

Surviving a Plague of Blogs: Strategies for Understanding and Managing Online News and Opinion Environments

Fred Johnson

Abstract

The Internet is an extremely useful research tool for students and teachers alike but poses new instructional problems for teachers who need to show their students how to identify and use a rich variety of reliable Internet sources. Specifically, how can we find the worthy online news and opinion sources by using blogs? Savvy researchers and teachers need to develop strategies for making the best possible use of blogs and blogging: They need to know how these discourse communities function and how to explore and evaluate them. For teachers and educators who plan to help their students and themselves cope with and benefit from the rapid proliferation of online information outlets, three basics are key: (1) how we understand the nature of online news and opinion environments, (2) the language we use to describe such environments, and (3) the strategic ways we approach them.

Online outlets for news and opinion range from digital versions of old media standbys, to online-only journals like *Salon* and *Slate*, to personal web pages, to emerging new-media outlets like “weblogs” or “blogs”—all instantly accessible to anyone with an Internet connection. Arguably, blogs are a new genre; certainly they place new kinds of interpretive demands on readers. Daniel W. Drezner of University of Chicago and Henry Farrell of George Washington University, both of whom are much-read bloggers as well as professors of political science, offer a useful definition:

Blogs (short for “weblogs”) are periodically updated journals, providing online commentary with minimal or no external editing. They are usually presented as a set of “posts,” individual entries of news or commentary, in reverse chronological order. The posts often include hyperlinks to other sites, enabling commentators to draw upon the content of the entire World Wide Web. Blogs can function as personal diaries, political analysis, advice columns on romance, computers, money, or all of the above. (2004, pp. 32-33)

Both Rebecca Blood’s website and *Wikipedia*’s “Weblog” entry provide helpful unofficial histories of blogs and blogging (Blood, 2000; *Wikipedia*, 2005). *Wall Street Journal*’s “Numbers Guy,” Carl Bialik explains, the number of blogs now online, while hard to pinpoint, is certainly high (2005). By mid-2005, conservative estimates are as high as 10 or 11 million and rapidly rising (Bialik, 2005, ¶ 5). Bialik (2005) cites 2005 Perseus Development Corporation research that suggests more than 30,000,000 blogs are up and running with that number rising to 60,000,000 during 2005. Jeffrey Henning’s “The Blogging Geyser” (2005) summarizes Perseus’s findings. Notable scholarly considerations of blogging include the *Into the Blogosphere* project (Gurak, Antonijevic, Johnson, Ratliff, & Reyman, 2004) and the “Di-

gressions” section of the Fall 2004 edition of *Lore* published online by Bedford St. Martin’s (Wiederhold, 2004).

The easy availability of so much information and particularly the emergence of blogs as a new medium for news and commentary are boons to web-savvy researchers who have a good sense of what they would like to find. But for students who are news-reading novices—as for any researcher looking into unfamiliar media, ideas, and issues—the Internet complicates an already difficult process of sorting “crackpots” from scholars, objective news sources from partisan opinion outlets, and valuable information from cyber chaff. Seen in this light, the millions of blogs springing up all over the Internet are key offenders, constantly adding more writers, more writing, and more writing outlets to the already overwhelming number of writers, writings, and writing outlets. Yet, read strategically, blogs can quickly offer their readers a rich understanding of contemporary news and issues, and a renewed understanding of the conversational nature of knowledge in general. Three thoughts are key for educators who hope to help their students and themselves cope with and benefit from the rapid proliferation of online information outlets: (1) how we understand the nature of online news and opinion environments, (2) the language we use to describe such environments, and (3) the strategic ways we approach them.

Old Media Concerns

For some educators and scholars, old worries about the poor reading choices of students can obscure the unique features and benefits of online news and opinion reading. Several years ago when I first started reading news online and noticed the number of journals and magazines becoming available through the Web, I found myself talking to a couple of veteran professors in a campus coffee shop. I said something like, “News online is great because I can go straight from this op/ed column to the original story that the

columnist is upset about.” One professor was unimpressed. “The problem,” he said, “is that now no one will ever read anything they don’t want to read.” His friend, the other professor, agreed instantly. “People are too narrow-thinking already. Now, they’ll never have to hear the other side of anything.”

At the time, the force of our disagreement surprised me into silence, but it also helped me to make a connection between older concerns about mass media and contemporary responses to the Internet. As an undergraduate with a communications minor, I knew that some communications experts were concerned about the implications of narrow-casting, understood as the cable-TV-driven growth of niche media outlets. News consumers, some experts worried, would never hear the other side of anything. Eventually, these worriers speculated, many people would begin to read customized newspapers containing only a narrow, comforting set of views. What clicked for me in the coffee shop that day was that the notion of Internet news had been joined unjustly to an old pedagogical concern about narrow-casting. How do we move our students from *Mad Magazine* and *Rolling Stone* to *Atlantic Monthly* and the *New York Times*?

From a perspective shaped by concerns about narrow-casting, today’s Internet news must look like another 60 million *Mad Magazines* in circulation, making it even more difficult for teachers to convince their students to pay attention to *real* news outlets. And there it is: The contrasts between real news and amateur or entertainment news, the high-culture/low-culture binary wherein properly appointed gatekeepers must guarantee the quality of the real news.

Two different conversations were occurring between myself, experts, and professors. My conversation was about wringing information out of the Internet and skirting the old gatekeepers; their conversation lamented the bad taste of undergraduate news readers. If I were to have that past conversation

today, my first response to objections would have been this: The good-old-days were never all that good. There was no utopian era when the mass media outlets of the 20th century supplied all the important news and ideas to the average citizen. Neither was there a utopian era of newspaper journalism. In fact, any insult we can hurl at Internet news coverage has probably already been hurled at the newspapers, likely with greater wit. For example, “Newspapers,” said the essayist Charles Lamb in 1833, “always excite curiosity. No one ever lays one down without a feeling of disappointment” (as quoted in Harrison, 1974, p. 250). Also, “Newspapers,” said the playwright George Bernard Shaw in 1931, “are unable, seemingly, to discriminate between a bicycle accident and the collapse of civilisation” (as quoted in *Quotations About Media Journalism*, 2006). Clearly, we are dealing with an old complaint. The notion of a thorough, reliable, nuanced, one-stop news-aggregating source sounds wonderful but has always been disappointing in reality.

In fact, any discussion of the effects of big media gatekeepers on the delivery of news and opinion must include an acknowledgement of the ways big media tend to reduce all issues to simplest terms, polarize all arguments, cram big stories into a few column inches or a few minutes, and eclipse local news with national news. Joe Trippi (2004) addresses these sorts of big media weaknesses in his campaign memoir, *The Revolution Will Not Be Televised*, which is one of the most interesting early primary documents tracking the effects of the Internet on opinion culture.

Trippi has managed Howard Dean’s insurgent campaign for the Democratic Party’s 2004 presidential nomination, and he has made a lucrative career by creating reductive big media memes. “[W]hat I did best,” says Trippi, was “fine-tuning the candidate’s strengths (and just as often, the opponent’s weaknesses) into symbolic, blunt, and concrete messages that stuck with people” (2004, p. 35). He suggests that voters now dislike all candidates in

any election—voters always see themselves as choosing the least bad option rather than the best option—because the candidates use the big media to do what the big media does best: assassinate character (Trippi, 2004, p. 41). In the big media world, no one has time to win based on an argument. News moves too fast; attention spans are too short.

Ironically, though, Trippi claims to hate the big media's reductive and polarizing tendencies. As a populist politico, Trippi talks about his relief to have found, using the Internet and blogging, ways to return politics to ordinary people. He constantly stresses the difference between one-to-many information sharing, typical of big media outlets in which someone on top is talking down to everyone, and many-to-many information sharing, typical of blogging and other online phenomena in which information and ideas can start at the bottom and simply spread throughout a network (Trippi, 2004, p. 29). Trippi understands the Internet not as exacerbating the problems of traditional mass media but as actually offering some solutions to those problems.

Under Trippi's care, the Dean campaign prospered by sharing internet-based information to increase the amount of information and commentary of all kinds and at all levels regarding Dean and his campaign. Among other strategies, Trippi used multiple blogs that not only gave Dean supporters the opportunity to read posts directly from the campaign staff but also allowed readers to comment. The comment function of many blogs which allows readers to talk back to the writers can be like a cross between an online Discussion Board and a letters-to-the-editor page. It is one of the most interesting features of the genre. Though the main page of a blog is controlled by its writer or writers, the comment function allows readers to instantly talk back to the writers and even to talk among themselves about the topic at hand. Imagine, here is the motivational difference between firing off a letter to a local newspaper about what a candidate ought to do and posting similar comments to a blog *known* to be read and monitored by the campaign staff

and candidate. The letter to the editor may or may not be printed and may not be read and considered by anyone connected to the campaign; the blog comment becomes part of an ongoing, multi-level conversation that includes the candidate and candidate's supporters. Online news sources at their best exist in an easily linked, conversational network. Any individual blog posting, like any individual comment in a conversation, is most significant when viewed in light of its connection to other posts and news stories.

Keywords for Online News and Opinion Environments

The notion that blogs and other media outlets—online—can be in conversation with each other suggests the first keyword for describing and understanding the online news environment as enhanced by blogging: *community*. Blogs do not exist in isolation or normally have any pretensions of doing so. Conversation and fact checking are *not* side effects of blog culture: They drive blog culture. In doing so, blogs often help their readers access the rest of the Web more efficiently. Blogs can and do link their readers back to primary and secondary sources, feature back-and-forth argumentation between writers and between blogs, and let particular conversations continue for as long as need be. Also, bloggers often allow readers to comment as discussed previously, or where commenting is not enabled, allow readers to contact them via e-mail with questions, comments, and information which may then be posted to the blog. Because of these interactive practices, a blog is not limited by the expertise of in-house experts or well-known public experts. Its community of readers becomes a part of its fact-checking and information-gathering apparatus.

Consider what happened in the Fall of 2004 when bloggers began dogging veteran CBS news anchorman Dan Rather over his credulous presentation of what turned out to be forged Texas Air National Guard memos pertaining to George W. Bush's service. One of the most important blog

postings related to the scandal was by Scott Johnson (2004) of *Power Line* and was called "The Sixty First Minute." In an explanation of *Power Line*'s pivotal role in what became known as the "Rathergate" scandal, Lev Grossman (2004) wrote this:

One of the strangest and most radical [aspects of the story] is that the key information in "The 61st Minute" came from *Power Line*'s readers, not its ostensible writers. The Power Liners are quick, even eager, to point this out. "What this story shows more than anything is the power of the medium," [John] Hinderaker [one of *Power Line*'s three writers] says. "The world is full of smart people who have information about every imaginable topic, and until the Internet came along, there wasn't any practical way to put it together." (¶ 19)

As bloggers began to accumulate evidence about Rathergate, they reported on and linked to the opinions and analyses of document experts. They also linked to other relevant experts at one point overwhelming the "Selectric Typewriter Museum" website: a hobby website run by Jim Forbes. The bloggers also began *receiving* an extraordinary amount of information from their responsive and knowledgeable community of readers. It is a fascinating example of many-to-many information sharing.

Of course, readers still need to be mindful of the credibility of these many voices which is why *ethos* is a second keyword for online news and commentary. Opinion columnist, radio personality, and blogger, Hugh Hewitt wrote a book *Blog* (2005) that is helpful here. Written by a key player in the contemporary news and opinion scene, *Blog*, like Joe Trippi's campaign book, is an important account of the new online reading environment. *Blog* emphasizes the fact that bloggers must have the trust of their readers to survive. And readers want "information they can trust, and trust must be earned and is eas-

ily lost" (Hewitt, 2005, p. 99). So, a blog's credibility is its stock-in-trade. If bloggers are consistently debunked by other bloggers and if their information is frequently incomplete or slanted, their blogs will lose ethos, power, and readership. To be read and to maintain the respect of readers, a blog must have a credible ethos; it must seem respectable, reliable, desirable, and *helpful* to its information-seeking readers.

Of course, most blogs do not have a whole lot of public ethos because they receive only a few visitors each day. A few, high traffic blogs do receive hundreds of thousands of visitors a day, numbers small by the standards of *USA Today*, but as Hewitt (2005) argues, significant because they represent people actually visiting a site to read and consider the ideas of a specific writer or set of writers (p. 80). By comparison, newspaper circulation numbers are higher but represent the circulation of the paper, not the engaged reading of the paper's content. Obviously, the number of blogs available and the growing number of readers relying on them to supplement or supply their news draws our minds back to those skeptical coffee shop professors who worried about 60 million new *Mad Magazines*. However, at this point, we may consider that many serious news readers are searching for good information and intelligent commentary on blogs. These news readers are not interested in reading crackpots! Blog reading is catching on as a behavior among readers interested in intelligent news analysis and reliable information and is catching on because the best blogs, the ones with the most attractive ethos, offer features that the mainstream media has not been able to offer in its present form.

A big media news outfit assigns staff writers and reporters to stories every week. But, if we are interested in learning about a legal issue, why would we prefer a journalist's time-starved or space-starved summary to eavesdropping on the extended debate between several smart, informed, articulate lawyers who are blogging about the issue? If we want to understand

more about modern warfare, embedded journalists can offer interesting new perspectives on battlefield action; however, the combination of their journalistic perspectives with the perspectives of actual soldiers who post to blogs is more powerful. Now, add to this mix blogs written by civilian citizens in war-torn countries and a far more nuanced, multi-dimensional picture emerges than would likely have emerged from traditional journalism. Researchers who use blogs as sources should be cautious, of course. The researchers must become keen observers of a source's ethos, not just in terms of the bias of the blog but also in terms of the background of the writer, not just in terms of the blogger's credentials but also in terms of the way that the writer's blog fits into ongoing discussions in a community of writers and thinkers.

The manifestly social character of blogging—its significant communal aspects and dependence on reputation and linkage—suggests that the online information scene can be described in terms common to discussions of social networks. The theoretical basis and accompanying vocabulary for network-based analysis have been developed and refined in recent years in an interesting collaboration between physicists and sociologists. Two physicists in particular, Duncan J. Watts and Albert-László Barabási, have produced readable introductions to network science as it relates to sociology: *Linked: The New Science of Networks* (Barabási, 2002) and *Six Degrees: The Science of a Connected Age* (Watt, 2003). The work of these researchers explains many of the procedures governing the making, shaping, and re-shaping of networks, human and otherwise. My third keyword, taken from network science, is *clusters*.

Researchers studying the science of networks notice that people tend to cluster socially. The people, we know best, all tend to know each other, talk to each other, and trade the same information on the same topics. In a closed cluster—think cult in the mountains—isolation can lead to opinion stagnation.

When 100% of the people around you believe something, you believe, too. But people typically link out of their clusters to outsiders not known by their most intimate group of friends. Sociologists call these out-of-cluster connections *bridges*.

Bridges are weak ties to people whom we may hardly know. However, such weak ties have been found to be the most likely conduits through which new information and ideas can enter our otherwise isolated lives. Those people, outside our immediate social clusters, simply have information that we do not have and vice versa. Sociologist Mark Granovetter explains the notions of social “bridges” and “weak ties” in his seminal 1973 paper called “The Strength of Weak Ties.”

Online sources offer network pathways away from the de facto opinion cluster of the mainstream media. The problem is that the mainstream media only have a limited number of minutes or column inches to offer, and they are aiming for big audiences. They also tend to follow each other's leads, so together they form their own little echo chamber. That is, the mainstream news at its worst comes from a kind of closed cluster, its own kind of cult in the mountains with few bridges out. What the mainstream news outlets deem “niche” stays out of the mainstream media limelight. There is just not enough limelight to reach *everything*. With blogs added to the mix, though, readers interested in less covered news topics—maybe “niche” technology stories, or politics in neglected areas of the world—can go online, find information, and read relevant discussions written by intelligent, engaged writers.

The fourth keyword, then, is *sorting*. The blog version of news selection is quite different than that used by big media gatekeepers if only because bloggers typically have no pretensions about purveying *all* the news that matters. Hugh Hewitt (2005) suggests that political bloggers range from pure analysts who offer opinions to pure aggregators who offer links to what they consider the major stories of the day. Here, again, the language of network

science is useful for describing interactions online. Some organizations or people—like news aggregators—have many more links to individuals outside their main cluster of friends and connections. In social networking terms, these people are *hubs*. By maintaining links to so many people, hub people become conduits for all sorts of information and ideas.

They also become important for linking people together in general. Remove a hub, and suddenly individuals and groups are much farther away from each other, if we are measuring distance in terms of the number of links separating any two entities. In a link-and-node system like that created by a national highway system, big cities act as hubs. In long, skinny Florida, there are certain hub cities which, if removed from the highway network, could effectively paralyze the network (Barabási, 2003, p. 112). Without new links to replace some or all of those lost with the removal of hub cities, no one from the southern part of the state would be able to reach the rest of the United States highway system.

Hewitt says, “Most of the people who read [the Hugh Hewitt blog] do so because they trust me and they don’t have the time or inclination to scour the political, national, and international news every day or hour or edit what they read” (2005, p. 91). Further, he says: “[B]loggers are performing a cueing function, prompting people’s actions in hundreds of thousands of ways” (2005, p. 91). Readers seek out hubs because hubs are helpful. As Rebecca Blood puts it, “These weblogs [blogs] provide a valuable filtering function for their readers. The Web has been, in effect, pre-surfed for them. Out of the myriad web pages slung through cyberspace, weblog editors pick out the most mind-boggling, the most stupid, the most compelling” (2000, ¶ 7). Again, blog hubs are not gatekeepers of all news: The gatekeeper metaphor comes from the old media. Instead, hubs act as traffic cops helping lost people to find specific information, sometimes via unexpected routes. Or, better, aggregators may be hub “sites” and are real-time map makers who continually

track the shape and direction of various opinions on the Internet, never trying to map the whole net, only portions of it.

Strategic Reading: Blogs and E-Learning

Although the combination of traditional news, blogs, and other online sources makes available a rich array of news and commentary, the nature of the Internet makes it easy for news readers—especially student readers unfamiliar with the dynamics of the debates and issues that they are exploring—to become trapped in closed opinion clusters. The danger here is not just that readers may “never have to hear the other side of anything” but that even when searching for all sides of a story, some readers will follow links among a group of news and blog sites that, like a closed cluster of people, are talking only to each other. However, four simple and teachable online reading strategies can ward off closed-cluster entrapment, reveal the conversational nature of knowledge, and make online reading experiences rich and informative.

The first important strategy for Internet news reading is to choose sites that link freely and usefully to the Web. Our main online news portals should be hubs providing many bridges out. As readers, we ought to be suspicious of any Internet opinion piece without links to at least some primary sources. We ought to teach our students to look for writers and news outlets that take the time to link to not only primary sources but also dissenting opinions available online. So sites without outward bound links should be regarded with some suspicion because they are doing at best a second-rate job of using the power of the Internet to situate their commentaries in terms of ongoing public discussions.

A second strategy, I suggest, is finding a good news-aggregating hub, possibly a blog, and using it to find interesting news. Students should learn that hub very well and understand its ethos, limitations, and place in ongoing conversations. A good hub site, as Hewitt (2005) and Blood (2000) suggest,

is like a personal news scout who trolls for the best and most important or most interesting news stories, each day. As we train our students to identify and make use of news aggregators, we also need to help them become aware of the strengths and weaknesses of any particular news aggregator. What do other readers and experts say about this aggregator? If the aggregator has a bias, what is it? It is natural for an aggregator to follow certain stories to the exclusion of others. Having a limited scope, however, does not make the aggregator wrong, just limited, as all news sources are limited. Students should note the limits of their aggregators because those aggregators as hubs will be providing some of their main bridges to new ideas and information.

The third strategy is that, when we want to know more about a story or topic, we should actively follow the links outward not just to news reports and primary documents but also to conversations. We should, of course, teach our students to see where the facts branch into opinions and discussions, and help them learn to identify the major tensions in those discussions. We should also teach them to notice the ways that discourses develop among experts and big media opinion writers, bloggers and reporters, and public figures and readers. The bridges out, provided by links, are most helpful if we use them as gateways to exploration and discussions.

We do not need to rely on newspaper summaries to find out what public figures are saying in their speeches: The speeches are online, and a good news hub will link them to us. We also do not need to rely on newspapers to summarize an ongoing debate: In a richly linked online environment, the whole debate is accessible. Ideally, a conversation-seeking style of reading can reveal the dialectical action at the root of our cultural debates to a degree that traditional media cannot.

As a fourth strategy for effective online news and opinion reading, readers should switch to new hub sites now and then or supplement their regular hub sites with various other sites that either focus on different issues and top-

ics or bring different perspectives to similar issues. One of the things that makes the much-read blogger Glenn Reynolds (Instapundit.com) an attractive hub is his humble insistence that he cannot and should not be anyone's sole news source: "If you're just reading *Instapundit*, you need to branch out," he says in one typical postings, accompanied by a link to another blog featuring a set of annotated links to more interesting sites (2004, ¶ 1).

Different aggregators will link to different writers and different primary news sources. If we—teachers and students—are to avoid being stuck in opinion ruts, then we need to change our reading patterns now and then. We need new or different hubs. We need to be seeking out blogs and other news and commentary sources that have different interests and attitudes. Helpfully, the many interesting hub sites on the Web will refer to one another, and as we read one hub site, we are easily led to other useful hub sites.

Internet news, opinion sources, and traditional news outlets are complementary. For example, *Reason Online* managing editor Jesse Walker (2004) suggests that the new-media/old-media partnership was proactive during the "Rathergate" investigation:

The professional media drew on the bloggers for ideas; the bloggers in turn linked to the professionals' reports. The old media and the new media weren't at loggerheads with each other—or, to the extent that they were, they were also at loggerheads with themselves. They complemented each other. They were part of the same ecosystem. (¶ 5)

Contrary to fears that the Web will be a news-reading environment where "no one will ever read anything they don't want to read," online news and blogs, read strategically, provide a manageable and invigorating influx of knowledge and opinions. Online sources of news and commentary can provide a unique kind of interactive access to expertise and communal knowl-

edge, and the popularity of online news sites and blogs is a function of their usefulness to readers, professors, teachers, and students who are actively seeking both information and intelligent, well-argued opinions. For teachers specifically, the challenge is not to teach our students that a blog posting, by virtue of being a blog posting, is necessarily a distraction from reliable sources. Instead, we need to show our students helpful ways to think about the structure of online conversations, to understand how those conversations include offline and mainstream voices, and to see how the blog makes the most sense when situated in terms of the larger conversation and the most respected voices in that conversation.

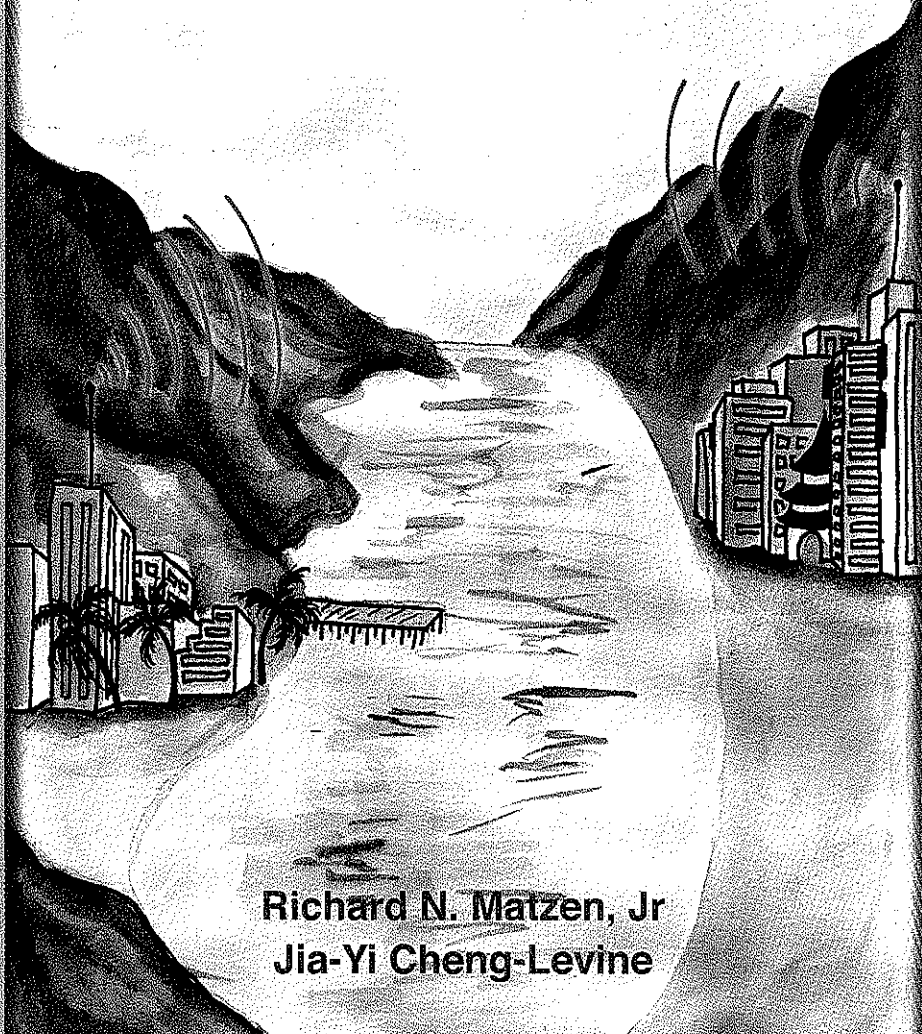
References

- Barabási, A. (2002). *Linked: The new science of networks*. Cambridge, MA: Perseus.
- Bialik, C. (2005, May 26). Measuring the impact of blogs requires more than counting. *The Wall Street Journal Online*. Retrieved May 31, 2005, from <http://online.wsj.com/public/article>
- Blood, R. (2000, September 7). Weblogs: A history and perspective. *Rebecca's Pocket*. Retrieved May 31, 2005, from http://www.rebeccablood.net/essays/weblog_history.html
- Drezner, D. W., & Farrell, H. (2004, November/December). Web of influence. *Foreign Policy*, 145, 32-40.
- Forbes, J. (n.d.). Selectric Typewriter Museum. Retrieved May 31, 2005, from <http://www.selectric.org/selectric/>
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380.
- Grossman, L., & Kerr, U. (2004, December 27). Blogs have their day. *Time*, 26(1), 109-112. Retrieved May 31, 2005, from EBSCO database (15408891).
- Gurak, L. J., Antonijevic, S., Johnson, L., Ratliff, C., & Reyman J. (Eds.). (2004). *Into the blogosphere: Rhetoric, community, and culture of we-blogs*. Retrieved October 7, 2005, from <http://blog.lib.umn.edu/blogosphere/>
- Harrison, J. M. (1974). Media, men and morality. *Review of Politics*, 36, 250-264.

- Henning, J. (2005, April 8). The blogging geyser. Perseus.com. Retrieved May 31, 2005, from <http://www.perseus.com/blogsurvey/geyser.html>
- Hewitt, H. (2005). Blog: *Understanding the information reformation that's changing your world*. Nashville, TN: Nelson.
- Johnson, S. (2004, September 9). The sixty-first minute. *Power Line*. Blog posting retrieved May 31, 2005, from <http://www.powerlineblog.com/archives/007760.php>
- Quotations about Media and Journalism*. (n.d.). Retrieved July 23, 2006, from <http://www.quotegarden.com/media.html>
- Reynolds, G. (2004, October 6). If you're just reading instapundit. *Instapundit*. Retrieved May 31, 2005, from <http://instapundit.com/archives/018253.php>
- Trippi, J. (2004). The revolution will not be televised: Democracy, the Internet, and the *overthrow of everything*. New York: Regan.
- Walker, J. (2004, September 15). Old media and new media. *ReasonOnline*. Retrieved May 31, 2005, from <http://www.reason.com/links/links091504.shtml>
- Watts, D. J. (2003). *Six degrees: The science of a connected age*. New York: Norton.
- Wikipedia*. (2005). Retrieved May 31, 2005, from <http://en.wikipedia.org/wiki/Weblog>
- Wiederhold, E. (Ed.). (2004). Digressions: Reflections on teaching: Academic blogging [Special section]. *Lore: an E-Journal for Teachers of Writing*. Retrieved October 7, 2005, from <http://www.bedfordstmartins.com/lore/index.htm>

Reformation

The Teaching and Learning of
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