

# *The Blogosphere's Influence on Political Discourse: Is Anyone Listening?*

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## **ABSTRACT**

A growing body of evidence suggests that blogs influence political discourse. Unfortunately, there have been few systematic studies to gauge precisely which actors are influenced and on which issues. This paper provides an empirical assessment of the blogosphere's influence on political discourse by asking: what impact does blog discussion have on mainstream media, Congressional, executive and campaign discussion of political issues? To be more precise, this paper tracks the amount of attention that A-list bloggers, less popular bloggers, the mainstream media, Congress, the executive branch, the Kerry campaign and the Bush campaign devoted to 20 prominent political issues during each day of the 2004 campaign in order to evaluate the extent to which the "blog agenda" influences mainstream media coverage and statements by political elites. Using vector autoregression analysis to analyze the data generated from random samples of 20 A-list and 150 less popular political blogs, I find that while political bloggers exert their largest and most consistent influence on each other, they also have a significant influence on mainstream media, Congressional, executive and campaign discussion. Contrary to some recent theorizing, however, the influence of the blog agendas is tightly constrained to a small set of episodic issues and does not extend to continuing and long standing issues.

## THE BLOGGING EXPLOSION

“Blogging” – the act of creating and maintaining an online diary where information is chronologically posted, updated frequently and presented in reverse chronological order (Blood, 2005) – has become an incredibly popular activity in recent years. In 1999, the total number of blogs was estimated to be around 50 (Drezner and Farrell, 2004). In 2002, a *Newsweek* article estimated the total number of blogs at 500,000, with a new blog starting every 40 seconds.<sup>1</sup> Despite how extravagant these early estimates seemed at the time, they turned out to be excessively conservative. In 2003, a survey by the Perseus Development Corporation, for example, found that there were 4.12 million blogs. A study by the Pew Internet and American Life Project found that 7 percent of the 120 million internet users in the United States had created a blog by November 2004 and by January 2005 that number had increased to 10 percent. Similarly, as Figure 2 shows, the number of blogs tracked by *Technorati.com* – a website devoted to measuring activity in the blogosphere – has doubled every five months since 2003. At the time of this writing (March 2007), Technorati is currently tracking over 25 million blogs.

Following this overall growth in blogging, it appears that the number of people engaging in explicitly political blogging has also increased in recent years. As Figure 1 shows, the number of “political” blogs listed on the Eatonweb Portal<sup>2</sup> – a popular blog directory – has increased dramatically since 2001. Interestingly, political blogging seems to have grown faster than other kinds of blogging. Indeed, as Figure 1 also shows, the number of political blogs has increased at a faster rate than the number of art, technology, business, music and sports blogs. According to a

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<sup>1</sup> First, creating and maintaining a blog is free, does not require a significant time commitment and requires little technical knowledge. Second, blogs are free forms of expression that impose no restrictions on what the blogger can talk about or how he or she can talk about it. Third, blogs provide comment boxes that allow readers to respond to the statements the blogger has made in each post. Fourth, blog entries typically provide links to relevant sources and most blogs feature “trackback” capabilities that provide links to all of the sites that link to each post. Finally, blogs provide archives of previous posts.

<sup>2</sup> The growth in the number listing on the Eatonweb Portal closely mimics the growth of the number of blogs overall.

recent survey by the Pew Internet and American Life Project, there are currently 1.4 million blogs that contain purely political information (Lenhart and Fox, 2006).<sup>3</sup>

Unsurprisingly, the rapidly expanding number of political blogs has been accompanied by a surge in the amount of research on political blogging. While there have been many descriptive accounts of political blogging<sup>4</sup> and a significant number of studies on blogging's relationship to traditional forms of political participation<sup>5</sup>, the vast majority of scholarly attention in recent years has focused on how blogs influence the political world around them. To be more precise, there have been a spate of recent studies examining how mainstream media coverage (Drezner and Farrell, 2004; Smolkin, 2004; Roth, 2004), election campaigns (Trippi, 2004, Trammell, 2004), legislative politics (Bloom and Kerbel, 2007; Bloom, 2003; Wright, 2003) and international affairs (Drezner and Farrell, 2004; McKinnon, 2007, Zuckerman, 2007) are influenced by political blogs.

Unfortunately, most of this recent research has relied on anecdotal evidence and case studies of high profile instances of purported blogger influence rather than systematically testing for blogger influence on a wide variety of issues over a long period of time.<sup>6</sup> While these studies provide some initial insight into the conditions under which blogs may be influential, therefore, they do not provide any generalizable conclusions about the kinds of issues that blogs are likely to be influential on or the kinds of actors that blogs are likely to influence.

This paper provides an empirical assessment of the blogosphere's influence on political discourse by asking: what impact does blog discussion have on mainstream media, Congressional, executive and campaign discussion of political issues? To be more precise, this

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<sup>3</sup> As McKenna (2006) points out, political blogs may be a greater percentage of the total blogs if the definition of "political blogs" is expanded to include blogs that mix personal and political content.

<sup>4</sup> These descriptive accounts can be further divided into research that addresses blogging by "issue experts" (McKenna, 2006), members of Congress (Pole, 2006) and linkage patterns among political blogs (Hargittae, Gallo and Kaine, 2007; Adamic and Glance, 2005; Drezner and Farrell, 2005; Shirky, 2003).

<sup>5</sup> See, for example, McKenna and Pole (2004).

<sup>6</sup> For good examples of work of this kind see Bloom (2003), Scott (2004), Scott (2005) and Bloom and Kerbel (2007).

paper tracks the amount of attention that A-list bloggers, less popular bloggers, the mainstream media, Congress, the executive branch, the Kerry campaign and the Bush campaign devoted to 20 prominent political issues during each day of the 2004 campaign in order to evaluate the extent to which the “blog agenda” influences mainstream media coverage and statements by political elites. Using vector autoregression analysis to analyze the data generated from random samples of 20 A-list and 150 less popular political blogs, I find that while political bloggers exert their largest and most consistent influence on each other, they also have a significant influence on mainstream media, Congressional, executive and campaign discussion. Contrary to some recent theorizing, however, the influence of the blog agendas is tightly constrained to a small set of episodic issues and does not extend to continuing and long standing issues.

### **THE BLOG AGENDA**

In order to describe the fact that the small number of issues actually under consideration at any given moment is only a small subset of the larger population of issues that could, theoretically, be placed under consideration, political scientists have developed the concept of an “issue agenda.” An issue agenda is the “collection of issues which are given attention at any given time” (McCarthy, Smith and Zald, 293). Not all arenas of political life, however, have the same issue agendas. Indeed, building on the work of Rogers and Dearing (1988), McCarthy, Smith and Zald (1996) distinguish between four distinct, yet interrelated agendas in the political realm: the media agenda (the set of issues that receive attention in the mass media), the public agenda (the set of issues that are accorded importance by the mass public), the governmental agenda (the set of issues that receive attention in one or another governmental arena) and the electoral agenda (the set of issues that receive attention from candidates for public office). Extending the concept of an issue agenda into the arena of internet politics, I define the “blog agenda” as the collection of issues that receive attention in the blogosphere.

## WHO MIGHT LISTEN?

### THE MAINSTREAM MEDIA

Most of the recent research into the impact of blog content has focused on the blog agenda's influence on the mainstream media agenda. Attention to the blog agenda's influence on mainstream media coverage first emerged in response to the controversy surrounding Senate Majority Leader Trent Lott's (R-MS) resignation in 2002. On December 5<sup>th</sup>, 2002, Lott shocked the audience at former "Dixiecrat" Strom Thurmond's (R-SC) 100<sup>th</sup> birthday party by saying:

"I want to say this about my state: When Strom Thurmond ran for president we voted for him. We're proud of it. And if the rest of the country had followed our lead we wouldn't have had all these problems over all of these years either" (Bloom, 2003; 2).

Despite the fact that many members of the mainstream media were in attendance at the event, none of the prime time news shows airing that night mentioned Lott's statement and none of the major national newspapers included a story about the issue the following morning (Bloom, 2003). A number of prominent political bloggers, however, saw the quote in a story on ABC News's daily on-line column, *The Note*, and began blogging about it immediately. Indeed, within 24 hours of Lott's remarks being reported, popular liberal bloggers, such as Atrios and Josh Marshall, and popular conservative bloggers, such as Instapundit, had discussed the issue at length and had even provided links to previous statements on racial issues by both Thurmond and Lott (Bloom, 2003). Over the course of the next week, more bloggers began writing about the issue and the mainstream media began to take notice. On December 10<sup>th</sup>, the *New York Times* covered the story for the first time and each of the three nightly network news shows discussed Lott's remarks. A number of these stories even discussed the role that bloggers played in attracting the media's attention to the story.<sup>7</sup> In short, the mainstream media covered the Lott story only after bloggers had discussed it at length and it appears, therefore, that the blogosphere had an important impact on the media agenda.

<sup>7</sup> For good examples of stories that give credit to bloggers see Shachtman (2002) and Kurtz (2002).

In addition to this particular instance of blog influence, there is growing evidence that journalists take their cues for what to cover from blogs. Most notably, a December 2004 survey of mainstream media journalists found that 84 percent of journalists had visited a political blog in the past 12 months and approximately 30 percent of those reported visiting a political blog at least once a day on a regular basis (Roth, 2004). Moreover, many influential journalists, including Paul Krugman, Howard Fineman and Fareed Zakaria, have said that blogs form a critical part of their information-gathering activities (Drezner and Farrell, 2004; Smolkin, 2004). When coupled with the fact that bloggers are being frequently cited as sources in the media's coverage of major political events (Hennessy and Martin, 2006), this evidence suggests that journalists are increasingly attuned to the discussions taking place in the blogosphere.<sup>8</sup>

#### **CONGRESS, THE EXECUTIVE AND POLITICAL CAMPAIGNS**

There is a growing body of evidence that suggests blog discussion may also influence the issues that politicians choose to discuss. With respect to members of Congress, for example, Representative Jack Kingston (R-GA) has his communications staff read through 50 conservative blogs every day in order to keep the House Republican leadership up to speed on which issues are driving their base (Pfeiffer, 2006) and a recent survey has found that over 90 percent of congressional staffers said that they themselves or others in their congressional office read blogs (Sroka, 2006). Similarly, with respect to members of the executive branch, Jimmy Orr, the head of the White House's Internet activities, admits that many in the administration read blogs every day to keep up to date on the issues that are receiving attention (Fromkin, 2004). Finally, with respect to candidates for political office, Howard Dean's presidential campaign in 2004 devoted a great deal of attention to tracking which issues were discussed on

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<sup>8</sup> There are also a large number of sites, such as Daypop.com, Feedster.com and Technorati.com, that provide aggregate measures of what is being discussed in the blogosphere. The statistics provided by these sites could be used by journalists as shortcuts in determining what is being discussed in the blogosphere. There is, however, no evidence to data about how extensively journalists rely on sites such as these.

liberal blogs (Trippi, 2004) and the Kerry campaign had a staff member devoted to tracking discussion on both liberal and conservative political blogs (Daou, 2005). In short, it appears that blogs are becoming a way for politicians to monitor the issues that are important to their constituents and, as a result, have the potential to become an important influence on the congressional, executive and campaign agendas.

In addition to exerting influence through the content of their blogs, there is evidence that bloggers may be exerting a more direct influence over what politicians say. Indeed, in an effort to court bloggers, both parties have held briefings and strategy sessions with established political bloggers. The Democratic Party, for example, has held a number of meetings with liberal political bloggers to advise press secretaries on how to cultivate a meaningful relationship with the blogosphere (Bluey, 2006) and Republican Representative Jack Kingston (R-GA) has organized a series of blogging seminars and conference calls that have brought together GOP aides on Capitol Hill with popular right-leaning bloggers (Pfeiffer, 2006). Although it is unclear at this point whether the parties are attempting to exert some influence over what bloggers say on their blogs or simply attempting to gain insight into the issues that are important to bloggers, these meetings do create the potential for blogger influence on the issues that politicians choose to discuss.

Although most of the research discussed above suggests that only A-list blogs will exert an influence on the media, congressional, executive and campaign agendas,<sup>9</sup> there are also a number of ways that less popular blog discussion may have an impact on these agendas. First, journalists and politicians may read and take cues from less popular blogs in the same way that they read A-list political blogs and, therefore, there may be a direct causal relationship between the content of less popular blogs and discussion by mainstream media institutions and political

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<sup>9</sup> Drezner and Farrell (2004) asked journalists to identify the “top 3” blogs that they read. Interestingly, just 10 of the blogs listed by journalists accounted for over half of all mentions.

elites. Second, journalists and politicians may read only A-list blogs but A-list blogs may get a substantial amount of their content from less popular blogs – thereby producing an indirect effect on media and elite discussion. Finally, as a result of the fact that they rely on the aggregate number of bloggers discussing an issue, less popular blogs can have an impact on the so-called “buzz” indicators created by websites such as Blogdex, DayPop and BlogPulse. To the extent that journalists and politicians turn to these indicators for ideas about what to cover, less popular blogs may be able to have an important impact on the media, congressional, executive and campaign agendas.

### **OTHER BLOGGERS**

There are very few studies of political blogging that fail to mention the interconnected and dialogic nature of political discourse in the blogosphere. In addition to claims that the blogosphere is a newly emerging “public sphere” where people meet to discuss matters of public concern (Baioill, 2004), there is a growing body of research that suggests political bloggers spend most of their time responding to the arguments made by other political bloggers. Adamic and Glance (2005), for example, find that a large percentage of the links that bloggers use in their posts lead to other bloggers and Herring et al. (2005) find that the conversations between bloggers are a salient feature of activity in the blogosphere.

The fact that bloggers are likely to be influenced by other bloggers should not, however, be taken to mean that all bloggers are equally influential. In fact, influence in the political blogosphere appears to be driven by ideological considerations and highly skewed towards a few popular blogs. Adamic and Glance (2005), for example, find that political bloggers link primarily to bloggers who share their ideological predispositions and both Drezner and Farrell (2004) and Herring et al. (2005) find that the most popular political blogs get a disproportionate number of links from other blogs. While these findings should not be taken to mean that the relationship

between A-list and less popular blogs is unidirectional or that liberal and conservative blogs never influence each other, they do suggest that not all blogs exert the same level of influence in the blogosphere.<sup>10</sup>

## **RESEARCH DESIGN**

### **THE MODEL**

As previous research has shown (Wallsten, 2004), the relationship between the blog, media, governmental and campaign agendas is likely to be complex and bi-directional. In order to account for the existence of these dynamic, bi-directional links, I follow previous research into the relationship between different agendas (Bartels, 1996; Soroka, 2002) and rely on vector autoregression (VAR).<sup>11</sup> VAR models use lagged values of all of the variables in a system of interrelated variables to predict the current value of each variable in the system (Bartels, 1996).<sup>12</sup> Because VAR models treat all of the variables in the system as endogenous to the equation rather than forcing the researcher to specify the relationship between variables prior to the analysis, they are not only well suited to uncovering bi-directional relationships but they are also an appropriate methodology for conducting research when theory is unclear or underdeveloped (Wood and Peake, 1998). For these reasons, I employ VAR models in this paper to explore the relationships between the blog, media, governmental and campaign agendas during the 2004 campaign.

### **THE MEASURES**

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<sup>10</sup> As Drezner and Farrell (2004) point out, popular blogs often read less popular blogs to find fresh approaches on an issue and to locate new information. Less popular blogs, in other words, may exert an influence on popular blogs by acting as “fire alarms.”

<sup>11</sup> For an overview of the use of vector autoregression in political science see Freeman et al. (1989). For empirical examples of VAR see Wood and Peake (1996) and Bartels (1996).

<sup>12</sup> In the context of this study, VAR models the activity of each actor as a function of the past behavior of the other six actors in the analysis.

Although the notion of a blog agenda is conceptually clear, it does present some significant measurement and sampling problems. Indeed, unlike the agendas discussed above<sup>13</sup>, there is no immediately obvious way to measure the blog agenda and, as a result, there are important questions about how to proceed in tracking the issues that are given attention by bloggers. Which blogs, for example, should be used to gather data on the issues on the blog agenda – only A-list blogs, only less popular blogs or a mix of both? Similarly, how should “attention” be measured – by keyword use, link topics, amount of discussion or some other factor?

Fortunately, a number of different on-line organizations have suggested a number of different ways to track which issues are being discussed in the blogosphere. MIT Laboratory’s Blogdex project, for example, measures the issues that bloggers are talking about by tracking which links are popular in the blogosphere at any given time. Using a similar methodology, *Technorati.com* records the links that bloggers are using in the 50 million blogs they track in order to show what is popular in the blogosphere. Rather than focusing on the links bloggers use, BlogPulse indexes a sample of blog posts by keyword in order to determine which people, issues and news bloggers are discussing. Adopting a somewhat different method of analyzing keywords, DayPop provides insight into what bloggers are talking about by measuring “wordbursts” – words that show heightened usage over the previous day.<sup>14</sup>

Unfortunately, these measures of the blog agenda suffer from a number of problems. First, and most importantly, the raw data that are collected by these organizations are, for the

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<sup>13</sup> The development of research on issue agendas has produced consensus on which measures should be used in studies of each of the four different arenas. Research focusing on the public agenda, for example, typically rely on survey responses to the question, “what is the most important problem facing our nation today?” Research focusing on the media agenda, usually measures issue attention by tracking how frequently and how prominently an issue is covered in the news. By contrast, research focusing on the governmental and electoral agendas, rely on content analyses of legislative debates and candidate press releases and speeches, respectively. Each of these different agendas, in short, can be easily measured with a widely agreed upon set of measurement tools.

<sup>14</sup> Similar to the Blogdex project, DayPop also provides a list of the 40 most frequently cited links and the most frequently cited news articles by blogs.

most part, not publicly available. Technorati, for example, does not provide archived information and BlogPulse only displays data from the previous six months. Second, even when archived information is made available, only a limited amount of data is displayed. DayPop, for instance, provides an extensive archive of its “Word Burst,” “Top 40” and “Top News” measures of blog attention but displays only the first twenty results for each day. For researchers interested in studying anything outside of the few, major political issues that rank in the top twenty from day to day, therefore, the data in the DayPop archives will be unsatisfying. Finally, each of the on-line organizations described above are concerned with measuring what is popular in the blogosphere on the whole and, as a result, they are unlikely to focus on discussion of political issues. Indeed, a quick glance at the data provided by these sites will reveal that discussion of political issues ranks somewhere between very low and not at all on most measures of what bloggers are talking about. Measuring the political issues on the blog agenda, in other words, is not possible using the existing sources of data.

As a result of these problems and of the general uncertainty about how to best measure the blog agenda, I decided to create two alternative measures of the blog agenda for the 2004 Presidential campaign. The first measure of the blog agenda is derived from a sample of the popular, A-list political blogs and uses keywords to track issue discussion. Although this approach may seem straightforward, determining which blogs are on the A-list is complicated by the fact that there is no agreed upon system for ranking the popularity of a blog. As a result, a number of different sites that rely on a number of different criteria have emerged to rank the popularity of blogs. *Blogstreet*, *The Truth Laid Bear Ecosystem* and *Technorati*, for example, compile their rankings based on how many times a blog is linked to another blog. By contrast, *The Truth Laid Bear* compiles its rankings based on the number of “hits” each blog receives.<sup>15</sup>

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<sup>15</sup> The Truth Laid Bear uses statistics from Sitemeter (a software program that measures the number of hits a site receives) in determining how much traffic a blog receives. Unfortunately, not all bloggers use Sitemeter and, as a result, rankings based on the number of hits are often incomplete.

In order to create a population list of A-list blogs from which to sample, I downloaded the top 100 rankings from these four sources (*Blogstreet*, *The Truth Laid Bear Ecosystem*, *The Truth Laid Bear* and *Technorati*) during the first week of February 2005 and included all blogs that appeared on at least two of the four websites' top rankings.<sup>16</sup> In total, there were 84 blogs on the final population list. From this population list, I randomly sampled 20 blogs. As a result of the fact that I am only interested in the content of political blogs and, more specifically, the content of American political blogs, I checked each of the 20 sampled blogs to ensure that they discussed "political" issues and were written by authors in the United States.<sup>17</sup> Blogs that did not meet these two criteria were not included in the analysis that follows. Overall, three blogs did not discuss political issues, one blog was written by an author outside the United States and 16 blogs discuss political issues and were written by authors inside the United States.<sup>18</sup> The final sample of A-list blogs is included in Appendix 1.

The second measure of the blog agenda also relies on keywords to track issue discussion but samples a much different population: less popular political bloggers. Unfortunately, gathering a sample of less popular political blogs presents a more difficult problem than gathering a sample of A-list political blogs. Indeed, whereas the number of popular political blogs is relatively small and there are a few, well-known sites that are devoted to tracking A-list blogs, the number of less popular political blogs is literally countless and there is no single website that claims to track all less popular blogs. Fortunately, however, many bloggers choose to list their blogs on one of the many blog directories that have sprung up around the internet and, more importantly, these directories allow bloggers to categorize their blogs based on the

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<sup>16</sup> This approach is the one used by McKenna and Pole (2004) in their study of A-list political bloggers.

<sup>17</sup> I adopted a broad definition of "political" and excluded only those blogs that were devoted exclusively to the arts, literature and technological issues.

<sup>18</sup> The three blogs that did not discuss political issues were *geek and proud*, *kottkeorg*, and *Slashdot*. *Where is Raed?* was the blog not written by an author in the United States.

subjects the blogger thinks their blog discusses most. Since these directories allow for searches based on these subject keywords, it can be relatively easy to locate blogs that are political.

Despite the fact that these directories include only those blogs that have been submitted for inclusion by their authors and, as a result, cannot produce anything like a complete list of political blogs from which to sample, I relied on twelve of the most well known blog directories<sup>19</sup> to generate a population list of 10,732 unique political blogs.<sup>20</sup> From this list, I randomly sampled 250 political blogs.<sup>21</sup> Once again, because I am interested only in American political blogs, I checked each of the sampled political blogs to determine if the blog was written by an author in the United States. Of the 250 less popular political blogs sampled, 12 were not actually blogs, 33 had addresses that no longer worked, 58 blogs were not written by authors in the United States and 147 were written by authors in the United States.<sup>22</sup>

Before discussing the blog agenda that emerged from these samples of blogs it is useful to say a few words about the blogs themselves. First, my sample of A-list blogs appears to slightly over represent liberal blogs. Using the coding scheme presented in Appendix 2, I coded each of the 16 A-list blogs in my sample for ideology. Overall, there were seven liberal blogs (44 percent), seven conservative blogs (44 percent) and two blogs with no clear ideological position (12 percent). In order to determine whether this sample was representative of all A-list blogs, I coded each of the 69 A-list blogs that were written by authors in the United States and focused on political issues for ideology. Of these 69 A-list blogs, there were 25 liberal blogs (36 percent), 32 conservative blogs (46 percent), two independent blogs (3 percent) and 10 blogs with no clear

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<sup>19</sup> The twelve directories were: *Blogwise*, *Blogarama*, *BlogCatalog*, *BlogUniverse*, *BlogSearchEngine*, *BlogStreet*, *CampaignLine*, *ETalkingHead*, *GetBlogs*, *EatonwebPortal*, *Globe of Blogs* and *Yahoo's* directory of blogs.

<sup>20</sup> This is similar to the approach used by Adamic and Glance (2005). In their article they create a sample of 1000 political blogs by downloading the listings of political blogs from several online weblog directories, including *eTalkingHead*, *BlogCatalog*, *CampaignLine*, and *Blogarama*.

<sup>21</sup> In addition, I excluded the blogs that were included in the A-list population from the final list of less popular political blogs.

<sup>22</sup> A list of the blogs included in the final sample is available upon request.

ideological position (14 percent).<sup>23</sup> As a result of the sampling error produced by the small size used in this study, therefore, liberal blogs are slightly overrepresented while blogs with less clear ideological leanings and independent blogs are slightly underrepresented.

Second, the number of liberal blogs in my sample of less popular political blogs far exceeds the number of conservative or independent blogs. To be more precise, there were 67 liberal blogs (46 percent), 44 conservative blogs (30 percent) and 11 independent blogs (7 percent) in my sample of 147 less popular political blogs.<sup>24</sup> In addition to being relevant to my specific goals of analyzing the blog agenda during the 2004 campaign, the results of this ideological coding are also interesting because they provide some initial insight into the distribution of ideological commitments in the blogosphere. While further research is needed to explore whether the large number of liberal bloggers in my sample is merely a result of a tendency on the part of conservative bloggers to avoid posting their blogs on blog directories, it appears that liberals have adopted blogging as a form of political expression in far greater numbers than either conservatives or independents.<sup>25</sup> These findings are consistent with previous research that has shown internet activists are actually more likely to be liberal than conservative or independent (Hill and Hughes, 1998).

Third, there were significant differences between the level of activity on the A-list blogs in my sample and on the less popular blogs. To be more precise, A-list bloggers posted an average of 10.5 times per day while less popular bloggers posted only 1.6 times per day.

Although this finding is not surprising given that A-list blogs are popular, in part, because they are frequently updated with new content to attract readers, there was also significant variation in

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<sup>23</sup> Many of the blogs that were categorized as “no clear ideological position” had multiple authors that contradicted or challenged each other.

<sup>24</sup> In addition, there were 25 blogs that could not be coded for ideology. Most of these blogs were very short and, as a result, contained very little information on which to base a classification of ideology. Indeed, some of these 22 blogs contained only a few posts and made no reference to politics.

<sup>25</sup> Another possibility is that the blog directories used here are somehow unattractive to conservative bloggers and, as a result, the population list from which the sample was drawn under represents conservative blogs.

the level of activity within each sample. Among the A-list blogs in my sample, for example, *Informed Comment* averaged only 2.7 posts per day while *Instapundit* posted an average of 20.6 posts per day. Similarly, among the less popular political bloggers, *Random Thoughts* averaged 34.3 posts per day while *The Whine Rack* posted only 34 times during the whole period of the study. In short, political bloggers, regardless of popularity, devote vastly different amounts of time and attention to their political blogs.

Fourth, although all of the blogs in my sample of A-list blogs dealt almost exclusively with political issues, the blogs contained in my sample of less popular blogs varied widely in the overall level of political discussion. Some of the blogs in my final sample of less popular blogs were exclusively political and offered almost no details on the personal life of the blogger while other blogs doubled as personal blogs – with stories and anecdotes about the blogger’s personal life filling a large portion of the blog. This variation in the amount of political discussion is the inevitable product of the fact that blogs allow authors to discuss any topic they want and that the blog directories from which the less popular blogs in this paper were sampled impose no restrictions on what keywords can be used to describe one’s blog.

Once these two samples of political blogs were collected, two measures of the blog agenda were constructed by tracking daily discussion of 20 issues over the five month period of the study. These 20 issues were selected not only because they represent the important issues being debated during the period of study but also because they provide a useful mix of foreign and domestic, continuing and episodic and legislative and more broadly political issues. More specifically, the 20 issues consisted of 11 domestic policy issues (five of which were episodic and eleven of which were continuing) and nine foreign policy issues (four of which were episodic and five of which were continuing). Although the 20 issues did not capture the total range of issues discussed in political blogs or in the mainstream media, they did seem to

constitute the majority of blog discussion and media coverage from July 1 to November 30, 2004. A list of the issues can be found in Table 1 and a list of the keywords used to identify them in the content analysis can be found in Appendix 3.<sup>26</sup>

Using the list of issue keywords presented in Appendix 3, a “keyword in context” program was used to code each of the 24,307 posts in the sample of A-list blogs and each of the 27,079 posts in the sample of less popular blogs. Posts were coded for each issue as either having mentioned the issue (i.e. the issue keyword was used) or not having mentioned the issue (i.e. the issue keyword was not used). Each mention of an issue keyword was coded for every post and, as a result, many posts are recorded as mentioning multiple issues.

As might be expected, there was wide variation in the amount of attention each of the 20 issues studied here received in the blogosphere. As Table 2 shows, however, liberal and conservative blogs tended, regardless of popularity, to focus on different issues. Indeed, although both liberal and conservative blogs devoted considerable attention to the war in Iraq (being discussed in 12.5 and 15.6 percent respectively), conservative blogs were more than twice as likely to discuss Genocide in Darfur (.3 to .7 percent), three times more likely to discuss immigration (.5 to 1.6 percent) and nearly ten times more likely to discuss the so-called “Memogate” controversy (.4 to 3.1 percent).

As Table 2 also shows, however, there were significant differences between the amount of attention that A-list and less popular blogs devoted to certain issues regardless of their ideology. For almost every one of the 20 issues in this study, A-list blogs were more likely to discuss the issue than less popular blogs. A-list blogs, for example, were twice as likely to discuss the war in Iraq (8.5 to 17.5 percent), five times more likely to discuss the Israeli-

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<sup>26</sup> The key words were selected because they are words that seem essential to discussing the issue. In other words, mentions of key words are a necessary but not sufficient condition for discussion of the issue.

Palestinian conflict (.5 to 2.6 percent) and ten times more likely to discuss the story of missing explosives at al Qa Qaa (.1 to 1.1 percent).

In order to measure the media, congressional, executive and campaign agendas during the campaign, a number of different indicators were constructed. First, as a measure for mainstream media coverage, I used a daily count of the number of stories in the *New York Times* that mentioned the issue keywords listed in Appendix 3.<sup>27</sup> Second, as a measure for congressional discussion, I used a daily count of the number of congressional hearings, floor speeches and other public statements by members of Congress that mentioned the issue keywords in Appendix 1.<sup>28</sup> Fourth, as a measure of executive branch discussion, I used a daily count of the number of speeches, press briefings and other public statements by the President, Vice President, cabinet officers and agency heads and their press secretaries and staff that mentioned the issue keywords in Appendix 1.<sup>29</sup> Finally, as a measure of campaign discussion, I used a daily count of the number of press releases from the Bush and Kerry campaigns that mentioned the keywords in Appendix 1. Once again, each mention of an issue keyword was coded for every article and, as a result, many articles are recorded as mentioning multiple issues.

As a point of comparison to the blog agendas shown in Table 2, the media, congressional, executive and campaign agendas during the period of this study are presented in Table 3. Similar to discussion in the blogosphere, the war in Iraq and issues related to terrorism were the most widely talked about issues in the mainstream media, Congress, the executive and by the Kerry and Bush campaigns. There were, however, also important differences between the amount of attention each of these actors devoted to certain issues and the amount of discussion those issues received in the blogosphere. The mainstream media, for example, discussed immigration and

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<sup>27</sup> *The New York Times* was selected to represent the media agenda because it is the elite newspaper in the United States (Winter and Eyal, 1981) and because the *Times*' coverage usually serves as a guide for what is important to other media outlets (Graber, 1997). Editorials and letters to the editor, however, were excluded from the final counts of the number of stories.

<sup>28</sup> This measure is derived from a search of the archives of the Federal News Service.

<sup>29</sup> This measure is also derived from a search of the archives of the Federal News Service.

North Korea far more than bloggers did and both the Kerry and Bush campaigns completely ignored a number of issues, such as “Memogate,” the Israeli-Palestinian conflict and genocide in Darfur, that were important to bloggers.

## THE ESTIMATION

The first step in VAR analysis is to determine the appropriate number of lags to include in the system of equations that is being estimated.<sup>30</sup> Following Sims (1980), I determined the number of lags to include in each model by sequentially adding lags to the system of equations and testing for the statistical significance of each additional lag using a modified F-test. Additional lags need to lead to a significant improvement in the fit of the VAR model in order to be included.<sup>31</sup> Based on Akaike’s Information Criterion (AIC) and the Final Prediction Error (FPE) as well as degree of freedom considerations, I selected different lag periods – ranging from one to five days – for each of the 20 issue time series studied here.<sup>32</sup> A list of the lag periods for each issue can be found in Appendix 4.

Because the equations in VAR analysis are estimated as a system, it is not possible to directly interpret the individual coefficients that are produced in the analysis. More specifically, indirect effects and multicollinearity make the interpretation of coefficients derived from VAR analysis difficult. As a result of these problems, I follow other research using VAR models and present the results of Granger causality tests and impulse response functions rather than the actual coefficients from the VAR estimation (Soroka, 2002).

Granger causality tests help uncover the causal relationships that exist between the

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<sup>30</sup> Determining the appropriate number of lags ( $p$ ) in VAR analysis is crucial. As Enders (2004) writes, “appropriate lag length selection can be critical. If  $p$  is too small the model is misspecified; if  $p$  is too large, degrees of freedom are wasted” (281). In addition, Gujarati (1994) points out that Granger exogeneity tests can be highly sensitive to lag lengths.

<sup>31</sup> Although it is possible to include separate lag lengths for variable, most studies using VAR analysis use the same lag length for all equations (Enders, 2004).

<sup>32</sup> The VAR was also checked to ensure stability. All of the eigenvalues were within the unit circle, thereby, satisfying the stability condition.

variables in the system of equations.<sup>33</sup> “Granger causality” is based on the idea that “variable X causes another variable Y, if by incorporating the past history of X one can improve a prediction of Y over a prediction of Y based solely on the history of Y alone” (Freedman, 1983; 328) and Granger causality tests, therefore, provide statistical evidence for whether lags of one variable Granger cause any of the other variables in the system. More specifically, a chi-squared statistic is used to test the null hypothesis that the lags of the independent variables are significantly different from zero. A significant chi-squared test means that the independent variable “Granger causes” the dependent variable while an insignificant chi-squared test means that the independent variable does not “Granger cause” the dependent variable.

Although Granger causality tests provide a good measure of the overall nature of the causal relationships between variables, they do not offer any readily interpretable information about the precise direction, magnitude or dynamics of the causal effects.<sup>34</sup> As a result, I also display the results of “impulse response functions” – which use the coefficients from the system of equations to simulate how each of the variables in the system react when one of the other variables is “shocked” by a one standard deviation increase in its variance. To be more precise, impulse response functions extend the findings of the Granger causality tests by providing more detailed information about whether each actor has a positive or negative influence on the amount of blog discussion for each issue, whether the impact of each actor is large or small and whether the impact of each actor is felt immediately or after a delay.

## RESULTS

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<sup>33</sup> Because VAR is sensitive to non-stationarity in the data, we conducted a Dickey-Fuller test for each of the time series and, in each case, the null hypothesis of a unit root was strongly rejected. In addition, we examined the autocorrelation and partial autocorrelations coefficients and found evidence of stationarity.

<sup>34</sup> Because VAR is a system of equations, it is not possible to directly interpret the individual coefficients that are produced in the analysis. More specifically, indirect effects and multicollinearity make the interpretation of coefficients derived from VAR analysis difficult (Soroka, 2002).

As suggested above, there is no doubt that political blogs have the potential to influence the agendas of media and elite actors. To what extent, however, do the A-list and less popular blog agendas actually influence the mainstream media, Congressional, executive and campaign agendas? Table 4 displays the results of the Granger causality test for A-list political blogs and Table 5 displays the results for less popular political blogs – with significant entries indicating that blog discussion has a causal impact on the listed actor’s discussion of that particular issue.

The findings presented in Table 4 show that the impact of A-list blog discussion varied dramatically across actors. As Table 4 shows, statements by Congress and Bush and Kerry campaign releases were rarely influenced by A-list blog discussion. Indeed, A-list blog discussion significantly influenced congressional discussion on only four issues (“Memogate,” civil rights, moral values and voter fraud), Kerry campaign discussion on only three issues (abortion, missing explosives from al Qa Qaa and the Swift Boat Veterans for Truth campaign) and Bush campaign discussion on only four issues (the Osama bin Laden video, Iraq, North Korea and the Swift Boat Veterans for Truth campaign). By contrast, A-list blog discussion had a significant impact on executive branch statements, mainstream media coverage and less popular blog posts for a fairly large number of issues. To be more precise, A-list blog discussion “Granger caused” executive branch discussion on seven issues (the Osama bin Laden video, genocide in Darfur, missing explosives from al Qa Qaa, Mary Cheney’s sexuality, moral values, the Swift Boat Veterans for Truth campaign and voter fraud), “Granger caused” mainstream media discussion on eight issues (“Memogate,” Afghanistan, the Osama bin Laden video, Mary Cheney’s sexuality, moral values, social security, the Swift Boat Veterans for Truth campaign and voter fraud) and “Granger caused” less popular blog discussion on 14 issues (“Memogate,” abortion, the Osama bin Laden video, genocide in Darfur, immigration, Iran, Iraq, Mary Cheney’s sexuality, moral values, North Korea, social security, the Swift Boat Veterans for

Truth campaign and voter fraud).

The results of the Granger causality tests presented in Table 4 not only display how the influence of A-list blog discussion varies across actors, but also how the influence of A-list blog discussion varies across issues. On a number of issues, A-list blog discussion exerted no influence on media, elite or less popular blog discussion. More specifically, on four of the 20 issues studied here (prisoner abuse at Abu Ghraib, affirmative action, gay marriage and Palestine) A-list blog discussion does not “Granger cause” congressional, executive, mainstream media or campaign discussion. On a number of other issues, however, A-list blog discussion exerted a significant influence on the discussion of multiple actors. A-list blog discussion of the Osama bin Laden video, moral values and voter fraud, for example, influenced discussion by four of the six actors studied here and A-list blog discussion of the Swift Boat Veterans for Truth advertising campaign influenced discussion for every actor except Congress. To put all of this differently, the influence of A-list blog discussion on congressional and executive branch statements, mainstream media coverage, campaign press releases and less popular blog posts was not uniform across issues.

The results of the Granger causality tests for less popular blog discussion presented in Table 5 closely mimic the results of the Granger causality tests for A-list blog discussion discussed above. As Table 5 shows, less popular blog discussion rarely influenced statements made by Congress or the Kerry and Bush campaigns. Indeed, less popular blog discussion “Granger caused” congressional discussion on only five issues (“Memogate,” the Osama bin Laden video, moral values, the Swift Boat Veterans campaign and voter fraud), Kerry campaign discussion on only four issues (prisoner abuse at Abu Ghraib, genocide in Darfur, missing explosives from al Qa Qaa and the Swift Boat Veterans campaign) and Bush campaign discussion on only three issues (missing explosives from al Qa Qaa, the Swift Boat Veterans for

Truth campaign and voter fraud). By contrast, less popular blog discussion exerted a significant influence on executive branch statements, mainstream media coverage and A-list blog posts for a relatively large number of issues. More specifically, less popular blog discussion influenced executive branch discussion on nine issues (“Memogate,” the Osama bin Laden video, prisoner abuse at Abu Ghraib, genocide in Darfur, Mary Cheney’s sexuality, missing explosives from al Qa Qaa, moral values, the Swift Boat Veterans for Truth campaign and voter fraud), mainstream media coverage on seven issues (“Memogate,” Iran, Mary Cheney’s sexuality, missing explosives from al Qa Qaa, moral values, Palestine and voter fraud) and A-list blog discussion on nine issues (“Memogate,” the Osama bin Laden video, prisoner abuse at Abu Ghraib, civil rights, immigration, Mary Cheney’s sexuality, missing explosives from al Qa Qaa, moral values, the Swift Boat Veterans for Truth campaign and voter fraud).

The results of the Granger causality tests presented in Table 5 also show that the influence of less popular blogs varies significantly across issues. On a relatively large number of issues, less popular blog discussion exerted no impact on any of the other actors’ discussion. To be more precise, less popular blog discussion did not “Granger cause” congressional, executive branch, mainstream media, campaign or A-list blog discussion on seven of the 20 issues studied here. On a number of other issues, however, less popular blog discussion did exert a significant influence on the discussion of the other actors. Less popular blog discussion of “Memogate” and moral values influenced discussion of four of the other actors and less popular blog discussion of missing explosives from al Qa Qaa, the Swift Boat Veterans for Truth campaign and voter fraud influenced discussion of five of the six other actors studied here. Similar to the influence of A-list blog discussion, therefore, it appears that the influence of blog discussion varies significantly across issues.

As suggested above, the results of Granger causality tests provide a good measure of whether a causal relationship exists between variables but do not offer any insights into the precise direction, magnitude or dynamics of that relationship. As a result, I present impulse response function results in Tables 6 and 7. More specifically, Tables 6 and 7 display the number of standard units that each variable is predicted to change after shocking the A-list and less popular blog variables by one standard deviation.

Consistent with the results of the Granger causality tests presented above, A-list blog discussion had its strongest and most consistent influence on less popular blog discussion. As Table 6 shows, the less popular blog variable was the most responsive of the actor variables on 14 of the 20 issues studied here. Moreover, the average impact of a one standard deviation shock to the A-list blog discussion variable was  $-.15$  standard units for less popular blog discussion compared to  $.03$  standard units for media coverage,  $.00$  for Congressional statements and  $.01$  for executive branch statements and Kerry and Bush campaign press releases. In short, it appears that A-list blog discussion exerts its greatest impact on less popular blog discussion.

Although less popular blog discussion showed the greatest overall responsiveness to the content of A-list blogs, it is important to note that this responsiveness did not always lead to an increase in the number of less popular blog posts. To be more specific, on three issues – “Memogate,” genocide in Darfur and missing explosives from al Qa Qaa – shocking the A-list blog variable by one standard deviation led to significant decreases in the number of less popular blog posts for a number of days after the shock and on one issue – Mary Cheney’s sexuality – shocking the A-list blog variable led to a significant decrease on the first day after the shock. To state the matter simply, it appears that A-list blog discussion can discourage rather than encourage less popular blog discussion on some issues.

Despite the fact that, as suggested above, A-list blog discussion “Granger causes” discussion on a number of different issues, the magnitude of this causal influence is often weak. Indeed, as Table 6 shows, shocks to the A-list blog variable often produce only very small changes in the congressional, executive, media and campaign variables. The three exceptions to this general pattern were Kerry campaign press releases on the issue of missing explosives and mainstream media coverage of moral values and the bin Laden video – all of which showed large and consistent increases in response to increases in A-list blog discussion. Overall, however, it appears that A-list blog discussion has a significant, albeit, very small impact on the amount of attention that journalists and political elites devote to most issues.

In addition to providing insight into the magnitude and direction of the impact produced by A-list blog posts the results presented in Table 6 also provide some information about how quickly media, congressional, executive, campaign and less popular blog discussion responds to A-list blog discussion. With a very small number of exceptions, A-list blog discussion showed their strongest influence within three days and the magnitude of the influence declined steadily over time for most issues. It appears that when the mainstream media, Congress, the executive branch, the campaigns and other political bloggers are influenced by the discussion of A-list blogs they are influenced quickly rather than after a long delay.

In much the same way that A-list blogs exerted their greatest influence on less popular blog discussion, less popular blogs had their strongest impact on A-list blog discussion. With the exception of mainstream media coverage on “Memogate,” prisoner abuse at Abu Ghraib and moral values, less popular blog discussion rarely influenced discussion by any of the non-blog actors. To be more precise, as Table 7 shows, the A-list blog discussion variable was the most responsive of the actor variables on 12 of the 20 issues studied here and the average impact of a one standard deviation shock to the less popular discussion variable was .11 standard units for

less popular blog discussion (compared to only .02 standard units for media coverage, .01 for executive branch statements and .00 for Congressional statements and Kerry and Bush campaign press releases). In short, less popular blog discussion does have an influence but this influence is limited primarily to A-list blogs and media coverage of a small number of issues and does not extend to Congress, the executive branch or the campaigns.

Once again mimicking the results from the analysis of A-list blogs, the results presented in Table 7 show that the impact of less popular blog discussion is likely to emerge immediately rather than after a delay. For almost every actor on almost every issue, less popular blog discussion showed its strongest influence within three days and the magnitude of the influence declined rapidly over time for most issues. It appears, therefore, that when the mainstream media, Congress, the executive branch, the campaigns and A-list blogs are influenced by the discussion found on less popular blogs they are influenced quickly.

## DISCUSSION

What do these results suggest about the influence of the A-list and less popular blog agendas on the mainstream media, Congressional, executive and campaign agendas? First, bloggers exert their largest and most consistent influence on each other. To be more precise, A-list blogs were influenced by less popular blogs on nine of the 20 issues studied here and less popular blogs were influenced by A-list blogs on 14 of the 20 issues. These findings present a serious challenge to top-down, elite-driven theories of political discourse that suggest that information, ideas and issue frames follow a one-way path from political elites and mainstream media to the mass public.<sup>35</sup> To be more precise, these findings suggest that bloggers do not rely

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<sup>35</sup> A representative sample works that adopt an elite perspective on mass opinion can be found in Brody (1991), Carmines and Stimson (1989), Erikson, MacKuen, and Stimson (2003), Gerber and Jackson (1993), Lupia and McCubbins (1998), Page and Shapiro (1992), Popkin (1991), Stimson (1991), Zaller (1992). For a critique of elite opinion theories, see Lee (2002).

solely on elite cues in deciding what to blog about and, more importantly, that bloggers are participating in an extensive form of political dialogue with the rest of the blogosphere.

Second, A-list blog discussion had a larger and more consistent impact than less popular blog discussion on all of the issues and for all actors studied here. The fact that A-list blogs exert a greater influence than less popular blogs should not be surprising. Indeed, A-list blogs are likely to be read by politicians and journalists not only because they receive the most traffic and, as a result, are likely to be the most influential with the mass public but also because they are written by authors with the most experience in politics and in political commentary. A recent survey of popular bloggers, for example, found that a large proportion of A-list political bloggers have earned advanced degrees and are currently employed as journalists or professors (McKenna and Pole, 2004). More specific to my sample of A-list blogs, 60 percent of the authors in my sample have a graduate degree and 65 percent are employed as journalists, professors or political consultants. When coupled with the fact that they attract a large audience, these qualifications and experience make A-list blogs a more attractive source than less popular blogs for politicians and journalists who are looking for insightful discussion of the day's important political issues.

Finally, the influence of both the A-list and less popular blog agendas was highly contingent upon the type of issue being discussed. Although most recent theorizing has implied that the blog agendas can influence the mainstream media, Congressional, executive and campaign agendas equally across issues, it appears that the blog agendas are actually more likely to exert a significant impact on discussion of episodic issues, such as "Memogate," the Swift Boat Veterans advertising campaign and missing explosives from al Qa Qaa, than on discussion of long standing issues, such as abortion, affirmative action and the Israeli-Palestinian conflict. Indeed, as Tables 8 and 9 show, both A-list and less popular blog discussion exerted a significant influence on media, congressional, executive and campaign discussion on a larger percentage of

episodic issues than continuing issues (44.4% to 10.9% for A-list blogs and 57.8% to 3.6% for less popular blogs). Interestingly, as Tables 8 and 9 also show, both A-list and less popular blogs had a greater influence on domestic episodic issues than on foreign episodic issues. To be more specific, A-list blog discussion influenced media, congressional, executive and campaign discussion on 56% of domestic episodic issues (compared to 30% of foreign episodic issues) and less popular blog discussion influenced media, congressional, executive and campaign discussion on 64% of domestic episodic issues (compared to 50% of foreign episodic issues). Overall, therefore, it appears that blogs do have an impact on journalists and politicians but this impact is generally small and is limited to a tiny subset of political issues.

These findings, when considered alongside recent research that shows bloggers take their cues about what to blog about from media and elite discussions, (Wallsten, 2005), suggest a general storyline about the relationship between blogs, the mainstream media and politicians. It appears that political bloggers, who rely primarily on mainstream media coverage and the messages of politicians for their information (Adamic and Glance, 2005; Scott, 2005) and who are likely to view themselves as “elite watchdogs” (McKenna and Pole, 2004), probably decide to blog about an issue when they see it debated in the mainstream media. Journalists and politicians, who increasingly rely on political blogs as part of their daily newsgathering routines (Drezner and Farrell, 2004a) and who frequently use political blogs as a barometer for the public’s interest in a story (Drezner and Farrell, 2004b), then decide whether to discuss an issue further based on activity in the blogosphere.<sup>36</sup> As suggested above, this process probably occurs fairly quickly – with bloggers and journalists reacting to each other within a few days – and is more likely to occur on episodic issues than on continuing issues. To put all of this differently,

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<sup>36</sup> Of course, it is still unclear whether journalists are influenced by the “quality” (i.e. how much controversy the issue is generating, whether new aspects of the issue are being discussed, etc.) or the quantity (i.e. how many different people are talking about the issue, how many words are devoted to the issue, etc.) of discussion in the blogosphere. Future research may want to explore this question further.

the relationship between blogs, journalists and politicians is primarily a high speed, three-way street rather than a slow moving, one-way road leading from one actor to another.

## CONCLUSION

This paper began by asking: what impact does blog discussion have on mainstream media, Congressional, executive and campaign discussion? Using vector autoregression on the data generated from a content analysis of 20 randomly selected A-list blogs and 150 randomly selected less popular blogs, I found that while political bloggers exert their largest and most consistent influence on each other, they also have a significant influence on mainstream media, Congressional, executive and campaign discussion. Contrary to some recent theorizing, however, the influence of the blog agendas is tightly constrained to a small set of episodic issues and does not extend to continuing and long standing issues. Blog influence, in short, is highly contingent upon the actors and issues in question.

The findings of this paper suggest a number of directions for future research. First, the analysis presented here might be extended by looking for more direct evidence of blog influence. Indeed, although the findings here suggest that blogs have a small but significant influence on media and elite discussion, this conclusion rests on an admittedly slender reed of statistical analysis.<sup>37</sup> In order to make a stronger case for the influence of political blogs, future research should employ a more detailed content analysis of media and elite discussion that focuses on the sources that journalists and politicians cite. More specifically, future research might explore the extent to which bloggers are cited as sources by mainstream media institutions and politicians and, more importantly, the extent to which bloggers are cited as sources on discussions of episodic – as opposed to continuing – issues. If bloggers are frequently cited by journalists and

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<sup>37</sup> Regression analyses like the ones presented here require that no significant variables are excluded from the model. When attempting to assess the influence of various agendas on one another, however, it is difficult to fully specify the model because it is difficult to measure reality. As a result, a potential confound in the analysis here is that all actors are responding to real world events with different time lags and not responding to discussion by the other actors.

politicians in their discussions of episodic issues, the case for blog influence made here will be strengthened considerably.

Second, a measure of the issues that are accorded importance by the mass public is needed to ensure that the estimates presented here are reliable and accurate. The addition of a measure of the public agenda is important for the kind of analysis presented here because excluding an important variable from the system can produce biased estimations of the causal effects of each actor. If, as a long tradition of research suggests, the public agenda has a significant influence on the media, governmental and campaign agendas, excluding it from the analysis may lead to inaccurate conclusions about the influences on the blog agenda. While Gallup's "Most Important Problem" series is the most frequently used measure of the public agenda, it is administered in five to six week intervals and, therefore, not very useful for studies that seek to explore agenda dynamics at the daily or weekly levels. Nevertheless, future work on the relationship between the blog, media, governmental and campaign agendas should include a measure of the public agenda in order to ensure accurate estimates about the causal effects of these different actors.

Finally, more recent studies of the relationship between the blog and media, congressional, executive and campaign agendas should be conducted in order to assess the extent to which the influence of political blogs has changed over time. As suggested above, the influence of political blogs over media and elite discussion during the 2004 campaign was fairly small and limited to episodic issues. It appears, however, that politicians have only recently – in 2006 – realized that blogs may be useful for more than just raising money and recruiting volunteers and, as a result, blog influence may be greater now than it was only three years ago. The Republican Party's efforts to keep track of on-line political discussion, for example, did not begin in earnest until early 2006 (Pfeiffer, 2006) and Peter Daou (2005), who was in charge of

Kerry's internet activities in 2004, said that for Democrats "the Internet was perceived as a source of cash, not as a research or communications tool" (1). A study that analyzes politician responsiveness in 2006 or 2008 rather than in 2004, therefore, may find that the Congressional, executive and campaign agendas follow the A-list and less popular blog agendas more closely than what I have found here.

## APPENDIX 1 – SAMPLE OF A-LIST BLOGS

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<b>Blog Title</b>	<b>Address</b>
America Blog	<a href="http://www.americablog.blogspot.com">http://www.americablog.blogspot.com</a>
Atrios	<a href="http://atrios.blogspot.com">http://atrios.blogspot.com</a>
Daily Dish	<a href="http://www.andrewsullivan.com">http://www.andrewsullivan.com</a>
Digby's Blog	<a href="http://www.digbysblog.blogspot.com">http://www.digbysblog.blogspot.com</a>
Instapundit	<a href="http://www.instapundit.com">http://www.instapundit.com</a>
Juan Cole	<a href="http://www.juancole.com">http://www.juancole.com</a>
Little Green Footballs	<a href="http://www.littlegreenfootballs.com">http://www.littlegreenfootballs.com</a>
Michelle Malkin	<a href="http://www.michellemalkin.com">http://www.michellemalkin.com</a>
Powerline	<a href="http://www.powerlineblog.com">http://www.powerlineblog.com</a>
Talking Points Memo	<a href="http://talkingpointsmemo.com">http://talkingpointsmemo.com</a>
Yglesias	<a href="http://yglesias.typepad.com">http://yglesias.typepad.com</a>
Daniel Drezner	<a href="http://www.danieldrezner.com">http://www.danieldrezner.com</a>
The Independit	<a href="http://indepundit.com">http://indepundit.com</a>
Winds of Change	<a href="http://www.windsofchange.net">http://www.windsofchange.net</a>
American Prospect	<a href="http://www.prospect.org/weblog">http://www.prospect.org/weblog</a>
Vodka Pundit	<a href="http://www.vodkatpundit.com">http://www.vodkatpundit.com</a>

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## **APPENDIX 2 – CODING SCHEME FOR IDEOLOGY OF BLOGS**

In order to code for the ideology of the blog four steps were taken. First, the title of the blog was checked for references to ideology or political partisanship. Many political blogs include some reference to their ideology or partisanship in the title of their blog. Second, the blog's introductory description was checked for statements of ideological or partisan preferences. Many political bloggers use the fact that most blogging software allows the blogger to write a short statement of purpose or summary of their blog to express their ideological beliefs. Third, the content of the blog itself was checked for statements of opinion about the election. If a blog made an outright statement of preference about the outcome of the election, such as "please let Bush win," "please defeat Bush," "vote for Bush" or "vote against Bush," the blog was coded for the direction of that statement. Finally, the sidebar of each blog was checked for links to explicitly partisan or ideological websites.

### **APPENDIX 3: ISSUE KEYWORDS**

The issue to be measured is listed in bold. The keywords that counted as a mention of the issue are listed below.

#### **“Memogate”**

Dan Rather  
Killian (documents)

#### **Abortion**

Abortion  
Pro-choice  
Right to choose  
Right to Life  
Pro-life

#### **Abu Ghraib**

Abu Ghraib  
Prisoner abuse

#### **Affirmative Action**

Affirmative action  
Reverse discrimination

#### **Afghanistan**

Afghanistan

#### **Bin Laden**

Bin Laden

#### **Civil Rights**

Civil rights

#### **Gay Marriage**

Gay marriage  
Same-sex marriage  
Homosexual marriage

#### **Genocide in Darfur**

Darfur  
Sudan

#### **Immigration**

Immigrants  
Immigration  
Illegal aliens

#### **Iran**

Iran

#### **Iraq**

Iraq

#### **Mary Cheney**

Mary Cheney

#### **Missing Explosives**

Explosives

#### **Moral Values**

Moral values

#### **North Korea**

North Korea

**Palestine**

Palestine  
Palestinian

**Social Security**

Social Security

**Swift Boat Veterans**

Swift Boat Veterans

**Voter Fraud**

Voter fraud  
Election fraud  
Irregularities (voting)

#### **APPENDIX 4 – LAG SELECTION**

<b>Issue</b>	<b>Lag Period</b>
"Memogate"	5
Abortion	2
Abu Ghraib	3
Affirmative Action	1
Afghanistan	1
Bin Laden	2
Civil Rights	1
Gay Marriage	1
Genocide in Darfur	2
Immigration	1
Iran	1
Iraq	1
Mary Cheney	4
Missing Explosives	1
Moral Values	5
North Korea	1
Palestine	4
Social Security	1
Swiftboat Veterans	5
Voter Fraud	5

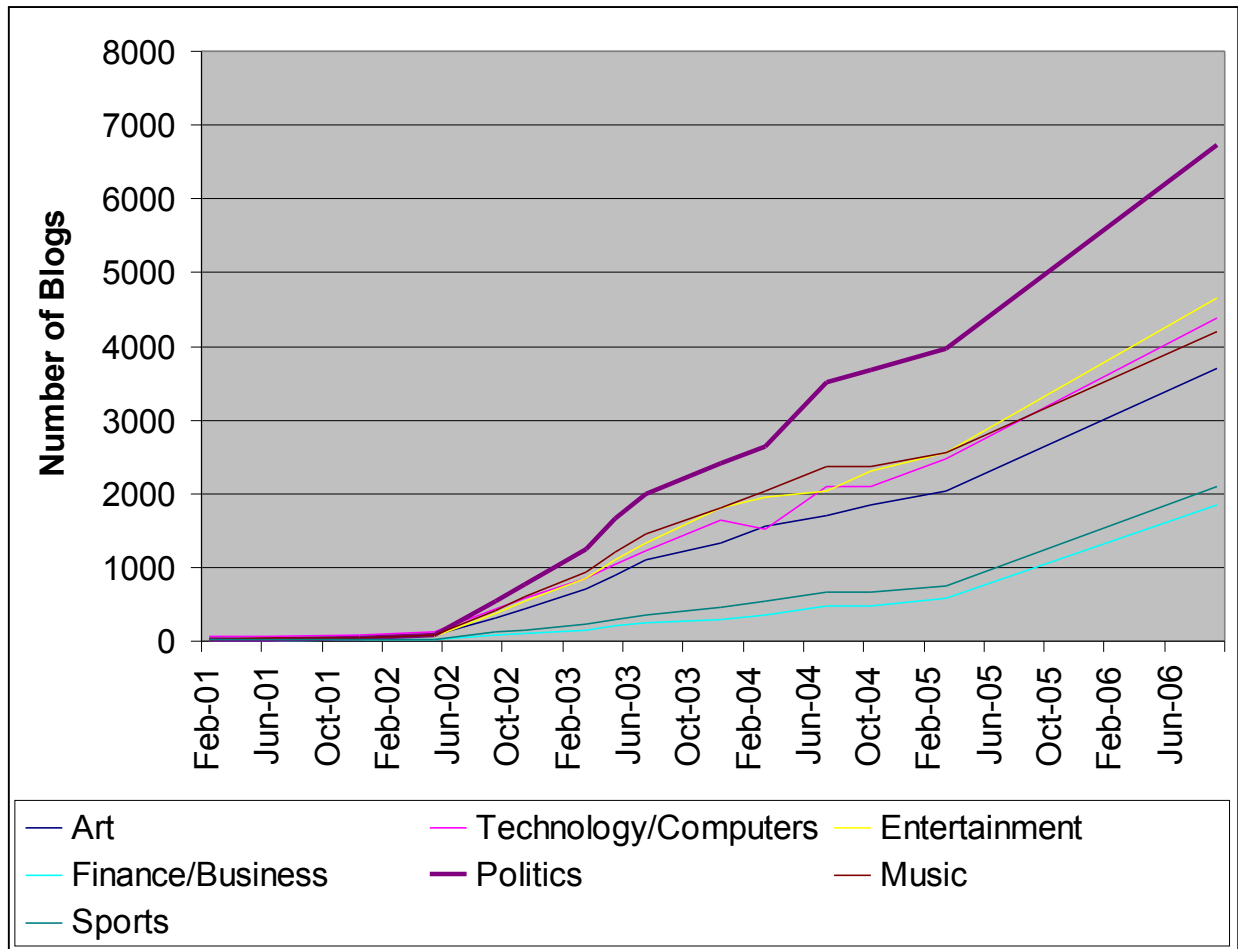
## BIBLIOGRAPHY

- Adamic, Lala and Natalie Glance. 2005. "The Political Blogosphere and the 2004 Presidential Election." *BlogPulse* (www.blogpulse.com).
- Baoill, Andrew. 2004. "Weblogs and the Public Sphere." *Into the Blogosphere: Rhetoric, Community and Culture of Weblogs*.  
([http://blog.lib.umn.edu/blogosphere/weblogs\\_and\\_the\\_public\\_sphere.html](http://blog.lib.umn.edu/blogosphere/weblogs_and_the_public_sphere.html)).
- Bloom, Joel. 2003. "The Blogosphere: How a Once Humble Medium Came to Drive Elite Politics." Paper presented at the annual meeting of the American Political Science Association, Philadelphia Marriott Hotel, Philadelphia, PA.
- Bloom, Joel and Matthew Krebel. 2007. "Roadkill on the Information Superhighway: The Defenestration of Trent Lott and Other Cautionary Tales from the Blogosphere." In *The Power and Political Science of Blogs* edited by Daniel Drezner and Henry Farrell. Ann Arbor: University of Michigan Press.
- Bluey, Robert. 2006. "The Blog War on Capitol Hill." Human Events Online  
(<http://www.humanevents.com/article.php?print=yes&id=14070>).
- Brosius, Hans-Bernd and Hans Mathias Kepplinger. 1990. "The agenda-setting function of television news: Static and dynamic views." *Communication Research* 17: 183-211.
- Drezner, Daniel and Henry Farrell. 2004a. "The Power and Politics of Blogs." Paper presented at the annual meeting of the American Political Science Association, Hilton Chicago and the Palmer House Hilton, Chicago, IL.
- . 2004b. "Web of Influence." *Foreign Policy*.  
([http://www.foreignpolicy.com/story/cms.php?story\\_id=2707](http://www.foreignpolicy.com/story/cms.php?story_id=2707)).
- Gonzenbach, William. 1992. "A Time-Series Analysis of the Drug Issue, 1985-1990: The Press, the President and Public Opinion." *International Journal of Public Opinion Research* 4 (2): 126-147.
- Graber, Doris. 1997. *Mass Media and American Politics (5<sup>th</sup> Edition)*. Washington DC: CQ Press.
- Herring, Susan, Inna Kouper, John Paolillo, Lois Ann Scheidt, Michael Tyworth, Peter Welsch, Elijah Wright and Ning Yu. 2005. "Conversations in the Blogosphere: An Analysis "From the Bottom Up." Paper presented at the 38<sup>th</sup> Hawaii International Conference on System Sciences.
- Hill, K. and J. Hughes. 1998. *Cyberpolitics: Citizen Activism in the Age of the Internet*. New York: Rowman and Littlefield Publishers, Inc.

- Lenhart, Amanda, John B. Horrigan and Deborah Fallows. 2004. "Content Creation Online." *Pew Internet and American Life Project*.  
([http://www.pewinternet.org/pdfs/PIP\\_Content\\_Creation\\_Report.pdf](http://www.pewinternet.org/pdfs/PIP_Content_Creation_Report.pdf)).
- McCarthy, John, Jackie Smith and Mayer Zald. 1996. "Accessing public, media, electoral and governmental agendas." In *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures and Cultural Framings* edited by Doug McAdam, John McCarthy and Mayer Zald. Cambridge: Cambridge University Press.
- McCleary, R. and R.A. Hay. 1980. *Applied time series analysis for the social sciences*. Beverly Hills, CA: Sage.
- McCombs, Maxwell. 2000. "The Agenda Setting Role of the Mass Media in the Shaping of Public Opinion." Unpublished manuscript.
- McCombs, Maxwell and Donald Shaw. 1972. "The Agenda Setting Function of the Mass Media." *Public Opinion Quarterly* 36: 176-87.
- McKenna, Laura and Pole.Antoinette. 2004. "Do Blogs Matter? Weblogs in American Politics." Paper presented at the annual meeting of the American Political Science Association, Hilton Chicago and the Palmer House Hilton, Chicago, IL.
- Neuman, Russell. 1990. "The Threshold of Public Attention." *Public Opinion Quarterly* 2: 159-76.
- Pfeiffer, Eric. 2006. "GOP urged to make greater use of blogs." *Washington Times* April 13, 2006.
- Rogers, Everett M., and James W. Dearing. 1988. "Agenda Setting Research: Where Has It Been and Where Is It Going?" In *Communications Yearbook, Vol. 11* edited by James A. Anderson. Newbury Park, CA: Sage.
- Roth, Marci McCoy. 2004. "How journalists see the Blogosphere." Annenberg School for Communication  
(<http://www.asc.upenn.edu/usr/mccoy/blogs.pdf#search=%22%20how%20journalists%20see%20the%20blogosphere%22%22>)
- Sroka, T. Neil. 2006. "Understanding the Political Influence of Blogs: A Study of the Growing Importance of the Blogosphere in the U.S. Congress." Institute for Politics, Democracy and the Internet (<http://www.ipdi.org>).
- Scott, D. Travers. 2005. "Tempests of the Blogosphere: Presidential Campaign Stories that Failed to Ignite Mainstream Media."  
(<http://homepage.mac.com/dtraversscott/academics/blogflops/tempestsfulltext.html>).
- Scott, Esther. 2004. "'Big Media'" Meets the 'Bloggers': Coverage of Trent Lott's Remarks at Strom Thurmond's Birthday Party." John F. Kennedy School of Government, Harvard University.

- Smolkin, Rachel. 2004. "The Expanding Blogosphere." *American Journalism Review* (<http://ajr.org/Article.asp?id=3682>).
- Trammell, Kaye. 2004. "Year of the Blog: Webstyle Analysis of the 2004 Presidential Candidates." Paper presented at the annual meeting of the National Communication Association, Chicago, IL.
- Trippi, Joe. 2004. *The Revolution Will Not Be Televised: Democracy, the Internet and the Overthrow of Everything*. New York: Regan Books.
- Weaver, David, Doris Graber, Maxwell McCombs and Chaim Eyal. 1981. *Media Agenda Setting in Presidential Elections: Issues, images and interest*. New York: Praeger.
- Winter, James and Chaim Eyal. 1981. "Agenda setting for the civil rights issues." *Public Opinion Quarterly*, 45, 376-83.
- Zhu, Jian-Hua and Deborah Blood. 1997. "Media Agenda Setting Theory: Telling the Public What to Think About." In *Emerging Theories of Human Communication* edited by Branislav Kovacic. Albany: SUNY Press.
- Zucker, H. 1978. "The variable nature of news media influence." In *Communication Yearbook 2* edited by B. Rubin. New Brunswick, NJ: Transaction.

**FIGURE 1– BLOG GROWTH BY TYPE, FEBRUARY 2001 TO SEPTEMBER 2006**



Source: Eatonweb Portal

**TABLE 1 – ISSUES SELECTED**

	<b>Continuing</b>	<b>Episodic</b>
<b>Domestic</b>	Abortion Affirmative Action Civil Rights Gay Marriage Immigration Social Security	"Memogate" Mary Cheney's Sexuality Moral Values Swift Boat Veterans Campaign Voter Fraud
<b>Foreign</b>	Afghanistan Iran Iraq North Korea Palestine	Bin Laden Videotape Genocide in Darfur Missing Explosives from al Qa Qaa Prisoner abuse at Abu Ghraib

**TABLE 2 – BLOG DISCUSSION OF ISSUES**

<b>Issue</b>	<b>A-list</b>			<b>Less Popular</b>		
	<b>Conservative</b>	<b>Liberal</b>	<b>Total</b>	<b>Conservative</b>	<b>Liberal</b>	<b>Total</b>
“Memogate”	3.69	0.46	2.19	0.75	0.29	0.38
Abortion	0.68	1.03	0.85	1.74	0.95	1.09
Abu Ghraib	0.69	0.7	0.7	0.25	0.31	0.29
Affirmative Action	0.18	0.15	0.16	0.15	0.11	0.11
Afghanistan	2.69	2.37	2.56	1.89	0.87	1.12
Bin Laden Video	2.38	2.56	2.48	1.39	1.06	1.23
Civil Rights	0.56	0.84	0.69	0.4	0.5	0.52
Gay Marriage	1.13	2.13	1.61	1.34	0.94	1.06
Genocide in Darfur	1.04	0.4	0.74	0.35	0.21	0.26
Immigration	1.79	0.48	1.18	0.75	0.54	0.57
Iran	2.9	3.35	3.13	1.19	1.15	1.23
Iraq	16.32	18.64	17.51	12.63	7.28	8.46
Mary Cheney	0.39	0.9	0.63	0.2	0.09	0.11
Missing Explosives	0.91	1.25	1.07	0.15	0.14	0.14
Moral Values	0.15	0.19	0.17	0.25	0.27	0.28
North Korea	0.64	0.9	0.77	1.24	0.41	0.61
Palestine	4.01	0.93	2.58	0.6	0.39	0.5
Social Security	0.41	0.93	0.66	0.94	0.51	0.58
Swiftboat Veterans	2.6	1.88	2.27	2.19	0.74	0.96
Voter Fraud	0.4	0.58	0.49	0.45	0.43	0.44

Entries are percent of posts discussing issue.

**TABLE 3 – MEDIA, CONGRESSIONAL, EXECUTIVE AND CAMPAIGN DISCUSSION**

<b>Issue</b>	<b>Media</b>	<b>Congress</b>	<b>Executive</b>		
			<b>e</b>	<b>Kerry</b>	<b>Bush</b>
"Memogate"	53	1	6	0	0
Abortion	170	0	65	1	22
Abu Ghraib	76	23	42	4	0
Affirmative Action	27	1	4	0	1
Afghanistan	433	104	421	39	90
Bin Laden Video	123	58	133	17	19
Civil Rights	149	26	33	18	6
Gay Marriage	55	10	26	1	6
Genocide in Darfur	157	13	89	2	1
Immigration	464	58	83	12	8
Iran	234	58	243	9	8
Iraq	1961	168	659	128	205
Mary Cheney	11	0	6	0	0
Missing Explosives	4	1	6	6	2
Moral Values	13	2	9	0	1
North Korea	775	44	195	8	10
Palestine	32	8	24	1	3
Social Security	74	44	152	25	38
Swift Boat	47	2	18	24	2
Voter Fraud	13	2	6	0	2

Entries are number of stories, articles or press releases

**TABLE 4 – GRANGER CAUSALITY TESTS FOR A-LIST BLOGS**

Issue	Congress		Executive		Media		Kerry		Bush		Less Popular Blogs	
	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value
"Memogate"	<b>13.95</b>	<b>.02</b>	4.30	.51	<b>8.70</b>	<b>.02</b>	n/a	n/a	n/a	n/a	<b>145.58</b>	<b>.00</b>
Abortion	n/a	n/a	1.37	.50	.91	.64	<b>11.33</b>	<b>.00</b>	1.49	.48	<b>23.37</b>	<b>.00</b>
Abu Ghraib	.54	.91	2.12	.55	4.80	.19	1.16	.76	n/a	n/a	2.03	.57
Affirmative Action	.16	.69	.50	.48	.79	.37	n/a	n/a	.16	.69	.77	.38
Afghanistan	.31	.58	.10	.76	<b>9.06</b>	<b>.00</b>	.95	.33	1.57	.21	1.63	.20
Bin Laden Video	4.85	.09	<b>10.17</b>	<b>.01</b>	<b>18.12</b>	<b>.00</b>	2.08	.35	<b>7.47</b>	<b>.02</b>	<b>16.73</b>	<b>.00</b>
Civil Rights	<b>6.99</b>	<b>.01</b>	.20	.65	.11	.74	1.49	.22	3.41	.07	.07	.79
Gay Marriage	3.08	.08	.27	.60	2.80	.09	1.50	.22	2.81	.09	3.31	.07
Genocide in Darfur	1.36	.51	<b>7.25</b>	<b>.03</b>	2.03	.36	.44	.80	.74	.69	<b>15.45</b>	<b>.00</b>
Immigration	.10	.76	.01	.91	.18	.67	.76	.38	.81	.37	<b>4.29</b>	<b>.04</b>
Iran	1.23	.27	.58	.45	.03	.86	.80	.37	2.49	.11	<b>10.05</b>	<b>.00</b>
Iraq	.40	.53	.39	.53	3.26	.07	.66	.42	<b>8.09</b>	<b>.00</b>	<b>18.68</b>	<b>.00</b>
Mary Cheney	n/a	n/a	<b>73.02</b>	<b>.00</b>	<b>15.93</b>	<b>.00</b>	n/a	n/a	n/a	n/a	<b>198.48</b>	<b>.00</b>
Missing Explosives	.02	.89	<b>67.47</b>	<b>.00</b>	.58	.45	<b>168.82</b>	<b>.00</b>	.58	.45	<b>203.06</b>	<b>.00</b>
Moral Values	<b>50.93</b>	<b>.00</b>	<b>10.09</b>	<b>.05</b>	<b>274.57</b>	<b>.00</b>	n/a	n/a	.96	.97	<b>96.86</b>	<b>.00</b>
North Korea	.34	.56	.09	.77	.11	.74	.23	.63	<b>3.72</b>	<b>.05</b>	<b>15.35</b>	<b>.00</b>
Palestine	6.86	.14	3.85	.43	3.21	.52	2.68	.61	7.84	.10	3.71	.45
Social Security	.01	.94	2.64	.10	<b>12.21</b>	<b>.00</b>	.02	.90	1.09	.30	<b>7.76</b>	<b>.01</b>
Swiftboat Veterans	3.66	.60	<b>11.25</b>	<b>.05</b>	<b>13.30</b>	<b>.02</b>	<b>36.30</b>	<b>.00</b>	<b>44.53</b>	<b>.00</b>	<b>19.51</b>	<b>.00</b>
Voter Fraud	<b>28.03</b>	<b>.00</b>	<b>29.59</b>	<b>.00</b>	<b>10.71</b>	<b>.05</b>	n/a	n/a	5.64	.34	<b>13.72</b>	<b>.02</b>

Bold entries significant at p<.05

**TABLE 5 – GRANGER CAUSALITY TESTS FOR LESS POPULAR BLOGS**

Issue	Congress		Executive		Media		Kerry		Bush		A-list Blogs	
	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value	X <sup>2</sup>	p-value
"Memogate"	<b>22.85</b>	<b>.00</b>	<b>31.87</b>	<b>.00</b>	<b>30.75</b>	<b>.00</b>	n/a	n/a	n/a	n/a	<b>33.43</b>	<b>.00</b>
Abortion	n/a	n/a	.76	.69	.68	.71	1.76	.42	1.78	.41	1.05	.59
Abu Ghraib	2.74	.43	<b>10.91</b>	<b>.01</b>	2.66	.45	<b>18.66</b>	<b>.00</b>	n/a	n/a	<b>13.05</b>	<b>.01</b>
Affirmative Action	.06	.80	.20	.66	3.56	.06	n/a	n/a	.06	.80	.00	.98
Afghanistan	.08	.78	1.75	.19	.01	.90	.19	.67	.51	.47	1.39	.24
Bin Laden Video	<b>5.77</b>	<b>.05</b>	<b>5.83</b>	<b>.05</b>	.59	.75	2.21	.33	2.19	.33	1.47	.48
Civil Rights	1.15	.28	.03	.87	.15	.70	.35	.56	1.62	.20	<b>4.27</b>	<b>.04</b>
Gay Marriage	.36	.55	1.40	.24	.40	.53	1.23	.27	.62	.43	2.38	.12
Genocide in Darfur	4.47	.11	<b>9.02</b>	<b>.01</b>	.37	.83	<b>9.59</b>	<b>.01</b>	.26	.88	.35	.84
Immigration	.29	.59	.02	.88	.27	.60	.21	.65	1.39	.24	<b>3.99</b>	<b>.05</b>
Iran	3.49	.06	3.22	.07	<b>5.40</b>	<b>.02</b>	1.29	.26	.21	.64	.04	.85
Iraq	.06	.80	.62	.43	1.80	.18	.00	.95	1.96	.16	.16	.69
Mary Cheney	n/a	n/a	<b>151.27</b>	<b>.00</b>	<b>14.87</b>	<b>.01</b>	n/a	n/a	n/a	n/a	<b>9.99</b>	<b>.04</b>
Missing Explosives	.00	.98	<b>48.63</b>	<b>.00</b>	<b>77.29</b>	<b>.00</b>	<b>4.12</b>	<b>.04</b>	<b>77.29</b>	<b>.00</b>	<b>65.76</b>	<b>.00</b>
Moral Values	<b>169.26</b>	<b>.00</b>	<b>18.14</b>	<b>.00</b>	<b>61.85</b>	<b>.00</b>	n/a	n/a	2.07	.84	<b>25.04</b>	<b>.00</b>
North Korea	.05	.82	2.02	.16	.72	.40	1.85	.17	1.06	.30	.12	.73
Palestine	1.62	.80	5.70	.22	<b>14.10</b>	<b>.01</b>	3.04	.55	8.88	.06	7.37	.12
Social Security	.93	.34	.12	.73	.07	.79	.04	.85	.10	.75	1.57	.21
Swiftboat Veterans	<b>11.26</b>	<b>.05</b>	<b>28.83</b>	<b>.00</b>	2.03	.85	<b>20.23</b>	<b>.00</b>	<b>45.36</b>	<b>.00</b>	<b>20.14</b>	<b>.00</b>
Voter Fraud	<b>14.27</b>	<b>.01</b>	<b>14.30</b>	<b>.01</b>	<b>25.95</b>	<b>.00</b>	n/a	n/a	<b>25.57</b>	<b>.00</b>	<b>14.66</b>	<b>.01</b>

Bold entries significant at p<.05

**TABLE 6 – IMPULSE RESPONSE FUNCTIONS FOR A-LIST BLOGS**

Issue	Days After						Less Popular Blogs	Issue	Days After						Less Popular Blogs
	Shock	Congress	Executive	Media	Kerry	Bush			Shock	Congress	Executive	Media	Kerry	Bush	
"Memogate"	1	.00	.01	.00	n/a	n/a	-1.17	Iran	1	-.03	-.04	.01	.01	.01	.03
	2	.00	.00	.07	n/a	n/a	-1.31		2	-.01	.00	.04	.00	.00	.04
	3	.00	.00	.02	n/a	n/a	-.72		3	.00	.00	.02	.00	.00	.01
	4	.00	.00	.02	n/a	n/a	-.98		4	.00	.00	.01	.00	.00	.01
	5	.00	.01	-.04	n/a	n/a	-1.74		5	.00	.00	.00	.00	.00	.00
	6	.00	.03	.06	n/a	n/a	-1.47		6	.00	.00	.00	.00	.00	.00
Abortion	1	n/a	.04	.01	.00	.01	.03	Iraq	1	.02	.02	.11	.01	.06	-.06
	2	n/a	-.07	.11	.03	.03	.07		2	.01	.02	.11	.01	.04	.02
	3	n/a	-.02	.02	.00	.00	.01		3	.00	.01	.07	.01	.02	.01
	4	n/a	-.05	.08	.00	-.01	.02		4	.00	.01	.04	.01	.01	.00
	5	n/a	-.02	.02	.00	.00	.01		5	.00	.00	.03	.00	.01	.00
	6	n/a	-.02	.02	.00	-.01	.00		6	.00	.00	.02	.00	.01	.00
Abu Ghraib	1	-.03	.03	-.09	.00	n/a	.08	Mary Cheney	1	n/a	.05	.04	n/a	n/a	-1.03
	2	.00	-.01	.03	-.01	n/a	.41		2	n/a	-.02	.08	n/a	n/a	.04
	3	.02	.04	-.09	.01	n/a	-.08		3	n/a	.10	-.01	n/a	n/a	-.14
	4	.01	.01	.01	.00	n/a	.13		4	n/a	.10	.01	n/a	n/a	.43
	5	.01	.01	.01	.00	n/a	.00		5	n/a	-.02	.03	n/a	n/a	.08
	6	.00	.01	.00	.00	n/a	.03		6	n/a	.01	-.01	n/a	n/a	.35
Affirmative Action	1	-.01	-.02	.07	n/a	-.01	.00	Missing Explosives	1	.00	.09	-.01	.24	.01	-1.23
	2	.00	.00	-.01	n/a	.00	-.01		2	.00	.14	-.02	.32	.10	-4.44
	3	.00	.00	.00	n/a	.00	.00		3	.00	.21	.14	.15	.00	-3.06
	4	.00	.00	.00	n/a	.00	.00		4	.00	.12	.19	.02	.03	-3.07
	5	.00	.00	.00	n/a	.00	.00		5	.00	.01	.15	.00	.07	-2.99
	6	.00	.00	.00	n/a	.00	.00		6	.00	.01	.08	-.03	.02	-1.11
Afghanistan	1	.02	.02	.19	.02	.04	-.19	Moral Values	1	.01	.01	.60	n/a	.01	.36
	2	.00	.00	.08	.02	.02	-.01		2	-.01	-.09	-.08	n/a	.00	.19
	3	-.01	.00	.02	.00	.01	.00		3	.00	-.08	.31	n/a	.00	-.17
	4	.00	.00	.01	.00	.00	.00		4	-.06	.25	.14	n/a	-.01	.08
	5	.00	.00	.00	.00	.00	.00		5	-.05	-.02	.22	n/a	.00	.02
	6	.00	.00	.00	.00	.00	.00		6	.17	.23	-.03	n/a	.00	.02
Bin Laden	1	-.04	-.03	.09	-.01	.03	.21	North Korea	1	-.03	-.02	-.06	.01	.03	.03
	2	.02	.08	.08	.00	.01	.31		2	.00	.01	.01	-.01	.00	.05
	3	.01	.04	.06	-.01	.00	.20		3	.00	.00	.01	.00	.00	.02
	4	-.01	.00	.02	.00	.00	.15		4	.00	.00	.00	.00	.00	.01
	5	-.01	-.01	.01	.00	.00	.09		5	.00	.00	.00	.00	.00	.00
	6	-.01	.00	.01	.00	.00	.07		6	.00	.00	.00	.00	.00	.00
Civil Rights	1	.12	.02	-.03	.03	.03	.16	Palestine	1	-.01	-.01	-.01	.00	.00	.11
	2	.01	.03	.00	.00	.01	.01		2	.02	.03	.03	.00	.00	-.19
	3	.00	.00	.00	.00	.00	.01		3	.02	.02	.02	-.01	.00	-.23
	4	.00	.00	.00	.00	.00	.00		4	.01	.00	-.02	.00	.01	-.10
	5	.00	.00	.00	.00	.00	.00		5	.01	.02	.00	.00	.00	-.01
	6	.00	.00	.00	.00	.00	.00		6	.01	.00	.01	.00	-.01	-.03
Gay Marriage	1	.02	-.01	.05	.00	.02	.15	Social Security	1	.01	.19	.28	.01	.06	.11
	2	.01	.00	.03	.00	.00	.16		2	-.01	.03	.05	.01	.02	.04
	3	.01	.00	.01	.00	.00	.11		3	.00	.03	.04	.00	.01	.02
	4	.00	.00	.01	.00	.00	.07		4	.00	.01	.01	.00	.01	.01
	5	.00	.00	.00	.00	.00	.04		5	.00	.01	.01	.00	.00	.00
	6	.00	.00	.00	.00	.00	.02		6	.00	.00	.00	.00	.00	.00
Genocide in Darfur	1	.01	.09	.07	.00	.00	-.01	Swiftboat Veterans	1	.00	.01	.06	.08	.01	.63
	2	.01	-.09	.06	.00	.00	.10		2	.00	.05	.03	.08	.00	.19
	3	-.01	.00	.00	.01	.00	-.03		3	.01	.01	.01	-.01	.00	-.15
	4	.00	-.02	.01	.00	.00	-.06		4	.00	.01	.03	.05	.01	-.08
	5	.00	.00	.00	.00	.00	-.03		5	.00	.04	.06	.04	.01	.84
	6	.00	.00	.00	.00	.00	.00		6	.00	.03	.07	.01	.00	.68
Immigration	1	.02	-.01	-.09	.02	.01	.21	Voter Fraud	1	.05	-.03	-.04	n/a	.00	.41
	2	.01	.00	-.01	.00	.00	.06		2	.02	.07	-.07	n/a	.00	.16
	3	.00	.00	.00	.00	.00	.02		3	.01	.01	.07	n/a	.00	.13
	4	.00	.00	.00	.00	.00	.01		4	.00	.04	.06	n/a	-.02	-.11
	5	.00	.00	.00	.00	.00	.00		5	.00	-.03	.03	n/a	.01	.18
	6	.00	.00	.00	.00	.00	.00		6	.01	.02	.01	n/a	.01	.09

**TABLE 7 – IMPULSE RESPONSE FUNCTIONS FOR A-LIST BLOGS**

Issue	Days After							Issue	Days After						
	Shock	Congress	Executive	Media	Kerry	Bush	A-list Blogs		Shock	Congress	Executive	Media	Kerry	Bush	A-list Blogs
"Memogate"	1	.03	.03	.37	n/a	n/a	.19	Iran	1	.09	.17	.18	.02	.01	.15
	2	.00	.00	.07	n/a	n/a	.10		2	.02	.04	.02	.00	.00	.00
	3	.01	-.05	-.12	n/a	n/a	.07		3	.01	.02	.02	.00	.00	.01
	4	-.02	.05	.23	n/a	n/a	.01		4	.00	.01	.00	.00	.00	.00
	5	-.02	.06	-.05	n/a	n/a	.24		5	.00	.00	.00	.00	.00	.00
	6	-.02	-.06	-.11	n/a	n/a	.21		6	.00	.00	.00	.00	.00	.00
Abortion	1	n/a	-.05	.01	.00	-.01	.40	Iraq	1	-.01	.05	.14	.00	-.05	.21
	2	n/a	-.01	.06	-.01	-.03	.14		2	.00	.00	-.01	.00	-.01	.14
	3	n/a	-.02	.01	.00	-.01	.16		3	.00	.00	.00	.00	.00	.08
	4	n/a	.00	.01	.00	-.01	.08		4	.00	.00	.00	.00	.00	.05
	5	n/a	-.01	.00	.00	.00	.06		5	.00	.00	.00	.00	.00	.03
	6	n/a	.00	.00	.00	.00	.03		6	.00	.00	.00	.00	.00	.02
Abu Ghraib	1	.09	.09	.01	.07	n/a	.05	Mary Cheney	1	n/a	-.04	-.01	n/a	n/a	.40
	2	-.04	-.13	.29	-.01	n/a	.04		2	n/a	.08	-.08	n/a	n/a	.17
	3	.00	-.04	.11	.04	n/a	.00		3	n/a	.28	.10	n/a	n/a	.01
	4	-.02	.06	.22	.07	n/a	.00		4	n/a	-.26	.13	n/a	n/a	.04
	5	-.02	.05	.23	.02	n/a	.01		5	n/a	.07	-.06	n/a	n/a	.01
	6	-.01	.00	.16	.01	n/a	-.01		6	n/a	-.05	.01	n/a	n/a	.02
Affirmative Action	1	.00	-.01	.16	n/a	.00	-.06	Missing Explosives	1	.00	-.17	-.04	-.07	.15	.38
	2	.00	.00	.02	n/a	.00	-.02		2	.00	-.03	.03	-.34	-.19	.08
	3	.00	.00	.00	n/a	.00	.00		3	.00	-.18	-.08	-.20	-.02	.39
	4	.00	.00	.00	n/a	.00	.00		4	.00	-.18	-.18	.02	.05	.97
	5	.00	.00	.00	n/a	.00	.00		5	.00	.01	-.15	-.02	-.10	.68
	6	.00	.00	.00	n/a	.00	.00		6	.00	.01	-.07	.00	-.05	.27
Afghanistan	1	.02	.18	-.01	-.02	.05	.05	Moral Values	1	.03	.01	-.22	n/a	-.01	1.16
	2	.02	.03	-.02	-.01	.00	.01		2	-.03	.02	.32	n/a	.00	.57
	3	.01	.01	.01	.00	.00	.00		3	-.03	.19	.00	n/a	.00	.65
	4	.00	.00	.00	.00	.00	.00		4	.05	-.04	-.12	n/a	.00	.11
	5	.00	.00	.00	.00	.00	.00		5	.12	.16	-.09	n/a	.00	1.02
	6	.00	.00	.00	.00	.00	.00		6	-.05	-.09	.03	n/a	.00	.06
Bin Laden	1	.06	.13	.03	.02	-.02	.09	North Korea	1	.01	.14	.20	-.03	-.02	.24
	2	-.11	-.12	.07	-.03	-.02	.13		2	.00	.00	.03	.00	.01	.04
	3	-.05	-.01	.04	.01	.00	.10		3	.00	.00	.00	.00	.00	.01
	4	-.03	-.01	.03	-.02	.00	.07		4	.00	.00	.00	.00	.00	.00
	5	-.02	.02	.03	.00	.00	.03		5	.00	.00	.00	.00	.00	.00
	6	-.01	-.01	.01	-.01	.00	.02		6	.00	.00	.00	.00	.00	.00
Civil Rights	1	-.05	.01	-.04	.02	-.02	-.02	Palestine	1	-.02	.01	.10	.02	.00	.03
	2	.01	.00	.00	.01	.00	-.02		2	-.01	-.08	-.06	-.01	-.01	.03
	3	.00	.01	.00	.00	.00	.00		3	-.02	.01	-.08	.01	.02	-.06
	4	.00	.00	.00	.00	.00	.00		4	.00	.02	-.01	.00	.00	.03
	5	.00	.00	.00	.00	.00	.00		5	-.01	-.02	-.02	.00	.01	-.01
	6	.00	.00	.00	.00	.00	.00		6	-.01	-.02	-.02	.00	-.01	.02
Gay Marriage	1	.01	.04	.02	.01	-.01	.12	Social Security	1	.06	.04	.02	-.01	.02	.23
	2	.01	.02	.01	.00	.00	.07		2	.02	.01	.03	.00	.01	.14
	3	.01	.01	.01	.00	.00	.04		3	.00	.00	.01	.00	.00	.06
	4	.00	.00	.01	.00	.00	.02		4	.00	.00	.00	.00	.00	.03
	5	.00	.00	.01	.00	.00	.01		5	.00	.00	.00	.00	.00	.01
	6	.00	.00	.00	.00	.00	.01		6	.00	.00	.00	.00	.00	.01
Genocide in Darfur	1	-.06	.28	-.07	.05	.00	.12	Swiftboat Veterans	1	.01	.03	-.01	-.05	-.02	.20
	2	-.05	-.16	.01	.01	.00	.12		2	.01	-.02	.05	-.02	.02	.34
	3	-.02	-.09	.00	.00	.00	-.01		3	-.01	.15	.03	.07	.02	.27
	4	.00	-.03	.00	.00	.00	.02		4	-.01	.07	-.01	-.14	-.02	.12
	5	.00	.02	-.01	.00	.00	.01		5	.00	-.02	-.04	.07	.01	.18
	6	.00	.01	-.01	.00	.00	.00		6	-.01	.02	.00	.13	.02	.20
Immigration	1	-.04	-.01	.15	-.01	-.03	.13	Voter Fraud	1	.02	.00	.12	n/a	.00	.06
	2	-.02	-.02	.02	.00	.00	.04		2	.04	.01	.10	n/a	-.01	.16
	3	.00	.00	.00	.00	.00	.01		3	.00	.04	.02	n/a	-.01	.07
	4	.00	.00	.00	.00	.00	.00		4	.01	.00	-.02	n/a	.00	.15
	5	.00	.00	.00	.00	.00	.00		5	-.03	.02	-.03	n/a	.01	.14
	6	.00	.00	.00	.00	.00	.00		6	.01	-.03	-.03	n/a	.02	.05

**TABLE 8 – A-LIST BLOG INFLUENCE BY ISSUE TYPE**

Issue Type	Actor	% of Issues Showing Blog Influence		
		Continuing	Episodic	Overall
Domestic	Media	16.7%	100.0%	54.5%
	Congress	16.7%	60.0%	36.4%
	Executive	0.0%	80.0%	36.4%
	Kerry Campaign	16.7%	20.0%	18.2%
	Bush Campaign	0.0%	20.0%	9.1%
	<b>Domestic - Overall</b>	<b>10.0%</b>	<b>56.0%</b>	<b>30.9%</b>
Foreign	Media	20.0%	25.0%	22.2%
	Congress	0.0%	0.0%	0.0%
	Executive	0.0%	75.0%	33.3%
	Kerry Campaign	0.0%	25.0%	11.1%
	Bush Campaign	40.0%	25.0%	33.3%
	<b>Foreign - Overall</b>	<b>12.0%</b>	<b>30.0%</b>	<b>20.0%</b>
<b>Overall</b>	<b>10.9%</b>	<b>44.4%</b>	<b>26.0%</b>	

**TABLE 9 – LESS POPULAR BLOG INFLUENCE BY ISSUE TYPE**

Issue Type	Actor	% of Issues Showing Blog Influence		
		Continuing	Episodic	Overall
Domestic	Media	0.0%	80.0%	36.4%
	Congress	0.0%	80.0%	36.4%
	Executive	0.0%	100.0%	45.5%
	Kerry Campaign	0.0%	20.0%	9.1%
	Bush Campaign	0.0%	40.0%	18.2%
	<b>Domestic – Overall</b>	<b>0.0%</b>	<b>64.0%</b>	<b>29.1%</b>
Foreign	Media	40.0%	25.0%	33.3%
	Congress	0.0%	25.0%	11.1%
	Executive	0.0%	100.0%	44.4%
	Kerry Campaign	0.0%	75.0%	33.3%
	Bush Campaign	0.0%	25.0%	11.1%
	<b>Foreign – Overall</b>	<b>8.0%</b>	<b>50.0%</b>	<b>26.7%</b>
	<b>Overall</b>	<b>3.6%</b>	<b>57.8%</b>	<b>28.0%</b>