

Order versus access: news search engines and the challenge to traditional journalistic roles

Matt Carlson

SAINT LOUIS UNIVERSITY, USA

Seminal studies of journalism have often focused on how institutional and organizational constraints shape the construction of news in order to understand how the news comes to be before it arrives in a reader's hands or on a television screen (for example Breed, 1955; Fishman, 1980; Gans, 1979; Moloch and Lester, 1974; Schlesinger, 1978; Tuchman, 1978; White, 1950). These works aptly demonstrate how journalists select, formulate and present the news in a routinized manner. Yet unique opportunities for news audiences to be 'active' in shaping what news they receive introduce substantive challenges to models that hold journalistic work to be discrete from its consumption by news audiences. But more than just an infusion of interactivity, changes in the technology of news presentation force a rethinking of journalism's cultural and societal role in the face of rapidly developing competing alternative normative frameworks.

This article addresses the changing journalism environment by examining a significant development - the rise of online news search engines that allow users to set their own parameters governing the selection of news items according to an individualized hierarchy of importance. This is a shift, moving from the news media's role in filtering the universe of possible stories into a purposefully arranged, delimited news product to granting search engine users access to multiple stories across a diverse range of news outlets on individually chosen topics.

To examine news search engines, Google News is offered as a case study. More than a technological advancement, Google views its news search engine as transforming journalism through radically expanding access to diverse viewpoints on any issue. This leads to a normative divide between Google,

which promotes extensive access to a diversity of views based on individual searches, and traditional journalism,¹ which places value on creating a finite, ordered news product. Underlying this divide is a definitional struggle over what journalism is and what it should be.

The theoretical and normative understandings of the news raised here are contextualized in the concrete concerns arising in contemporary journalistic discourse. To elucidate the differing articulations of their roles, discourse from both Google News and traditional journalists is examined. Following this, the differing normative formations are considered.

The presentational authority of journalism

To understand the impact of news search engines on journalism, it is imperative to begin by proposing a formulation of journalism. Beyond simply providing information, journalism ascribes to a normative role central to democratic political functioning as well as everyday life: 'The primary purpose of journalism is to provide citizens with the information they need to be free and self-governing' (Kovach and Rosenstiel, 2001: 17). This sentiment is echoed by working journalists in their interpretations of their occupational mission (see Gardner et al., 2001; Weaver and Wilhoit, 1986). This public service view implies that the news media must be active in their discernments, both in what they choose as well as in how they present what they choose. This was recognized by the US Commission of the Freedom of the Press in 1947 with its suggestion that the news media give 'a truthful, comprehensive, and intelligent account of the day's events in a context that gives them meaning' (cited in Siebert et al., 1956: 87). The news provides not only facts, but facts in an interpretive context that helps audiences make sense of the world (Carey, 1986, 1989; Park, 1940).

The ability of the news media to provide accounts perceived as being veridical requires that journalism possess a degree of legitimation, or journalistic authority. Zelizer defines this as 'the ability of journalists to promote themselves as authoritative and credible spokespersons of "real-life" events' and thus able 'to present authoritative versions of the world' (1992: 12). Journalistic authority is dynamic rather than assured; journalists must continuously work to maintain it, often in the face of criticism and contestation (Eason, 1988). In addition, the boundary between journalism and non-journalism is porous and shifting (Winch, 1997), creating tension over assessments of online news efforts (Singer, 2003). The principal strategy employed in bolstering journalistic authority is an adherence to norms and practices 'guiding individuals in appropriate standards of action' (Zelizer, 1992: 2). Journalists ground their work in a belief in providing impartial, objective presentations of reality (Bennett et al., 1985; Hackett, 1984; Schudson, 1978). The news product as it reaches its audiences is shaped by these norms; it cannot be separated from them.

Journalistic authority also relates to presentational aspects of the news. Journalists are expected not only to create stories, but to order them in a way that makes sense of each story in relation to other stories in the news product. The news product as a whole magnifies each story by placing it in context both in relation to other items within the news product as well as against all items not deemed worthy for inclusion in the product. Because of this added meaning, the product of journalism is not accurately the story but a complex of meaningfully arranged stories that work together to form something called 'the news'. Whether it is a television or radio broadcast or a newspaper or magazine issue, the news product acts as a vessel of the news for a given period. In this way, journalism possesses presentational authority, or the ability to generate meaning through the purposive ordering of news items.

Journalism scholars have long focused on news selection and placement. With regard to newspapers, Lippmann describes the selection and ordering of news not as natural or given, but as activated through journalistic conventions:

Every newspaper when it reaches the reader is the result of a whole series of selections as to what items shall be printed, in what position they shall be printed, how much space each shall occupy, what emphasis each shall have. There are no objective standards here. There are conventions. (1922: 223)

The presentational dimension of news functions as an institutionalized process according to a set of socially derived news practices. From this perspective there is nothing inherent in the news items, rather relative importance is socially constructed.

With regard to presentational authority, two 'filters' exist for any news product. Through these filters, journalists systematically transform and reduce the raw material of reality into an institutionally constructed representation of that reality taking the form of a delimited news product. First, news must be intentionally finite in order to establish a divide between news and non-news. This is a filter of inclusion or exclusion within the news product. Most occurrences are not deemed to have the required level of newsworthiness to be admitted to the day's news. Other topics have news cycles of varying lengths. Constraints on resources as well as space and time - the 'news hole' - force news products to adhere to this filter by making decisions based on shared notions of newsworthiness (see Galtung and Ruge, 1965). In response to this constraint, journalists develop routines around a limited number of news-generating institutions, which reinforces the legitimacy of certain sources and topics (Bennett, 1983; Fishman, 1980; Hall et al., 1978; Sigal, 1973; Tuchman, 1978).

Moving beyond inclusion/exclusion, a second filter of placement within the news gives prominence to certain topics or stories over others. Story location, length, presence/absence of other elements (e.g. photograph, graphic, sidebar, etc.), headline size and promotional elements are all indicative of a story's relative importance to other news items. To use Schudson's term, the news outlet chooses the degree with which to 'amplify' certain stories:

A news story is an announcement of special interest and importance. It is a declaration by a familiar private (or sometimes public) entity and usually professional (but occasionally political) entity in a public place that an event is noteworthy. It suggests that what is published has a call on public attention. Placement on the page or in the broadcast indicates how noteworthy; readers understand the hierarchy of importance this creates. It is a hierarchy of moral salience. It is no wonder that the sacred center of the working day on a metropolitan newspaper is the editorial conference to decide what stories will make page one, and where on the page they will go. (1995: 21)

As with inclusion/exclusion, the structures of news media - limited page space, a set broadcast - must result in the amplification of some stories and de-emphasis of others. This is a deliberate process, in accordance with a 'moral' hierarchy established by news editors, yet one that is determined within a set institutional norms pertaining to journalistic values. As a result, the news product provides a representation of the relative importance of news items, reflected in such tropes as 'top' stories, which refers as much to importance as it does placement - top of the front page or top of the broadcast. A whole language of newsworthiness - breaking, exclusive, featured - signals relevance in relation to the other items in the day's news, which is already imparted with initial relevance due to inclusion. This is also a controversial filter, as any reading of columns by newspaper ombudsmen and public editors will indicate.

The power of the media to highlight or ignore particular stories is widely acknowledged in media studies work. This has been true of both the quantitative effects tradition, such as with agenda setting (McCombs and Shaw, 1972), as well as in critical assessments (Gitlin, 1980; Glasgow University Media Group, 1976; Hall et al., 1978; Herman and Chomsky, 1988). While critiques focus on individual stories and, particularly, an over-reliance on official sources, they also chastise the press for ignoring or burying specific stories, or conversely for over-hyping others. This criticism reinforces the relationship between placement and perceived importance.

While research on journalism has primarily focused on news production, research on audiences indicates that news consumption is an active process. Now-classic research studies on media audiences (e.g. Ang, 1985; Graber, 1984; Hall, 1973; Morley, 1980; Radway, 1984) indicate that it would be incorrect to divide traditional news media as controlling audience interpretations while characterizing news search engines as a departure from such constraints. Rather, the process of news consumption must be viewed in a system that 'sees the process of interpretation as one of negotiation between a set of structured potentialities "out there" and the person's repertoire of knowledge representations and processing strategies' (Livingstone, 1998: 33). That a news outlet chooses to include a story, and chooses to place it at a particular point in the broadcast or publication, does not mean that each news consumer will inherently internalize the story's importance along the same hierarchy. With traditional media, the news consumer herself is a filter of information as she chooses

what to read or watch, how much to concentrate, and how to interpret the story and its importance relative to her own experience as well as to surrounding news stories. Yet individual stories remain embedded in the framework of a delimited news product with a hierarchy of importance manifested through placement, length, and other visual or auditory cues. Audiences select from within this product which items deserve attention, but they do not shape the parameters of the product according to their predilections.

News search engines and the promotion of access

Aspects of presentational authority carry over with online news. These news sites utilize techniques for signaling relative story importance in a manner akin to offline journalistic products, just as many top online news sites are connected with traditional media outlets. The structure of news websites generally resembles the hierarchical array of traditional media, even if this hierarchy is determined by criteria unique in substance to the medium, such as recency (Eveland et al., 2004). The most important stories are signaled through the use of graphics and different-sized headline fonts, especially with breaking stories. Placement toward the top of the page connotes importance and freshness, while users scroll down for older, less central stories. On the surface, the web sustains the filters of inclusion/exclusion and placement, since journalists continue to make decisions on which links to place where and with what amount of attention.

If, presentationally, online news sites appear similar to traditional media, the underlying technology exposes fundamental differences separating online news from other media. While the news products discussed above are temporally bound (e.g. the *nightly* newscast, *today's* paper), online news does not face the same constraint. Nor does it face the same spatial constrictions of traditional media products. Rather, the dynamism of online news allows fresh items to be uploaded when ready and to remain on the site indefinitely. Additionally, online news has made it easier for news users to 'efficiently select the news that interests them' (Tewksbury, 2003: 695) by facilitating personalization. One way this occurs is through news search engines.

While individual online news sites have long possessed search engines for finding endogenous content, the past few years have seen a rise in search engines that index headline links across news sites. By entering a query into a search engine, users are presented with an automatically ranked list of links to stories containing the search term from news sites throughout the web. Some of the more popular sites are Google News (www.news.google.com), Newsbot (newsbot.msnbc.msn.com), Yahoo! News (search.news.yahoo.com), AltaVista (www.altavista.com/news), Rocket News (www.rocketnews.com) and AlltheWeb (www.alltheweb.com). The sites vary in the number of sources they cull from, the length of time they archive stories, and the amount of

personalization they allow. For example, MSNBC's Newsbot 'learns' the preferences of individual users and adapts its news accordingly.

Google News and the push for diversity

Google News provides a fruitful vantage point from which to consider the impact of news search engines. First, the Google search engine remains ubiquitous, handling 42.7 percent of all US search engine queries in March 2006 (comScore, 2006). Unsurprisingly, Google News received a great amount of publicity upon its launch, sparking attention to news search engines generally. Since its launch, Google News has insisted on the merits of an entirely automated news system, which sets it against human edited news sites. This section will look at these distinctions in greater detail and the next section will examine the response to Google News by journalists.

Google News was launched in September 2002 as a fully automated news service. The site requires no human editors - unlike leading news aggregator web pages like AOL or Yahoo News. Headline links are collected from over 4500 websites and the site refreshes every 15 minutes. A closely guarded algorithm examines dozens of factors to create a hierarchical placement within searches and on the front page. Searches yield articles from a variety of sources around the world ranging from major news outlets to college newspapers. Links are time-stamped and remain archived for 30 days. Google News allows users to search for news stories in a format resembling the regular Google search engine. The site also includes a front news page and section fronts with automatically selected and positioned news topics. Each topic is accompanied by links to stories from multiple news outlets.

Since its inception, Google News has seen its traffic increase, reaching 10 million unique visitors in May 2006, according to Nielsen//NetRatings. This made Google News the tenth most visited news site, drawing more unique visitors than sites for the *Washington Post* and Fox News (Cyberjournalist.net, 2006).

Google News celebrates the lack of a human component in its news selection process. The bottom of the front page includes the line: 'The selection and placement of stories on this page were determined automatically by a computer program.'² This idea is expounded upon in information on the site about how Google News works:

Google News is a highly unusual news service in that our results are compiled solely by computer algorithms, without human intervention. As a result, news sources are selected without regard to political viewpoint or ideology, enabling you to see how different news organizations are reporting the same story. This variety of perspectives and approaches is unique among online news sites, and we consider it essential in helping you stay informed about the issues that matter most to you.³

This statement indicates that automation not only serves the technical purpose of doing work much quicker and more thoroughly than humans. It is meant to expose users to a variety of voices by offering multiple accounts of any story from a wide range of news outlets. For example, a story on the US military in Iraq will draw from large US news outlets as well as from smaller international outlets. The computer, Google purports, is unbiased and thus better able to serve a mix of views because it does not recognize bias.

The impetus of creating a diverse agora of news stories on any topic was articulated by the creator of Google News:

I want this to be a force for a democracy.... One of the things that makes us objective is we show all points of view. Even if you disagree with one, we give you both - the majority and the minority point of view. The ones you don't agree with are education. It's nice to know what the other side is thinking. You'll see left-leaning ones as much as much as you see right-leaning ones. Frankly, the software doesn't know the difference between left and right, which is good. (quoted in Kramer, 2003: n.p.)

This statement situates the news search engine as affirming the journalistic norm of impartiality while standing against norms associated with selecting and ordering disparate news items into an ordered whole. Value is placed on increasing exposure to differing viewpoints, which works against conceptions of the web as creating an environment where users insulate themselves with only news from their point of view (Sunstein, 2001). The underlying motive for Google is to increase access to stories for users to discover according to individualized searches.

By aggregating across 4500 sites, Google News includes a vastly wider breadth of news than any single traditional media outlet. Google must decide, via human decision-making, which sites to include, forcing it to develop a criteria of a 'news' site versus a non-'news' site. These decisions ultimately shape the stories included in any search. Yet it is through searches that users either include or exclude a topic. The selection of specific search terms over others dictates the headlines that will be included. As for the filter of placement, the Google News search engine produces its own placement through the ordering of headlines in descending order from the top of the screen based on its search algorithms. Presumably, the algorithm aims to produce search results based on relevance and recency, albeit according to guarded criteria. The automated ranking of search results impacts the user's selection by promoting headlines from certain outlets above others. Meanwhile, the front page is created and ordered automatically based on an evaluation of story importance. Like a traditional news product, the front page layout of Google News contextualizes topics in relation to one another in order to convey relative topic weight. Yet it provides links to multiple news outlets for any one story in order to provide differing perspectives.

In 2005, Google News made it easier for users to become producers of their own news product by adding customizable spaces to its front page based on a user's search preferences. The user sets the search engine to automatically search specific topics - up to 25 at a time. In a real way, the user dictates the layout of the front page - she helps produce the news product, even if it is an individualized product.

Google News stands apart from traditional media in privileging access over order. At the same, it relies on these media outlets for content. The next section examines the response to Google News by journalists as they attempt to make sense of the impact of news search engines on journalism and to clarify what journalism does.

The journalistic response to Google News

As cultural producers, journalists maintain the ability to speak publicly about journalism through their news products. While such discourse occurs in non-mediated settings such as newsrooms or conferences, it is through public discourse that journalists respond to challenges ranging from changing technology, charges from critics across the political spectrum, and shifting economic and ownership conditions. Journalistic discourse provides researchers with fruitful data for understanding the maintenance of the journalistic 'paradigm' in the face of alterations and incursions (see Bennett et al., 1985; Berkowitz, 2000; Reese, 1990). Such efforts constitute an attempt at 'discursive containment' as journalists strive to control narratives about journalism (Dahlgren, 1992). This section explores discourse in mainstream news outlets and in the journalism trade press concerning Google News from its release in September 2002 through August 2005.⁴ The purpose is to ground the above discussion on tensions raised by news search engines in discourse from journalists about both Google News and journalism in general. It should be stressed that this discourse is by no means univocal, but instead comprises different threads that range in their assessment of the impact of news search engines.

Several journalists took a negative tack in evaluating Google News by focusing on the displacement of human editing by automated news services. Columnist Michael Kinsley called this scenario 'humbug' when he asserted: 'People still do it better. But not by much. The day is clearly approaching when editors can be replaced by computers. This requires some urgent rethinking' (Kinsley, 2002: A43). While Kinsley displayed confidence on the merits of human editors, he simultaneously expressed concern over automated search technologies. *US News and World Report* warned that, without editors, individual stories cannot be verified: 'Without gatekeepers, no one stands ready to verify reports as accurate, so there's no difference between real news and agreed-upon gossip or low-level fluff (Leo, 2005: 60). A similar argument was made by the director of Yahoo News: 'News cannot be

100 percent automated and present a meaningful picture of what is happening in the world and in people's lives. It takes humans to decide these are the freshest and most relevant stories' (cited in Walker, 2002: E1). This assertion contends that journalists must be active at the presentational level to make sense of the news - with humans as the desirable agents for selecting and ordering content. In the face of technological challenges, one columnist reiterated the need for presentational authority:

There's a lot on [the front page] competing for your attention. Do not consider it a disorganized jumble. In fact, the entire newspaper is an attempt to impose order on the chaos that is our world. There is a rough rule of thumb: The higher up the story is on a page, the more important it is. (Kelly, 2005: C9)

Here, a journalist makes an explicit claim regarding the value of the interpretive actions editors carry out on the news in order to create an interdependent coherent news product. This is viewed as a valuable service that the news provides.

One tack journalists took in criticizing Google News was to point out flaws in its front page story ranking. The front page of Google News mimics the structure of other news websites, but occasionally produces unwanted results. *Time* magazine disparaged Google News's verification abilities:

Google News also has a somewhat deficient disinformation detector, a weakness that got it into trouble a couple of weeks ago when its lead story was a piece of propaganda lifted directly from the Iranian News Service. (Macht, 2002: 95)

An article in the *New York Times* noted that front page placement 'has earned some ridicule from journalists' (Gallagher, 2003: C5), and presented Google News's late response to the 2003 Columbia space shuttle disaster as an example. The *Wall Street Journal* similarly reported partisan political organizations and parody items among the top headlines (Delaney, 2005: B1). Another example came when the headline links to a story about a Washington DC area gynecologist accused of molesting patients were accompanied by a picture of an unrelated *Ottawa Sun* columnist whose story was carried farther down on the page. It was questioned if such a case could make Google News susceptible to libel (Dube, 2004). Further criticism questioned whether search results were truly unbiased. An *Online Journalism Review* story showed that top headlines from a search of 'John Kerry' during the 2004 campaign often came from politically conservative websites. While Google dismissed this charge, others suspected that partisan online news producers had found a way to write stories that would be promoted in the Google News rankings (Lasica, 2004; Ulken, 2005).

In addition to concern over Google News's impact on existing notions of journalism, anxiety arose over its economic impact on other news sites. Google News claims it adds value by driving searchers to news sites, but this is contested on several grounds. First, sites do receive increased traffic, but

only to a single, inner page instead of the whole site (Outing, 2005). Second, for smaller news sites, increased non-local traffic does not help when advertising is based on local visitors (Palser, 2002). Third, the algorithm driving link placement on Google News does not privilege original reporting, which drives traffic away from the originating news outlet toward newly posted wire stories (Kesmodel and Vara, 2005). A final example came when Agence France Presse (AFP) requested that Google News stop including its content and then demanded \$17.5 million in compensation for past content. AFP derives its revenue from subscriptions sold to other news outlets and claims that Google News undercut this arrangement by offering AFP content for free. Google News responded by withdrawing AFP content (Kesmodel and Vara, 2005). Taken together, these examples indicate how Google News is not separate from these other sites, but a large enough source to create tension around online news economics.

While the above popular and trade press journalists looked at Google News with concern or disdain, a number of positive assessments were also made. A complimentary assessment in the *Columbia Journalism Review* focused on the utility of Google News for keeping tabs on developing stories: 'As a news junkie, I used to spend my time scouring the various major news sites to find out what was going on. Now I simply bookmark Google News and revisit it throughout the day' (Sreenivasan, 2003: 11). Elsewhere, a writer for the *Washington Post* summed up an evaluation of Google News with awe at the automation process: 'All in all, the former editor in me feels humbled at how a computer is able to assemble on the fly an adequate version of what it takes a dozen or two humans to do at most major Web news sites' (Walker, 2002: E1). *Slate's* media columnist Jack Shafer asserted, positively, that human editors were made 'extraneous' by Google News, as: 'No team of human editors can compete with 24/7 robots' (Shafer, 2002). Similarly, a *New York Daily News* article noted the lack of human bias, 'Google News doesn't base its results on a political view, the way many newspapers do, which is a very good thing' (*New York Daily News*, 2002: 7). While the fact of being human confounds attempts by human editors to fulfill the normative journalistic goal of impartiality, automated news search engines are thought to be intrinsically unbiased.

Finally, others looking at Google News took a balanced approach toward the impact of news search engines on journalism, viewing it as expanding rather than disrupting journalism. For example, a *Newsweek* writer situated search engines and human editors as functioning together in a system:

Journalism pundits bemoaned how 'a computer' could emulate flesh-and-blood editors, but they missed the point. Like all of the company's products, Google News is not about computers making lists, but formulas that extract the combined judgment of human beings posting information to the Internet. (Levy, 2005: 11)

In this view, Google News adds value to existing news sites. Similarly, a *Time* reporter wrote: The good news (for Web surfers) is that Google delivers a

surprisingly high-quality product that's just as relevant and up-to-date as the human-edited news outlets with which it competes. The better news (for human editors) is that it can't do what it does without us' (Macht, 2002: 95). This represents a hybrid approach that views journalists as essential for developing content, even if this content comes to users through search engines rather than editor-determined news products.

The automation of news via search engine technology raises concerns for journalists at a time when they face contestation over their cultural authority due to declining audiences, wavering resources, and ubiquitous charges of bias and inaccuracy. New media forms occasion a further threat to the presentational authority of the news discussed above. Journalists' responses have ranged from fear to mockery at the suggestion that the need for human editors is declining. Rather, the belief holds that the judgment of human editors bound up in selecting and ordering the news remains essential to making sense of the news from a patchwork of unrelated material. Other journalists praise news search engines for making a vast number of stories and news sources available. More than simply volume, this increased accessibility of materials grants users easier access to diverse reporting. With Google News, every indexed story is of potential relevance as individualized searches bring users to content. The active role of users in generating search results requires a reconceptualization of journalistic filters to include the role users play in determining the news content they consume.

Contrasting normative models

The distinction between traditional news media and Google News cannot simply be reduced to providing news stories to audiences through different methods. Rather, there exists a fundamental division between how they each articulate the normative aims of this structure. This creates a conflict between structuring the news in a purposeful context and the value in presenting multiple versions of a story without legitimating one view over another. Each of these aims deserves explication.

With traditional news, both the above discussion of presentational authority and the discourse by journalists reacting to Google News indicate an emphasis on placing news stories in an interpretive context. Aside from their internal coherency, stories are made sense of through situating them vis-a-vis all other items in the news product. This is a purposive structure, giving notice of the relative value of news items, all of which are perceived as more important than what is omitted. The news product is a representation of a set time period's meaningful events. Unsurprisingly, this presentational ordering touches off a great deal of media criticism, which reinforces the idea that news products represent a hierarchy of importance.

Google News, the leading news search engine, reconceptualizes the relationship between news presentation and the audience through granting news

users a more active role in selecting news. This is not simply a matter of selecting different topics; it is also about choosing among multiple accounts of the same story. Even with the front page, users decide from more than one headline link for each major story. In this way, Google News seeks to provide more than an index of news stories. The design is predicated on increasing news audiences' exposure to multiple viewpoints. In a decidedly pluralist tone, Google News maintains that users gain from increased exposure to disparate viewpoints and leaves the user to select among them. Increased diversity and access are the stated goals.

The divergence between the 'ordered interpretation' model of traditional media and the 'individual diversity' model of news search engines results in a contrary view of the audience. While traditional news may accept that its audiences actively select which items to give attention to, this is a role limited by the one-way flow of information. News search engines, however, grant users the ability to actively seek information in a two-way flow. No news product exists outside of the news consumer, only a database of stories. The news consumer selects among these through searching by topics, which introduces a new level of audience activity as they choose both a topic and then stories on that topic from the search engine-generated list. This process invites a rethinking of the role of the audience in journalism. The presentational authority concept implies that journalists dictate an interpretive order to the news. In contrast, Google News's emphasis on access and diversity is predicated on viewing news audiences as actively creating their news environment. It is this disconnect between a news audience selecting from a preformed news product versus seeking news through supplied search terms that provides the basis for the tension between traditional media and news search engines.

This discussion has largely centered on differing normative perspectives between traditional news, which creates meaning among a field of unrelated stories bound together into something called 'the news', and search engines, which promote diversity through easy access to different viewpoints on any topic. Yet the gap between normative ideals and what happens in practice deserves attention. The news is regularly, and often quite rightly, assailed for being inadequate in providing a digest of what is most important. Aside from criticisms of individual stories, the news corpus also receives condemnation for what it omits or buries. Such instances weaken journalism's presentational authority by challenging its selection process. Likewise, Google News aims at diversity, but regularly recycles the same wire content in links to different news sites. How much diversity can be said to be gained from linking to a story on an Indian news site that uses Associated Press content? Directing users to a greater number of news sites does not simply correlate with a wider range of content. Thus, it is important to separate normative goals from actual practice. However, the importance of examining these normative articulations is their power over defining the goals journalism should pursue. These goals, in turn, impact journalistic practice.

The diminution of the placement and ordering role exercised in news products raises deeper issues of journalism's function and authority in the public sphere and challenges existing notions of what journalists do. The conflict between the presentational authority of journalists and individual selectivity accompanying the rise of news search engines can be considered through a dichotomy Pool (1990) labels 'social cohesion versus individuality'. Past criticism focused on the media as breeding conformity among undifferentiated mass audiences. Yet changes in technology reverse the concern to one of rampant individuality resulting in a lack of societal cohesiveness. Pool asserts, 'The cohesion and effective functioning of a democratic society depends upon some sort of public agora in which everyone participates and where all deal with a common agenda of problems, however much they may argue over solutions' (1990: 15). Such a statement seems ironic, since Google News does not aim to create an environment of 'total filtering' (Shapiro, 1999), but rather to increase exposure to diverse views.

Optimistically, alterations in the presentation of news will not diminish shared bonds (as Sunstein, 2001, warns), but will increase overall news knowledge. Tewksbury and Althaus point out:

By placing more control over the flow of the news in the hands of individual readers, online news audiences may become collectively more knowledgeable about a broad range of events and issues even though individually the knowledge base of this audience might be rather idiosyncratic. (2000: 459)

In this sense, society benefits from a different variety of informed citizenry than has previously existed. However, talk of a transformation in news presentation must account for the stratification of technological prowess that exists as a 'usage gap' (van Dijk, 2004: 235) among online users (see DiMaggio et al. 2004; Hargittai, 2004).

Conclusion

The threat to existing journalism practices from news search engines has been contextualized in this article as specifically a transformation away from the presentational authority of journalists to orchestrate disparate news items into a hierarchically arranged news product that makes sense of each item through its relationship with other items. This ranking of information employs a temporally rigorous application of a set of institutionalized news values that dictates relative newsworthiness. Within each news product these news values also dictate the ranking of the information in a process repeated at regular intervals, such as the day, week, or, as with cable news, even the hour. This structure gives rise to the establishment of salience for certain issues - the idea of the 'news of the day'. The news consumer is aware of this context, even if she does not actively engage stories outside her interests.

News search engines, meanwhile, reduce this authority by removing presentational aspects of news in order to allow individualized news searches based on each user's interests. User-based filtering transforms the news 'product' from the level of the packaged news product - the 30-minute news broadcast, the day's newspaper, the magazine issue - to the level of an individual story. Google News, which has been examined here, goes further and also creates an automated news page with its own entirely computer-generated news layout. As Google News becomes more customizable, users can have the site automatically search for and provide links for individualized topics. This set-up comes close to Negroponte's (1995) concept of the *Daily Me* personalized electronic newspaper.

Yet Google News offers more than simply the convenience of a personalized news product. Rather, it explicitly aims to expose users to multiple views on a given topic. This is a contrast from a traditional news product, which aims to provide a singular voice across a range of topics. Google News stresses access and diversity, which creates a normative divide with traditional media seeking to create a purposively ordered set of news stories.

Ultimately, the differences between traditional news media and news search engines add up to more than a competition for audiences. Rather, this is a confrontation over what journalism should offer its audiences, or simply, over what journalism should be. The idea of what is 'journalism' is not fixed or unmoving, but prone to shift and change as culture shifts and changes around it. In this way, news search engines portend a different conceptual model of what news does and how it addresses its audiences. To conclude optimistically, the challenge posed by news search engines forces traditional journalism to interrogate its societal role, which is both to acknowledge its own power at representing the societal importance of the events it selects and also to comprehend news audiences in new ways that acknowledge the thirst for a multitude of stories and perspectives that cannot be satisfied by one outlet. In this view, the plurality of the news, across outlets and across borders, becomes available quite easily to anyone who expresses the desire.

Notes

1. The terms 'traditional news media' and 'traditional journalism' are composite terms denoting established news outlets in print and broadcast media and their underlying newsgathering principles. Clearly, variation exists among these outlets, but here their general qualities are considered to make comparisons with news search engines.

2. URL (consulted 8 May 2006): www.news.google.com

3. URL (consulted 8 May 2006): http://news.google.com/intl/en_us/about_google_news.html

4. The Factiva database was used to retrieve articles with commentary on Google News made between September 2002 and August 2005. Factiva archives a wide range of sources, including newspapers, magazines, the trade press, broadcast transcripts and many websites. It is an efficient and comprehensive means of locating texts. Additional searches were made of the *Online Journalism Review* (<http://www.ojr.org>).

References

- Ang, I. (1985) *Watching Dallas*. London: Methuen.
- Bennett, W.L. (1983) *News: The Politics of Illusion*. New York: Longman.
- Bennett, W.L., L. Gressett and W. Haltom (1985) 'Repairing the News: A Case Study of the News Paradigm', *Journal of Communication* 35(1): 50-68.
- Berkowitz, D. (2000) 'Doing Double Duty: Paradigm Repair and the Princess Diana What-a-story', *Journalism* 1(2): 125-43.
- Breed, W. (1955) 'Social Control in the Newsroom: A Functional Analysis', *Social Forces* 33: 326-35.
- Carey, J. (1986) 'The Dark Continent of American Journalism', pp. 146-96 in R. Manoff and M. Schudson (eds) *Reading the News*. New York: Pantheon.
- Carey, J. (1989) *Communication as Culture*. New York: Routledge.
- comScore (2006) 'Number of Search Queries Gain in March, Google Leads the Way', 17 April, URL (consulted May 2006): <http://www.comscore.com/press/release.asp?press=802>
- Cyberjournalist.net (2006) 'Top News Sites for May', 27 June, URL (consulted July 2006): <http://www.cyberjournalist.net/news/003577.php>
- Dahlgren, P. (1992) 'Introduction', pp. 1-23 in P. Dahlgren and C. Sparks (eds) *Journalism and Popular Culture*. Thousand Oaks, CA: SAGE.
- Delaney, K. (2005) 'Yahoo "Hybrid" Now Dominates News Web Sites', *Wall Street Journal* 14 April: B1.
- DiMaggio, P., E. Hargittai, C. Celeste and S. Shafer (2004) 'Digital Inequality: From Unequal Access to Differentiated Use', pp. 355-400 in K. Neckerman (ed.) *Social Inequality*. New York: Russell Sage Foundation.
- Dube, J. (2004) 'Could Google News Be Sued for Libel?', *Cyberjournalist.net*, 5 June, URL (consulted July 2006): <http://www.cyberjournalist.net/news/001346.php>
- Eason, D. (1988) 'On Journalistic Authority: The Janet Cooke Scandal', pp. 205-27 in J. Carey (ed) *Media, Myths, and Narratives: Television and the Press*. Newbury Park, CA: SAGE.
- Eveland, W., K. Marton and M. Seo (2004) 'Moving Beyond "Just the Facts": The Influence of Online News on the Content and Structure of Public Affairs Knowledge', *Communication Research* 31(1): 82-108.
- Fishman, M. (1980) *Manufacturing the News*. Austin: University of Texas Press.
- Gallagher, D. (2003) 'Deal May Freshen Up Google's Links', *New York Times* 24 February: C5.
- Galtung, J. and M. Ruge (1965) 'The Structure of Foreign News', *Journal of Peace Research* 2: 64-90.
- Gans, H. (1979) *Deciding What's News*. New York: Vintage.
- Gardner, H., M. Csikszentmihalyi and W. Damon (2001) *Good Work: When Excellence and Ethics Meet*. New York: Basic Books.
- Gitlin, T. (1980) *The Whole World is Watching*. Berkeley, CA: University of California Press.
- Glasgow University Media Group (1976) *Bad News*. London: Routledge and Kegan Paul.
- Graber, D. (1984) *Processing the News: How People Tame the Information Tide*. New York: Longman.
- Hackett, R. (1984) 'Decline of a Paradigm? Bias and Objectivity in News Media Studies', *Critical Studies in Mass Communication* 1: 229-59.
- Hall, S. (1973) *Encoding and Decoding in Television Discourse*. Birmingham, UK: Centre for Contemporary Cultural Studies, University of Birmingham.

- Hall, S., C. Critcher, T. Jefferson, J. Clarke and B. Roberts (1978) *Policing the Crisis: Mugging, the State and Law and Order*. London: Macmillan.
- Hargittai, E. (2004) 'Internet Access and Use in Context', *New Media and Society* 6(1): 137-43.
- Herman, E. and N. Chomsky (1988) *Manufacturing Consent*. New York: Pantheon.
- Kelly, J. (2005) 'Read (but Not All!) About It', *Washington Post* 11 February: C9.
- Kesmodel, D. and V. Vara (2005) 'A Mixed Blessing: News Portals Like Google News and Topix Attract Masses, But Irk Some Editors', *Wall Street Journal Online* 23 March, URL (consulted September 2007): http://online.wsj.com/public/article/SB111151985359286597-hBb39gbCuTKJA1_hms1eXHdB0gQ_20050422.html?mod=blogs
- Kinsley, M. (2002) 'Computers Go Too Far; Hey - That's My Job You're Automating!', *Washington Post* 29 November: A43.
- Kovach, B. and T. Rosenstiel (2001) *The Elements of Journalism*. New York: Three Rivers Press.
- Kramer, S. (2003) 'Google News Creator Watches Portal Quiet Critics With "Best News" Webby', *Online Journalism Review* 25 September, URL (consulted September 2005): <http://www.ojr.org/ojr/kramer/1064449044.php>
- Lasica, J.D. (2004) 'Balancing Act: How News Portals Serve Up Political Stories', *Online Journalism Review* 24 September, URL (consulted September 2005): <http://www.ojr.org/ojr/technology/1095977436.php>
- Leo, J. (2005) 'Googling the Future', *US News and World Report* 16 May: 60.
- Levy, S. (2005) 'Living by Google Rules; Mining the Web is Only Part of It. The Search Giant Faces Growing Pains and Fierce Competition', *Newsweek* 11 April: 11.
- Lippmann, W. (1922) *Public Opinion*. New York: Free Press.
- Livingstone, S. (1998) *Making Sense of Television*, 2nd edn. London: Routledge.
- Macht, J. (2002) 'Invasion of the Robo-Editors; Automated News Services Can Gather Headlines in a Flash. Is There Still Room for the Human Touch?', *Time* 14 October: 95.
- McCombs, M. and D. Shaw (1972) 'The Agenda-Setting Function of Mass Media', *Public Opinion Quarterly* 36(2): 176-87.
- Moloch, H. and M. Lester (1974) 'News as Purposive Behavior: On the Strategic Use of Routine Events, Accidents and Scandals', *American Sociological Review* 3: 101-12.
- Morley, D. (1980) *The Nationwide Audience*. London: BFI.
- Negroponte, N. (1995) *Being Digital*. New York: Knopf.
- New York Daily News* (2002) 'Web News', 27 October: 7.
- Outing, S. (2005) 'The Article Page: New Kingpin of Online News?', *Editor and Publisher Online* 22 April, URL (consulted September 2005): http://www.editorandpublisher.com/eandp/columns/stopthepresses_display.jsp?vnu_content_id=1000893246
- Palser, B. (2002) 'The Out-of-Towners: For Many Local News Sites, a Good Chunk of Readers Don't Live Around Here Anymore', *American Journalism Review* November: 66.
- Park, R. (1940) 'News as a Form of Knowledge', *American Journal of Sociology* 45: 669-86.
- Pool, I. (1990) *Technologies without Boundaries*. Cambridge, MA: Harvard University Press.
- Radway, J. (1984) *Reading the Romance*. Philadelphia: University of Pennsylvania Press.
- Reese, S. (1990) 'The News Paradigm and the Ideology of Objectivity: A Socialist at the *Wall Street Journal*', *Critical Studies in Mass Communication* 7: 390-409.

- Schlesinger, P. (1978) *Putting 'Reality' Together*. London: Constable.
- Schudson, M. (1978) *Discovering the News*. New York: Basic.
- Schudson, M. (1995) *The Power of News*. Cambridge, MA: Harvard University Press.
- Shafer, J. (2002) 'Automated News', *Slate* 24 September, URL (consulted September 2005): <http://slate.msn.com/id/2071499/>
- Shapiro, A. (1999) *The Control Revolution*. New York: Public Affairs.
- Siebert, F., T. Peterson and W. Schramm (1956) *Four Theories of the Press*. Urbana: University of Illinois Press.
- Sigal, L. (1973) *Reporters and Officials: The Organization and Politics of Newsmaking*. Lexington, MA: D.C. Heath.
- Singer, J. (2003) 'Who Are These Guys? The Online Challenge to the Notion of Journalistic Professionalism', *Journalism* 4(2): 139-63.
- Sreenivasan, S. (2003) 'Currents: Technology Corner', *Columbia Journalism Review* May: 11.
- Sunstein, C. (2001) *Republic.com*. Princeton, NJ: Princeton University Press.
- Tewksbury, D. (2003). 'What Do Americans Really Want to Know? Tracking the Behavior of News Readers on the Internet', *Journal of Communication* 53(4): 694-710.
- Tewksbury, D. and S. Althaus (2000) 'Differences in Knowledge Acquisition Among Readers of the Paper and Online Versions of a National Newspaper', *Journalism & Mass Communication Quarterly* 77(3): 457-79.
- Tuchman, G. (1978) *Making News*. New York: Free Press.
- Ulken, E. (2005) 'Non-Traditional Sources Cloud Google News Results', *Online Journalism Review* 19 May, URL (consulted September 2005): <http://www.ojr.org/ojr/stories/050519ulken/>
- van Dijk, J. (2004) 'Divides in Succession: Possession, Skills, and Use of New Media for Societal Participation', pp. 233-54 in E. Bucy and J. Newhagen (eds) *Media Access: Social and Psychological Dimensions of New Technology Use*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Walker, L. (2002) 'Google News, Untouched by Human Hands', *Washington Post* 26 September: E1.
- Weaver, D. and C. Wilhoit (1986) *The American Journalist*. Bloomington: Indiana University Press.
- White, D. (1950) 'The "Gatekeeper": A Case Study in the Selection of News', *Journalism Quarterly* 24: 383-90.
- Winch, S. (1997) *Mapping the Cultural Space of Journalism*. Westport, CT: Praeger.
- Zelizer, B. (1992) *Covering the Body: The Kennedy Assassination, the Media and the Shaping of Collective Memory*. Chicago: University of Chicago Press.

Matt Carlson is Assistant Professor of Communication at Saint Louis University, USA. His research focuses on changing modes of journalistic practice corresponding to larger cultural, economic and technological shifts. *Address*: Saint Louis University, Department of Communication, Xavier Hall 300, 3733 West Pine Mall, St Louis, MO 63108, USA. [email: mcarlsl0@slu.edu]