.S. elections*. New York: Oxford University Press.
- Bloom, J. D. (2003). The blogosphere: How a once-humble medium came to drive elite media discourse and influence public policy and elections. In *2nd annual Pre-APSA conference on political communication: Mass communication and civic engagement*. Philadelphia, PA.
- Brin, S., & Page, L. (1998). The anatomy of a large-scale hypertextual web search engine. In *Seventh international World Wide Web conference*. Brisbane, Australia.
- Browning, G. (1996). *Electronic democracy: Using the Internet to influence American politics*. Wilton: Pemberton Press.
- Dahlgren, P. (2005). The Internet, public spheres, and political communication: dispersion and deliberation. *Political Communication*, 22, 147–162.
- DiMaggio, P., Hargittai, E., Neuman, R., & Robinson, J. (2001). Social implications of the Internet. *Annual Review of Sociology*, 27, 307–336.
- Fountain, J. E. (2001). *Building the virtual state*. Washington: Brookings Institution Press.
- Freedman, J. L., & Sears, D. (1965). Selective exposure. *Advances in Experimental Social Psychology*, 2, 58–98.
- Frey, D. (1986). Recent research on selective exposure to information. *Advances in Experimental Social Psychology*, 19, 41–80.
- Hill, K. A., & Hughes, J. E. (1998). *Cyberpolitics: Citizen activism in the age of the Internet*. Lanham: Rowman & Littlefield.
- Horrigan, J. B., Garrett, K., & Resnick, P. (2004). The Internet and democratic debate. Washington, D.C.: Pew Internet and American Life Project.
- Howard, P. E. N. (2003). Digitizing the social contract: Producing American political culture in the age of new media. *Communication Review*, 6, 213–245.
- Huckfeldt, R., & Sprague, J. (1995). *Citizens, politics, and social communication: Information and influence in an election campaign*. Cambridge: Cambridge University Press.
- Katz, J. E., & Rice, R. E. (2002). *Social consequences of Internet use: Access, involvement and interaction*. Cambridge: MIT.
- Klam, M. (2004). Fear and laptops on the campaign trail. *The New York Times Magazine*.
- Lazarsfeld, P., & Merton, R. K. (1954). Friendship and a social process: A substantive and methodological analysis. In M. Berger (Ed.), *Freedom and control in modern society* (pp. 8–66). New York: Van Nostrand.
- Lenhart, A., Horrigan, J. B., & Fallows, D. (2004). Content creation online. Washington, D.C.: Pew Internet and American Life Project.
- Lev-on, A., & Manin, B. (2005). Deliberation and online exposure to opposing views. In *Second Conference on Online Deliberation*. Stanford, CA.
- Marsden, P. V. (1987). Core discussion networks of Americans. *American Sociological Review*, 52, 122–131.
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415–444.
- Negroponte, N. (1995). *Being digital*. New York: Knopf.
- Norris, P. (2001). *Digital divide: civic engagement, information poverty and the Internet in democratic societies*. New York: Cambridge University Press.
- Olasky, P. (2004). Blogs: Media watchdogs or pundits in pajamas? In *MTV.com Headlines*.
- Rainie, L. (2005). The state of blogging (pp. 1–4). Washington, D.C.: Pew Internet and American Life Project.
- Rainie, L., Cornfield, M., & Horrigan, J. B. (2005). The Internet and campaign 2004.
- Rainie, L., Fox, S., & Fallows, D. (2003). The Internet and the Iraq War. Washington, D.C.: Pew Internet and American Life Project.
- Stromer-Galley, J., Foot, K. A., Schneider, S. M., & Larsen, E. (2000). How citizens used the Internet in election 2000. In S. Coleman (Ed.), *Elections in the Age of the Internet: Lessons from the United States* (pp. 21–26). London: Hansard Society.
- Sunstein, C. (2001). *Republic.com*. Princeton: Princeton University Press.
- Xenos, M., & Foot, K. A. (2005). Politics as usual, or politics unusual: Position-taking and dialogue on campaign web sites in the 2002 U.S. elections. *Journal of Communication*, 55, 169–185.