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# Local Political Information on the Web: The Case of the 2007 Philadelphia Mayoral Campaign

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# **Local Political Information On the Web: The Case of the 2007 Philadelphia Mayoral Campaign**

## Abstract

Scholars and pundits have widely discussed the decline of print journalism, but there has been very little empirical research focused on examining online alternatives. This article utilizes a unique sample of online local political content related to the 2007 Philadelphia mayoral campaign to address this void. A content analysis of this dataset has three objectives: to depict the range of sources of online local political information (LPI) available to Philadelphians, to compare the LPI provided by these various sources, and to determine the amount and provenance of the original LPI that is available on the web. New media sources of LPI may be far from maturity, but this article finds that they do exist and are a viable resource for citizens.

### Keywords:

new media, local politics, Google, newspapers, political information, blogs

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Biographical note: Lee Shaker (Ph.D., University of Pennsylvania) is a post-doctoral researcher at Princeton University. His research interests lie at the intersection of media, technology, and local politics. Support for this research was provided by Michael X. Delli Carpini and the Annenberg School for Communication, University of Pennsylvania. Assistance was provided by Eran N. Ben Porath and Bill Herman.

Thomas Jefferson famously wrote, “Were it left to me to decide whether we should have a government without newspapers, or newspapers without a government, I should not hesitate a moment to prefer the latter.” As local newspapers wither and fail in the modern media environment, the situation that Jefferson was loathe to imagine is rapidly becoming our reality. The drift away from traditional local media institutions raises an array of compelling questions about the future of democracy in America’s communities. How will citizens learn about local politics? Who will produce local political information (LPI)? Who will assume the watchdog role that the local press has long fulfilled? Various observers suggest that new media technologies are key to answering these questions via blogs (Rosen, 2008), peer-to-peer collaboration (Benkler 2006), or some other web-based platform (Jarvis, 2005). Yet, the optimistic tenor of these perspectives is matched by the pessimistic tone struck by scholars like Starr (2009) and Shirky (2009) who chronicle the downfall of newspapers and see little hope online or elsewhere. In general, while opinions on this topic are abundant, very little empirical work examining the shift to an online future exists.

This article systematically assesses the online LPI related to the 2007 Philadelphia mayoral campaign. Using automated Google queries as a starting point, the breadth of online local political content – including, but extending beyond the pages available from local newspaper and TV station websites – is collected into a dataset used to shed light upon three particular issues. What are the sources of the LPI that is available online? What are the content and structural features of this LPI? And, how much of this LPI is original and how much is “shovelware” – offline content imported without alteration onto the web?

This article complements prognostications about the future of local news made by other scholars and pundits in that it provides an evidence-based reading of the LPI available online during a local election. As a case-study, it follows in the tradition of prior researchers (see especially Donohue et al. 1987a) who have examined structural changes in the media environment in order to explore their impact upon local-level democracy in America. This piece does not contain predictions about the future, but it may be useful in interpreting such predictions and even in constructing new forecasts. More importantly, it may help to ensure the strength and vibrance of local democracies by supporting efforts to provide citizens with necessary LPI in the digital age.

#### Literature Review

##### *Political Information & its Importance*

Like the study of agenda-setting or persuasion, research into the role that political information plays in the functioning of democracy is an enduring topic of academic interest (Bennett & Entman 2001). Such research begins with the notion that information is necessary grist for effective democracy (Mill 1859; Eveland et al. 2005; Craig et al. 2005). Though there are conflicting perspectives of precisely how much information citizens need or require (Page & Shapiro 1992; Sniderman et al. 1991; Converse 1964; Schudson 1998), there is “clear evidence that the amount of information one possesses shapes attitudes and behaviors, including such things as participation, voting behavior, tolerance, and information processing strategies” (Druckman 2005, p. 517).

This article is concerned with two basic kinds of political information – both of which are important cogs in the democratic process. First, simple factual data about election times, registration deadlines, and campaign events is called mobilizing

information (MI) and is vital in alerting and organizing the electorate in advance of the public undertakings of democracy (Lemert 1981). The second kind of political information details the substance of political affairs: what actions are taken by governmental bodies; what positions and characteristics representatives and candidates have; and how popular various ideas, officials, and candidates are. Within this second category, scholars have drawn a distinction between information that describes the strategic aspect of politics (also known as the ‘horse-race’) and issue-centric information (Iyengar 1991; Cappella & Jamieson 1997).

Despite widespread interest in studying the role of mass-mediated political information in the context of national politics, research of LPI is sparse and incomplete. Citizens can learn about local political affairs through direct experience and interpersonal interactions, but patterns of local political activity confirm that mass media institutions have long been critical components of the local landscape (Verba & Nie 1972). And, though little empirical research directly examines the role between LPI consumption and local political participation, a smattering suggests that both mobilizing and substantive political information provided by mass media are necessary components of healthy community democracies (McLeod et al. 1999; Scheufele et al. 2002). Meanwhile, studies of previous changes in the information environment – the rise of broadcast media, chain ownership of newspapers, and cable TV – have typically found that technological ‘progress’ can be equated with a reduction in the accessibility of LPI (Donohue et al. 1987b, 1987c; Demers & Wackman 1988; Lacy 1991). Such studies have, however, fallen out of vogue and the content analyses of LPI that do exist do not account for the most recent changes in the mass media environment.

### *Media & Local Political Information*

Examinations of the LPI content of local news are typically limited to electoral periods, focus on newspapers and TV broadcasts, and have two primary issues of concern: how much LPI exists and what frame (strategy or issue-driven) is employed. Studies of local TV news conclude that it is largely composed of stories on national topics or local crime and includes very little coverage of local political topics (Klite et al. 1997; Kiolbassa 1997; Kaplan et al. 2003; Kaplan et al. 2005; Stevens et al. 2006). Turning to newspapers, several scholars (Graber 1984; Grainey et al. 1984; Kaniss 1995) have found that the limited local political campaign coverage that does exist, like national political campaign news, includes only a small amount of issue-focused reporting. The consensus of this body of research is that, even if somewhat wanting, the local political content provided by newspapers is an important part of the democratic landscape that is unmatched by any other media.

In chronicling the 1991 Philadelphia mayoral campaign, Kaniss (1995) looked extensively at the city's two major daily newspapers – with a combined circulation over 700,000 at the time – and evening TV newscasts – which were viewed by more than 1 million households every night at 6 P.M. These media outlets told the tale of local politics that most Philadelphians knew in 1991. Today, in a city that is the same size, the combined circulation of the *Inquirer* and *Daily News* is 360,000 and the audience for the 6 o'clock news is 435,000 households (Audit Bureau of Circulations 2009; Nachman 2009). Even if all of the audience members that have fled old media in Philadelphia are not consuming LPI online, these figures illustrate the rising importance of the internet.

Scholars have begun to consider the audience's move online by studying the

online sites of newspapers (Singer 2001; Hoffman 2006; Boczkowski & de Santos 2007). Singer (2001) found that much of the content on newspaper websites is “shovelware” – articles taken from the print edition and formatted for the web without any other change. Along these lines, Hoffman (2006) compared the amount and types of mobilizing information in online and print newspapers and found no significant differences across the platforms. In Argentina, Boczkowski and de Santos (2007) found that the rise of newspaper websites encouraged content similarity across newspapers suggesting that the internet actually narrowed the scope of news coverage available to citizens from the nation’s major newspapers on- and off-line. Finally, in a related vein of research, scholars (Althaus & Tewksbury 2002; Tewksbury 2006; Thorson 2008) have begun to consider the ways that news consumption changes when the audience moves online from print: in a nutshell, people pay less attention to the hard news highlighted by editors and seek more soft news instead.

On the whole, this research depicts a newspaper industry that is very slowly adapting to the new medium: there is very little new about online newspapers, even if the needs and wants of the audience are changing. In addition, preliminary evidence suggests that, given choice online, many people elect to consume less hard news even when their focus is restricted to online newspaper sites (Tewksbury 2006). Clearly, it is possible that people may acquire LPI online from sources other than newspapers. But, the LPI offerings of other online outlets have not yet been systematically explored. Setting aside the consumption preferences of the audience, the question to ask if, as Starr (2009) and others argue, most newspapers are destined to collapse, is: Where will LPI come from if and when local newspapers fail?



Many versions of the digital future have been imagined. It is likely that, even if they fail in print, newspapers will endure in some online form – much as the *Seattle Post-Intelligencer* has converted to a small-staff online-only publication (Yardley & Perez-Pena 2009). Proponents of blogs see them as “little First Amendment machines” that allow direct, unfettered communication between citizens at a low cost – perfect for LPI (Rosen 2007). Hyperlocal news sites that aggregate a critical mass of citizens who read and write news of their community are at the heart of another vision (Glaser 2004). Universities, individuals, and media companies like Gannett have all sought to replicate the success of user-generated content sites like Korea’s OhMyNews, but it is unclear whether these ventures will be able to attract an audience or be financially viable (Shaw 2007; Farhi 2007). Scholars interested in networks (Wellman & Hampton 2003; Benkler 2006) describe many ways that new communication technologies can link citizens together. Instead of passively consuming LPI through news, these citizens each become a node of LPI that can be activated at any time. Aside from these scholarly notions, many real projects – like the website everyblock.com – use technology to facilitate access to LPI. By early 2009, the Knight Foundation alone had funded 35 such web experiments to provide and disseminate LPI (Miller & Stone 2009). Yet, in spite of all of this activity, there is a lack of research that depicts what LPI citizens are likely to find when they look for it online.

### Research Questions

Given the scarcity of prior research on LPI in general and *online* LPI in particular, research questions, rather than hypotheses, are stated to guide the subsequent analyses. As major local news institutions decline, concern that communities will be without viable

suppliers of LPI is increasing. So, the first task of the analysis is to establish a baseline understanding of the sources of LPI online. Doing so will help ground future research of online LPI as well as prognostications about the fate of communities in the event of widespread newspaper failure.

**RQ1:** What are the sources online that provided LPI relevant to the 2007 Philadelphia mayoral campaign?

The second research question moves beyond the source of online LPI to examine the characteristics of the content contained by the webpages collected for this study. The goal of the analysis here is to describe the kind of LPI that is available from the full variety of online sources. The concern driving this task is that, even if there are alternatives to offline media institutions on the web, they may not provide the kinds of LPI that communities need. Hewing to the guidelines established by previous content analyses of political information, the second research question asks:

**RQ2:** How prevalent are issue, strategy, and mobilizing information in the online coverage of the 2007 Philadelphia mayoral campaign? And, are there systematic variations in the provisioning of these types of information across the different sources of LPI?

The content analysis also examines the originality and interactivity of online LPI. As Hoffman (2006) and Singer (2001) have shown, much web content is simply copied from offline media. Though these articles specifically compared the online and offline versions of newspapers, they reflect a broader concern about the utility of the internet. If online LPI is largely a derivative of offline media, then it contributes little to a community other than an additional distribution platform. So, it is important to ascertain what the true source of online LPI is and whether or not it is unique in any other way. One way, for example, that online LPI may differ is through increased interactivity

enabled by technology. Accordingly, the third research question asks:

**RQ3:** How much of the relevant LPI online is original across the different sources?  
Are the online LPI providers offering opportunities for interactivity?

### Data & Methods

This article directly examines the LPI that was available online about the 2007 Philadelphia mayoral election. Mayoral elections are high-profile, high-stakes events that demand attention. This campaign was for an open seat, fell in an off-year for national elections, and took place as audiences fled local newspapers and TV newscasts. The 2007 race paired a competitive Democratic primary in May – won by former city councilman Michael Nutter, who surged from behind U.S. Congressmen Chaka Fattah and Bob Brady in the last stages of the campaign – with a nearly uncontested general election in which there was only a nominal challenge to Nutter (the eventual victor) from Republican Al Taubenberger.

### *Data*

To examine the LPI about the mayoral election that was available online, a series of scripts were written to repeatedly run specific, relevant Google searches and record the query results. These searches were executed automatically, every day, for six weeks in advance of both the primary and general elections. Every 15 minutes during the primary and once an hour during the general, the program queried Google with three specific search terms: “Philadelphia mayoral campaign,” “Michael Nutter mayor,” and “Bob Brady mayor.” For each search iteration, the first 30 rankings from Google were recorded. Then, at the end of each day, an aggregate spreadsheet that contained the modal top 30 results for each search term and the relevant pages’ titles, URLs, and brief descriptions was created. Finally, each link contained in the spreadsheets was followed

manually and every unique webpage was saved for analysis. In all, a total of 278 webpages were saved and analyzed in this study.

278 unique pages is a small fraction of the potential number of pages that could have been included in the sample: for 12 weeks of searching, 7,560 search results were recorded (12 weeks, 7 days, 30 rankings per day, 3 different searches). However, the vast majority of the top 30 pages were redundant, day after day. Though there was some movement up and down in the rankings, the results returned by Google for each search were remarkably stable over time.<sup>1</sup>

A word about the search terms before proceeding. The terms above mix a general campaign term with those for two specific candidates. The precise language of the search terms above was selected, after pre-testing an array of Boolean and natural-language search terms, for satisfying two criteria: they consistently returned the most pertinent results and they were most similar to the terms a casual web surfer would employ.<sup>2</sup> These terms were selected to capture a diverse sample of the broader online mayoral information environment and were designed to accomplish this in two further ways. First, the terms address the difference in stature common among mayoral candidates by collecting results for a competitor (Nutter) with a local office and little preexisting online standing and a competitor (Brady) with a national office and a well-established online persona. Second, the contrast in the online information environment between the contested primary election and uncontested general election was evaluated by conducting searches for the same term before both. (Because Bob Brady was eliminated from the campaign in the primary election, results for the search about him were only collected during the primary period.)

Overall, this approach yields a dataset that contains a systematic sample of the LPI available online that was relevant to the 2007 Philadelphia mayoral campaign. Google is a familiar resource for most internet users and is, by one measure, responsible for 13.6% of all web traffic (Qiu et al. 2005) and the lion's share of the more than 25% of online newspaper pageviews that come via search engines (Lee 2007). The top 30 Google results for a given search do not encapsulate the entire universe of information about a topic available online. But, prior research indicates that the impact – in terms of attention and clicks given by users – of a link decreases dramatically from 1 through 10 and is virtually nonexistent below that (Granka et al. 2004). In other words, the first 30 results (or even just the first 10 results) returned by Google account for the vast majority of the pages a user might eventually read after conducting a search. So, analyzing the top 10 and top 30 results from a given search should provide a fair summary of both what citizens searching the web for LPI are *likely* to and *could* find. As such, this sample moves beyond the pages of online newspapers and provides an opportunity to grasp the expanse of LPI available on the web.

Data that describes the actual size of the audience for LPI online is sparse. In conjunction with this research, though not discussed in detail in this article, an RDD survey of 1000 Philadelphians was conducted in November 2007. Among other questions about their media use and local political habits, respondents were asked how often they used the web to read local news and how often they searched with Google to locate local news. Among all respondents, 50.1% reported that they read local news on the web and 46.4% reported that they used Google to search for local news. To mitigate the tendency of citizens to over-report their news consumption (Prior 2009), it may be more realistic to

assume that only the citizens who claimed that they used the web or Google for local news ‘most days’ or ‘everyday’ actually did so with any real regularity. Applying this filter, 15.3% of respondents reported reading local news on the web and 11.5% Googled for it. Clearly, the size of the audience for LPI online on a day-to-day basis is smaller than the audience for local TV news and major local newspapers. But, citizens are shifting to the internet as a primary news source (Pew 2008) and the results of this survey suggest that they are looking beyond the websites of newspapers when they seek local news.

### *Methods*

Coding for the content analysis was carried out by the author and four others: two undergraduate and two graduate students (see Appendix A for an excerpt of the codebook). Among the categories of analysis, assessing the two types of substantive LPI required the most attention. *Strategy* content was defined as information that “describes the campaign strategies and the competition between the candidates” and five sub-categories (with specific examples) of qualifying information were provided: polling data, campaign funding, advertising strategies, electoral strategies, and endorsements. The presence of strategy content was then calculated on a 0-5 scale for each web page by adding the number of sub-categories that were marked positive in a text. Coding for *issue* content proceeded in a similar – but not directly comparable – fashion. Here, nine relevant issues were identified for coders who were also given the leeway to identify other pertinent issues that appeared (see Appendix A). After identifying the presence of an issue in a page, guidelines and examples for what constituted meaningful coverage were provided to the coders. Each page was then coded as having no meaningful issue

content (0), a small amount of content (1), or a large amount of content (2); for pages in which multiple issues were raised, the final 0-5 code reflects an aggregation of the amount of total issue coverage added together and limited to a maximum score of 5. Dichotomous variables set to 1 if strategy or issue content was present and 0 if not were created by recoding the ordinal variables. Coding of the remaining variables – the presence of mobilizing information, the presence of user comments, and the originality of the online content – was also dictated by guidelines and examples.

For analytic purposes, the results were divided into five categories depending on whether the source of the page was: candidates or political parties, traditional major local media institutions such as the *Philadelphia Inquirer* or the local network TV affiliates (including blog pages connected to these outlets), alternative media outlets like free entertainment weeklies or community newspapers, independent blogs (all blogs not connected to an existing major local media outlet), or an online encyclopedias (like Wikipedia) or aggregator (like Outside.In). Intercoder reliability for this step was assessed by comparing two coders' evaluation of the source of all the results using Krippendorff's  $\alpha$ . According to Krippendorff (2004), the ideal level of agreement on his measure is indicated by a score greater than .80, but  $\alpha$ 's above .667 can be acceptable. Using this criterion, agreement about the source of the pages for the three search strings was strong: Bob Brady mayor ( $\alpha = .97$ ), Michael Nutter mayor ( $\alpha = .89$ ), and Philadelphia mayoral campaign ( $\alpha = .84$ ).

Intercoder reliability of the remaining variables was checked by comparing a sample of the saved webpages from one search term executed in each of the primary and general election periods. This purposive sampling technique was chosen for the reliability

check to give the coders the benefit of contextual knowledge as they coded. This improved the coders' likelihood of correctly identifying content on pages that had been copied from other sources – originality is one of the key dependent variables in this study – because it made it more likely that they would have read the original publication. The  $\alpha$ 's for the intercoder reliability range between .71 and .81 – most below the optimal level of .80 but still acceptable by Krippendorff's standards. The coders conferred about the discrepancies and reached a consensus before proceeding to complete the remaining coding accordingly.

[Table 1 about here]

## Findings

In this analysis, the first task is to depict the amount and source of information returned by Google searches about the 2007 Philadelphia mayoral campaign (RQ1). Then, the kind of LPI returned by specific searches and from specific sources is detailed (RQ2). Finally, a pair of structural components of the online information environment are investigated: the originality of the online content and the presence of interactivity as measured through audience comments (RQ3).

[Table 2 about here]

Table 2 provides a basic overview of the results of five Google searches executed for this study. In the table, "N" refers to the number of unique pages collected from Google links that were determined to be relevant and included in the analysis. The number of pages included in the sample for each term differs for three reasons. First, there are fewer unique results for the broader search ("Philadelphia mayoral campaign") than for the candidate specific searches. Additionally, the broader search term returns a



lower proportion of relevant results because pages related to past campaign years were spuriously captured. Finally, identical search terms generated more unique results during the primary election period than the general election period. (This is likely true for two reasons. First, the general election was not competitive and drew less attention. Second, the primary created an information environment online that grew entrenched and more stable over time.)

Table 2 also documents the source of the results for each search string. Among all results and the top 10 results, source diversity is apparent. Major local news outlets are the most prevalent source of webpages (28% of the total), but independent blog pages are returned almost as often (26% of the total). Candidate, alternative media, and other new media sources are also represented at sizeable levels (each supplied 14-16% of the total). There is some variance in the source distribution across the search terms. Notably, pages from bloggers made up 35% of the results for the Michael Nutter search during the primary. For the other 4 queries, 21% of the results emanated from blogs and a simple T-Test indicates that this difference in proportions is significant ( $t = 2.35, p = .02$ ).<sup>3</sup> It is not possible with these data to validate how well this sample represents the true universe of pertinent online webpages. Still, the distribution of search results here suggests that – in the context of local politics – sites outside the mainstream media are included by Google.

[Table 3 about here]

Table 3 details the presence of strategy, issue, and mobilizing information in the web pages included in this study. Across all sources, slightly more than half of the pages include some strategy (53%) or issue-focused (51%) LPI. About 55% of pages hosted by both traditional major local media outlets and independent blogs contained issue

information and, on this measure, the two types of outlets did not significantly differ. Similarly, pages from blogs and the traditional media outlets did not differ significantly in their horse-race content. The pages emanating from either a candidate or a party's site – typically the front page of the site – frequently do not have either issue (21%) or strategy (21%) content (though they may have links that lead to such information). On the other hand, results hosted by alternative media outlets are very likely to have strategic (70%) and issue-oriented material (82%). In the entire sample, mobilizing information is present in 29% of pages. Its prevalence is consistent (and not significantly different) across sources though MI was significantly more common ( $t = 5.78, p = .01$ ) in the pages returned by the general campaign search (54% of pages) than by the candidate-specific searches (20% of pages).

Further comparison of the pages provided by the different kinds of sources reveals an intriguing pattern. On a scale from 0-5, pages hosted by alternative media outlets have significantly more issue (2.70 to 1.57;  $t = 2.98, p = .01$ ) and strategy (1.30 to 0.88;  $t = 1.97, p = .05$ ) information than those from major local media outlets. Similarly, pages hosted by encyclopedia-type sources have significantly more issue information (2.03 to 1.32) than blog pages ( $t = 1.93, p = .05$ ) though the difference in strategic information (1.20 to 1.10) is non-significant. These differences are intuitive: weekly papers publish longer, more in depth articles compared to their more timely daily cousins. They also suggest that a similar, symbiotic relationship is developing online. Though the sources may change, the familiar dichotomy between news and background information is preserved by the interlinked functioning of blogs and online encyclopedias.

It should also be noted that, across all content measures, pages that appeared in

the top 10 results yielded more information, more frequently than those returned lower in the rankings. The difference in the amount of issue information contained by top 10 pages (1.82) and all other pages (1.34) is significant ( $t = 1.99, p = .05$ ). The amount of issue and strategy information does vary some across search terms and electoral periods, but only slightly and without a discernible pattern.

[Table 4 about here]

A concern raised by prior researchers (Singer 2001; Hoffman 2006) about web content is that it does not differ from already-existing offline content. Table 4 details two structural dimensions of the web page results: whether they are composed of content reprinted from offline sources and whether they allow (and contain) comments. The amount of original content in the web pages varies dramatically depending on their source. 97% of results stemming from candidates or political parties – generally homepages, press releases, or policy briefs – were primarily original content (meaning that the information they provided was not available elsewhere from the mass media). Similarly, 75% of pages emanating from independent blogs were coded as primarily original. On the other hand, pages hosted by alternative media outlets in Philadelphia – *Philadelphia Weekly*, the *Northeast Times*, and so on – were reprints of offline content 85% of the time and pages hosted by the major local media outlets were reprints 61% of the time. In all, 58% of the pages located via the Google searches were composed primarily of original content and 35% were replications of offline media offerings. Among pages that appeared in the top 10 of results, 65% contained primarily original content and 24% replicated offline content, and the remainder were a mixture.

An important difference between online and offline content is the potential for

interactivity that the internet holds. In a very simple form, this interactivity is embodied by the ability that members of the audience have to comment upon a webpage and converse with each other on it. Results from blogs – which almost by definition include comments – in this sample almost always allowed comments (94%) and 42% of such results actually contained comments left by readers (see Table 4). Pages emanating from all kinds of old media outlets and the candidates offered the option of commenting 30-40% of the time and 12-13% of pages did include comments. In all, 46% of all results afforded readers the ability to comment and 18% of pages had comments. Comments, paired with the ability of the public to write blog posts or online encyclopedia entries, suggests that there is something quantifiably *new* about new media once one moves beyond the confines of newspaper websites.

#### Discussion

The findings in this paper address three facets of the online LPI environment. First, information related to the 2007 Philadelphia mayoral campaign was available from an array of websites including old media outlets and new media startups (RQ1). Second, a comparison of the new media and old media sources suggests that they have more in common than in contrast (RQ2). In other words, a citizen could have relied on either independent blogs or the *Inquirer* website and would have received comparable issue, strategy, and mobilizing information. Third, the webpages analyzed here contained a large amount of unique, original content and were not merely replications of offline media content (RQ3).

The first research question guiding this project focused on the provenance of online LPI. The results show that a wide range of information sources were returned by

Google. This finding relates to a scholarly debate regarding the equity of Google search results in which some scholars (Hindman et al. 2003; Chakrabarti et al. 2005) argue that Google results for national political topics are disproportionately composed of pages from popular sites and other scholars (Fortunato et al. 2006) suggest that Google actually levels the playing field. In this exploration of local politics, concern about a “Googlearchy” – a tendency for major media organizations to dominate search results – proved to be unwarranted. This article shows that any citizen seeking information about the 2007 Philadelphia mayoral campaign had to execute only a single, simple Google search to find a diverse proliferation of it online.

Clearly, the pages provided by the major daily newspapers and local TV affiliates in Philadelphia are a critical component of the city’s online LPI environment. But, they are also joined by pages from candidates’ websites, relevant blogs, and electronic encyclopedias. These sites give the online audience information choices that span the course of the campaign and the careers of the candidates. Some of them – like the pages from Philadelphia Forward (which focuses on local tax policy) – treat the issues and candidates with a depth rarely seen in print or on TV. Further, a candidate initially seen as a long shot by the press, Michael Nutter, slowly rose to a victory driven in part by lively online support from young, educated citizens. The results in this article confirm the heightened activity in the blogosphere regarding Nutter’s candidacy and it is at least worth asking if this foment shaped the media narrative about the candidate. If it did, then blogs were not just a viable source of campaign information, but a *leading* source of it.

The second RQ in this article targeted the substance of the webpages: specifically, what kind of mayoral campaign information could citizens locate online? In short, a

citizen that relied solely on online sources of LPI in advance of the mayoral election would have received a full slate of issue, strategy, and mobilizing information. For a casual web surfer, this mix of coverage would be similar to what they might find in old media sources, though it would likely have come from many different sources. At the same time, a motivated browser could find an unsurpassed depth of information online because space and distribution constraints are practically irrelevant to online publishing.

The kind of LPI provided by the different sources – major local media outlets, independent bloggers, the candidates – varied some, but not in a way that suggested that a citizen who depended on any particular source would be handicapped. For example, pages emanating from independent blogs were second in number only to those from major local media outlets (77 to 71), were original 75% of the time, and were nearly interchangeable with those from major local media outlets in terms of the presence of strategy, issue, and mobilizing information. If a voter had completely eschewed old-media sources and read pages only from blogs and other new media sources, she would have had equivalent – if not superior – access to campaign information. LPI is available online, from an array of sources. Much of it is unique and detailed. Still, it is hard to know how many people are reading it.

The size of the online audience for such LPI is, of course, difficult to determine. Yet, one important characteristic suggests that the blog posts and encyclopedia entries about local politics can survive: they are being created by citizens who are motivated by passion not profit. The nature of the web allows any individual to publish content cheaply and this affords the opportunity for interest-based communities to develop. In turn, these communities populate sites like Young Philly Politics that contain rich, detailed LPI that

track campaigns and, perhaps more importantly, community issues over time. Expansion of the local media environment to include voices like these is a significant contribution made possible by the internet. The existence of online LPI is not sufficient in and of itself to guarantee a large audience for it, but it is necessary for one to develop.

Finally, the third focus of this article was to identify “shovelware” from offline media outlets and determine the incidence of original content online. A large amount of the LPI online does directly emanate from preexisting coverage produced by daily newspapers and newscasts. But, the mayoral candidates and independent bloggers, in particular, offered novel content on the web that could not be found elsewhere. At this point, the web complements the existing local media infrastructure and gives citizens access to more LPI than they had in the recent past. Yet, the vibrance of Philadelphia’s online LPI environment does not appear wholly dependent upon the city’s major local media outlets.

At first blush, this finding should relieve some anxiety related to the collapse of urban newspapers. But, even if bloggers are providing new commentary regarding local affairs, the analysis in this article is not designed to determine how dependent the new media voices are upon the initial news gathering of old media outlets. The discussion of blogging about Nutter above is grounds for some optimism, but the extent of a dependence upon major local media outlets is still a concern: an LPI environment that looks like it is flourishing online now may collapse without an adequate foundation. It is my sense that this is not the case; much of the blog coverage was borne of first-person reporting. But, blogs may not yet be a full replacement for the ongoing beat-based news gathering and oversight provided by newspapers.

Two important limitations of this study should be noted. First, there are weaknesses in the construction of the sample. The sprawling fluidity of the internet makes it very difficult to design and capture a dataset for a content analysis that is neither reductive nor haphazard. The systematic Google searches used in this article give a fair chance of inclusion to any page or site – to the extent that Google results are fair. In doing so, it allows a broad overview of the relevant LPI available online. This approach differs dramatically, however, from a purposive analysis of content available on specific sites. This alternative might provide a better sense of the depth and nuance of the LPI online (from certain sources). An additional data collection challenge is the impermanence of the internet: pages change and disappear every day. Not every Google result was captured for this analysis. Second, the coding scheme places some constraints on the analyses that are possible. For example, the specific issues covered by different sources were not recorded. Doing so was not a priority for this article.

### Conclusion

This article only begins to address the overarching questions about the fate of citizens, communities, and democracy in the new media environment. At least in Philadelphia, the internet offers useful and original LPI. And, this information will not entirely cease to exist if the *Philadelphia Inquirer* goes under. But, online sources of LPI are far from maturity. There are no self-appointed beat reporters pounding the pavement, covering every in and out at city hall. And, though some hope may be drawn from the state of online information environment during the 2007 Philadelphia mayoral campaign, the situation may very well be different in other communities or during the interstices between elections in Philadelphia.



At the same time, the golden age of local newspapers that many yearn for is already being burnished by the soft, warm light of a retrospective view. Not everybody treated local newspapers as revered objects in the past; many people read the sports and funnies and moved on with their day without being informed about local politics. Beat reporting and the routines that calcified at newspapers created certain opportunities for manipulation and corruption of reporters in a way that may not be possible when the watchdog is a decentralized mass of bloggers. And, very few people had the ability to speak freely through the press. Those who did were often part of an entrenched establishment that tended to reinforce the status quo. Change, which is always somewhat foreboding, is clearly transpiring in the local media space. To even begin to understand this transformation, media researchers and those interested in the practice of local politics must become more empirically oriented in evaluating the new media environment.

As major local media institutions decline, certain aspects of the common experience that citizens in a community have shared is replaced with a fragmented landscape that offers individuals different choices. This transition may be beneficial in that it provides greater opportunity for citizens to become knowledgeable and engaged. But, some may choose to avoid consuming local political content. Additionally, this shift places the burden of action on citizens: instead of passively receiving a baseline amount of LPI, now citizens need to seek such information. Without a newspaper on their doorstep or an update on the hour, it is not clear if they will or not.

**Wordcount: 6472**

**Date: January 11, 2010**

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<sup>1</sup> The total N – 278 – for analysis is less than the number of pages saved (313) which, in turn, is less than the total number of unique links included in the Google search results (336). The difference between 313 and 278 is caused by the inclusion, by Google, of some irrelevant pages. The remainder of the missing results were omitted because the pages they led to were no longer accessible online at the time of data collection, despite efforts to be exhaustive and timely.

<sup>2</sup> During the primary season, the searches ran every 15 minutes – until Google blocked them under the assumption that they were an attempt at search engine optimization. Consequently, results for some days in the fourth, fifth, and sixth weeks were lost. Because of this, though the election was held on May 15<sup>th</sup>, the period of analysis here is set as April 1<sup>st</sup> through May 12<sup>th</sup>. During the general election period, the scripts were adjusted to run 24 times a day and were not disrupted.

<sup>3</sup> P-values for all t-tests reported in this article are two-tailed.

## Appendix A: Coding Guidelines

### Strategy: 0/1/2/3/4/5

- For strategy, you're coding based on the amount of information present in an article that describes the campaign strategies and competition of the candidates. You are looking for information that fits these categories:  
**(examples of each category are omitted here do to space constraints)**
  - Poll data or other information that describes the likelihood of a candidate(s) winning. This should not include poll data that describes support for a policy or issue.
  - References to money as it relates to dollar amounts raised, spent, on hand for candidates. Also should include discussions of *how* a candidate raises money.
  - Candidate advertising strategies: has X candidate aired TV ads or not, is Y candidate targeting Z community with ads etc, a "527" is targeting X candidate.
  - Analysis of electoral strategies: X candidate appeals to black voters, X candidate has formed an alliance with Y politician, X candidate has challenged Y candidate's right to be on the ballot.
  - Endorsements: X candidate has received Y organization's endorsement.
- Other: there may be other information that you recognize as relating to the strategy of the campaign. References to "machine backing" or a "strong street organization" are examples of such language. Such information can be included & counted as a category at your discretion.
- 0: information from 0 of the above categories is included in the article
- 1: information from 1 of the above categories is included in the article
- ...
- 5: information from 5+ of the above categories is included in the article
  - Often, these statements overlap and 2 or 3 categories are touched upon in 1 sentence. You may count these statements as references to separate categories & code a higher number accordingly.

### Issue: 0/1/2/3/4/5

- In this category, you are looking for the presence of significant information in an article about one or more issues that are important to the city of Philadelphia and its mayor. The primary issues are: crime and safety, schools and education, taxes and budget, economy and poverty, transportation, ethics and reform, the arts, and the environment.
- Coding this category requires three steps.
  - 1. Identify relevant issues in an article.
    - If there aren't any, then move on to coding other aspects of the article. If 1 or more issues are present, then continue by coding the issue content.
  - 2. Decide how much information is provided about each issue. (ex. below)
    - 0. If no substantive information is provided.
    - 1. If a little bit of information is provided (2-3 sentences).
    - 2. If a lot of information is provided (more than 4+ sentences).
  - 3. Add up the scores from each issue & reach a total.
    - 0: If there was no substantive issue content.
    - 1: If a little information was provided on 1 issue.
    - 2: If a little information was provided on 2 issues or a lot on 1 issue.
    - 3: If 3 issues are discussed a little or 1 a lot and 1 a little.
    - ...and so on. Code anything that scores 5 or above as a 5.
  - Examples: Crime (**other issue examples omitted here for brevity**)
    - **0:** "Phones rang in Democratic households yesterday with a message from Olivia saying "my dad" would work for safer and better schools."
      - One sentence, identifies two issues (safety/crime and education) but says nothing of substance about what Nutter would *actually do*.
    - **1:** "It stemmed from yet another discussion of a topic that has been a staple in these debates: Nutter's proposals to allow police to stop, question and frisk individuals suspected of carrying illegal weapons. The other four candidates have said they oppose the idea, with several,

including Evans, saying it could result in racial profiling and harassment of black people. In defending the tactic, Nutter said that his plan is "not about race, it's about criminals," and added: "As a person who's been black for 49 years, I think I know a little bit about racial profiling."

- Only 3 sentences, but describes an explicit procedure and some of its potential downsides.
- **2:** "The sad part of this whole debate is while the candidates spend their time inaccurately attacking my proposal, they have not offered any other plan that will aggressively stop the violence in Philadelphia and seize illegal weapons," he said.  
According to a recent Daily News/Keystone poll, "stop, question and frisk" is supported by a majority of voters. In an April survey of 364 registered Democrats, 61 percent said they strongly favored or somewhat favored stop-and-frisk. Criminologist Lawrence Sherman, director of the Jerry Lee Center of Criminology at Penn, defended "stop, question and frisk" yesterday. Sherman noted that the Supreme Court has upheld the right of officers to "look for behaviors that indicate that a person may be carrying a gun." He also cited studies of targeted police patrols - which used "stop, question and frisk" tactics - in Indianapolis, Pittsburgh and Kansas City, saying that the approach helped reduce shootings and homicides."
  - Five sentences that discuss the reason for stop-and-frisk, it's constitutionality, past usefulness, and public support.
- For articles with issue information, please indicate what the focus is. For each appropriate article, select the most important issues covered – as many as 3 – and record them in the spreadsheet. If 99/other, please specify what = other.
  - 1. Crime
  - 2. Education
  - 3. Taxes/Budget
  - 4. Economy/Poverty
  - 5. Transportation
  - 6. Ethics/Reform
  - 7. Arts
  - 8. Environment
  - 9. Other
  - \*\*\*Do not include discussions of race & electability in as an issue. These should be coded under the strategy heading when appropriate.\*\*\*

**Table 1: Intercoder Reliability**

	<b>Strategy 0-5</b>	<b>Strategy 0/1</b>	<b>Issue 0-5</b>	<b>Issue 0/1</b>	<b>Mobilizing Information</b>	<b>Original</b>	<b>Comment</b>
<b>Krippendorff's <math>\alpha</math></b>	0.71	0.70	0.81	0.73	0.74	0.75	0.73

N = 108. Strategy 0-5 and Issue 0-5 comparisons are of ordinal scales; all others are for nominal variables.

**Table 2: Sample Descriptives**

<b>Search</b>	<b>Unique Results</b>	<b>Pages Saved</b>	<b>N</b>	<b>Candidate/ Party</b>	<b>Traditional Media</b>	<b>Alternative Media</b>	<b>Encyclopedias &amp; Aggregators</b>	<b>Independent Blogs</b>
<b>Nutter Primary</b>	88	87	84	12 (14%)	23 (27%)	11 (13%)	9 (11%)	29 (35%)
<b>Nutter General</b>	63	55	54	7 (13%)	12 (22%)	10 (19%)	7 (13%)	13 (24%)
<b>Brady Primary</b>	78	69	69	12 (17%)	23 (33%)	5 (7%)	9 (13%)	16 (23%)
<b>Mayoral Primary</b>	59	56	44	6 (14%)	12 (27%)	7 (16%)	10 (23%)	9 (20%)
<b>Mayoral General</b>	48	46	33	1 (3%)	9 (27%)	13 (39%)	8 (24%)	5 (15%)
<b>Total</b>	<b>336</b>	<b>313</b>	<b>278</b>	<b>38 (14%)</b> <b>74 (20%)</b>	<b>79 (28%)</b> <b>20 (27%)</b>	<b>44 (16%)</b> <b>10 (14%)</b>	<b>43 (15%)</b> <b>14 (19%)</b>	<b>72 (26%)</b> <b>14 (19%)</b>

**Table 3: LPI Contained by Web Pages**

Category	N	Strategy %	Issue %	Strategy 0-5	Issue 0-5	Mobilizing Information %
<b>Candidate/Party</b>	38	21.1%	21.1%	0.29	0.55	28.9%
<b>Traditional Media</b>	77	61.0%	54.5%	0.88	1.57	26.0%
<b>Alternative Media</b>	33	69.7%	81.8%	1.30	2.70	24.2%
<b>Encyclopedias &amp; Aggregators</b>	39	69.2%	56.4%	1.21	2.03	35.9%
<b>Independent Blogs</b>	71	56.3%	54.9%	1.10	1.32	28.2%
<b>Nutter Primary</b>	84	60.7%	57.1%	1.07	1.92	15.5%
<b>Nutter General</b>	54	35.2%	55.6%	0.50	1.69	18.5%
<b>Brady Primary</b>	69	52.2%	53.6%	0.65	1.23	27.5%
<b>Mayoral Primary</b>	44	48.8%	29.3%	1.20	0.80	58.5%
<b>Mayoral General</b>	33	72.7%	45.5%	1.24	1.30	48.5%
<b>Total: All Results</b>		<b>53.4%</b>	<b>50.5%</b>	<b>0.90</b>	<b>1.47</b>	<b>29.2%</b>
<b>Total: Top 10</b>		<b>56.8%</b>	<b>54.1%</b>	<b>1.00</b>	<b>1.82</b>	<b>31.1%</b>

**Table 4: Structural Features of Web Results**

<b>Source</b>	<b>% of Pages</b>	<b>Original</b>	<b>Reprint</b>	<b>Can Comment</b>	<b>Have Comments</b>
<b>Candidate/Party</b>	14%	97%	0%	40%	13%
<b>Traditional Media</b>	27%	34%	61%	30%	12%
<b>Alternative Media</b>	12%	12%	85%	36%	12%
<b>Encyclopedias &amp; Aggregators</b>	14%	56%	31%	15%*	5%*
<b>Independent Blogs</b>	25%	75%	13%	94%	42%
<b>Total: All Results</b>	-	<b>58%</b>	<b>35%</b>	<b>46%</b>	<b>18%</b>
<b>Total: Top 10</b>	-	<b>65%</b>	<b>24%</b>	<b>39%</b>	<b>20%</b>

\* Pages from Wikipedia are not coded as positives here.



## **Bibliography**

- Althaus, S. L. & Tewksbury, D. (2002) 'Agenda setting and the "new" news: Patterns of issue importance among readers of the paper and online versions of the New York Times', *Communication Research*, vol. 29, pp. 180–207.
- Audit Bureau of Circulations (2009) Circulation averages for the six months ended September 30. [online] Available at <http://abcas3.accessabc.com/ecirc/newsform.asp> (7 January, 2010).
- Benkler, Y. (2006) *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, New Haven, CT: Yale University Press.
- Bennett, W.L. & Entman, R.M. (2001) *Mediated Politics: Communication in the Future of Democracy*, New York: Cambridge University Press.
- Boczkowski, P.J. & de Santos, M. (2007) 'When More Media Equals Less News: Patterns of Content Homogenization in Argentina's Leading Print and Online Newspapers', *Political Communication*, vol. 24, no. 2, pp. 167-180.
- Cappella, J.N. & Jamieson, K.H. (1997) *Spiral of Cynicism: The Press and the Public Good*, New York: Oxford University Press.
- Chakrabarti, S., Frieze, A. & Vera, J. (2005) 'The influence of search engines on preferential attachment', Presented at the annual meeting of the Society for Industrial and Applied Mathematics. [online] Available at [http://portal.acm.org/ft\\_gateway.cfm?id=1070474&type=pdf&coll=GUIDE&dl=GUIDE&CFID=31651362&CFTOKEN=55999258](http://portal.acm.org/ft_gateway.cfm?id=1070474&type=pdf&coll=GUIDE&dl=GUIDE&CFID=31651362&CFTOKEN=55999258) (12 April 2009).
- Converse, P.E. (1964) 'The Nature of Belief Systems in Mass Publics', in *Ideology and Discontent*, ed. D.E. Apter, New York: Free Press.
- Craig, S.C., Kane, J.G., & Gainous, J. (2005) 'Issue-Related Learning in a Gubernatorial Campaign: A Panel Study', *Political Communication*, vol. 22, no. 4, pp. 483-503.
- Demers, D.P & Wackman, D.B. (1988) 'Effect of Chain Ownership on Newspaper Management Goals', *Newspaper Research Journal*, vol. 9, pp. 59-68.
- Donohue, G.A., Olien, C.N., & Tichenor, P.J. (1987a) 'Media access and knowledge gaps', *Critical Studies in Mass Communication*, vol. 4, no. 1, pp. 87-92.
- Donohue, G.A., Olien, C.N., & Tichenor, P.J. (1987b) 'Are rural areas left behind in the age of information? -- more TV and radio, fewer newspapers', *Sociology of Rural Life*, vol. 9, no. 4, pp. 1-8.
- Donohue, G.A., Olien, C.N., & Tichenor, P.J. (1987c) 'Effect of use of metro dailies on

- knowledge gap in small towns', *Journalism Quarterly*, vol. 64, no. 2/3, pp. 329-336.
- Druckman, J.N. (2005) 'Does Political Information Matter?' *Political Communication*, vol. 22, no. 4, pp. 515-519.
- Eveland, W.P., Hayes, A.F., Shah, D.V. & Kwak, N. (2005) 'Understanding the Relationship Between Communication and Political Knowledge: A Model Comparison Approach Using Panel Data', vol. 22, no. 4, pp. 423-446.
- Farhi, P. (2007) 'Rolling the Dice: Media companies have high hopes that hyperlocal news online will bolster their newspapers' futures', *American Journalism Review*, vol. 29, no. 3, pp. 40.
- Fortunato, S., Flammini, A., Menczer, F. & Vespignani, A. (2006) 'The egalitarian effect of search engines', *Proceedings of the National Academy of Sciences*, vol. 103, no. 34, pp. 12684-12689.
- Glaser, M. (2004) 'The New Voices: Hyperlocal Citizen Media Sites Want You (to Write)!', *USC Annenberg Online Journalism Review*. [online] Available at <http://www.ojr.org/ojr/glaser/1098833871.php> (27 March 2009).
- Graber, D. (1984) 'Media Magic: Fashioning Characters for the 1983 Mayoral Race', in *The Making of the Mayor*, eds. M.G. Holli & P.M. Green, Grand Rapids, MI: Eerdmans.
- Grainey, T., Pollack, D. & Kusmierck, L. (1984) 'How Three Chicago Newspapers Covered the Washington-Epton Campaign', *Journalism Quarterly*, vol. 61, pp. 354-363.
- Granka, L., Joachims, T. & Gay, G. (2004) 'Eye-tracking analysis of user behavior in WWW search', *Proceedings of the 27th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, pp. 478-479.
- Hampton, K. & Wellman, B. (2003) 'Neighboring in Netville: How the Internet Supports Community and Social Capital in a Wired Suburb', *City & Community*, vol. 2, no. 4, pp. 277-311.
- Hindman, M., Tsioutsouloukakis, K. & Johnson, J.A. (2003) 'Googlearchy: How a Few Heavily Linked Sites Dominate Politics on the Web', Presented at the Annual Meeting of the Midwest Political Science Association.
- Hoffman, L.H. (2006) 'Is Internet Content Different After All? A Content Analysis of Mobilizing Information in Online and Print Newspapers', *Journalism & Mass Communication Quarterly*, vol. 83, no. 1, pp. 58-76.
- Iyengar, S. (1991) *Is anyone responsible? How television frames political issues*, Chicago: University of Chicago Press.

- Jarvis, J. (2005) *Web 2.0: It's Made of People*. Available at <http://www.buzzmachine.com/2005/10/07/web-20-its-made-of-people/> (17 April 2009).
- Kaniss, P. (1995) *The Media and the Mayor's Race*, Indianapolis: Indiana University Press.
- Kaplan, M., Rabinowitz, S., Derris, J.F. (2003) 'Local TV News Coverage of the 2002 General Election'. [online] Available at: [www.localnewsarchive.org](http://www.localnewsarchive.org) (18 April 2009).
- Kaplan, M., Goldstein, K., & Hale, M. (2005) 'Local News Coverage of the 2004 campaigns'. [online] Available at: [www.localnewsarchive.org](http://www.localnewsarchive.org) (18 April 2009).
- Kiobassa, J. (1997) 'Is Local TV News Still Local?' *Harvard International Journal of Press and Politics*, vol. 2, no. 1, pp. 79-95.
- Klite, P., Bardwell, R.A., & Salzman, J. (1997) 'Local TV News: Getting Away with Murder', *Harvard International Journal of Press and Politics*, vol. 2, no. 2, pp. 102-112.
- Krippendorff, K. (2004) *Content Analysis: An Introduction to Its Methodology*, Thousand Oaks, CA: Sage 2004.
- Lacy, S. (1991) 'Effects of group ownership on daily newspaper content', *Journal of Media Economics*, vol. 4, no. 1, pp. 35-47.
- Lee, T. (2007) Nearly 25% Of Newspaper Visits Driven By Search. *MediaPost News*, 3 May. [online] Available at: [http://www.mediapost.com/publications/?fa=Articles.showArticle&art\\_aid=59741](http://www.mediapost.com/publications/?fa=Articles.showArticle&art_aid=59741) (17 August 2009).
- Lemert, J. B. (1981) *Does mass communication change public opinion after all? A new approach to effects analysis*, Chicago: Nelson Hall.
- McLeod, J.M., Scheufele, D.A., & Moy, P. (1999) 'Community, Communication, and Participation: The Role of Mass Media and Interpersonal Discussion in Local Political Participation', *Political Communication*, vol. 16, pp. 315-336.
- Mill, J.S. (1859) *On Liberty*, [online] Available at: <http://www.utilitarianism.com/ol/> (17 August 2009).
- Miller, C.C. & Stone, B. (2009) 'Hyperlocal' Web Sites Deliver News Without Newspapers. *The New York Times*, 13 April. [online] Available at: <http://www.nytimes.com/2009/04/13/technology/start-ups/13hyperlocal.html> (17 August, 2009).
- Nachman, L. (2009) 6ABC Wins Sweeps. [online] Available at: <http://www.lauranachman.net/?p=2195> (7 January, 2010).

- Page, B.I. & Shapiro, R.Y. (1992) *The Rational Public*, Chicago: University of Chicago Press.
- Pew (2008) Key News Audiences Now Blend Online and Traditional Sources: Audience Segments in a Changing News Environment. [online] Available at: <http://people-press.org/reports/pdf/444.pdf> (17 August, 2009).
- Prior, M. (2009) 'The Immensely Inflated News Audience: Assessing Bias in Self-Reported News Exposure', *Public Opinion Quarterly*, vol. 73, pp. 130-143.
- Qui, F., Liu, Z., & Cho, J. (2005) 'Analysis of user Web Traffic with a Focus on Search Activities', *Proceedings of the International Workshop on the Web and Databases*, June 2005. [online] Available at: <http://oak.cs.ucla.edu/~cho/papers/qiu-user.pdf> (17 August, 2009).
- Rosen, J. (2007) *A Blog is a Little First Amendment Machine*. [online] Available at: [http://www.huffingtonpost.com/jay-rosen/a-blog-is-a-little-first-b\\_50164.html](http://www.huffingtonpost.com/jay-rosen/a-blog-is-a-little-first-b_50164.html) (17 August, 2009).
- Rosen, J. (2008) *A Most Useful Definition of Citizen Journalism*. [online] Available at: [http://journalism.nyu.edu/pubzone/weblogs/pressthink/2008/07/14/a\\_most\\_useful\\_d.html](http://journalism.nyu.edu/pubzone/weblogs/pressthink/2008/07/14/a_most_useful_d.html) (17 August, 2009).
- Scheufele, D.A., Shanahan, J., & Kim, S. (2002) 'Who Cares About Local Politics? Media Influences on Local Political Involvement, Issue Awareness, and Attitudes Strength', *Journalism & Mass Communication Quarterly*, vol. 79, no. 2, pp. 427-444.
- Schudson, M. (1998) *The Good Citizen: A History of American Civic Life*, New York: Free Press.
- Shaw, D. (2007) 'Really Local: Gannett and other media companies are embracing 'hyperlocal' Web sites as a new way of engaging fleeing readers', *American Journalism Review*, vol. 29, no. 2, pp. 54.
- Shirky, C (2009) *Newspapers and Thinking the Unthinkable*. [online] Available at: <http://www.shirky.com/weblog/2009/03/newspapers-and-thinking-the-unthinkable/> (17 August 2009).
- Singer, J.B. (2001) 'The Metro Wide Web: Changes in Newspapers Gatekeeping Role Online', *Journalism and Mass Communications Quarterly*, vol. 78, no. 2, pp. 65-80.
- Sniderman, P.M., Brody, R.A., & Tetlock, P.E. (1991) *Reasoning and Choice*, New York: Cambridge University Press.
- Starr, P. (2009) 'Goodbye to the Age of Newspapers (Hello to a New Era of Corruption)' [online] Available at:

- <http://www.tnr.com/politics/story.html?id=a4e2aafc-cc92-4e79-90d1-db3946a6d119> (17 August 2009).
- Stevens, D., Alger, D., Allen, B., & Sullivan, J.L. (2006) 'Local News Coverage in a Social Capital Capital: Election 2000 on Minnesota's Local News Stations', *Political Communication*, vol. 23, no. 1, pp. 61-83.
- Tewksbury, D. (2006) 'What Do Americans Really Want to Know? Tracking the Behavior of News Readers on the Internet', *Journal of Communication*, vol. 53, no. 4, pp. 694-710.
- Thorson, E. (2008) 'Changing patterns of news consumption and participation', *Information, Communication and Society*, Vol. 11, No. 4, pp. 473-489.
- Verba, S. & Nie, N.H. (1972) *Participation in America: Political Democracy and Social Equality*, New York: Harper & Row.
- Yardley, W. & Perez-Pena, R. (2009) Seattle Paper Shifts Entirely to the Web. *The New York Times*, 17 March. [online] Available at: <http://www.nytimes.com/2009/03/17/business/media/17paper.html> (17 August 2009).