

# COLUMBIA JOURNALISM REVIEW

Strong Press, Strong Democracy

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## Overload!

Journalism's battle for relevance in an age of too much information

By Bree Nordenson

**I**n 2007, as part of the third round of strategic planning for its digital transformation, The Associated Press decided to do something a little different. It hired a research company called Context to conduct an in-depth study of young-adult news consumption around the world. Jim Kennedy, the AP's director of strategic planning, initially agreed to the project because he thought it would make for a "fun and entertaining" presentation at the annual meeting. It turned out to be more than that; the AP believed that the results held fundamental implications for the role of the news media in the digital age. Chief among the findings was that many young consumers craved more in-depth news but were unable or unwilling to get it. "The abundance of news and ubiquity of choice do not necessarily translate into a better news environment for consumers," concluded the researchers in their final report. "Participants in this study showed signs of news fatigue; that is, they appeared debilitated by information overload and unsatisfying news experiences . . . . Ultimately news fatigue brought many of the participants to a learned helplessness response. The more overwhelmed or unsatisfied they were, the less effort they were willing to put in."

The idea that news consumers, even young ones, are overloaded should hardly come as a surprise. The information age is defined by output: we produce far more information than we can possibly manage, let alone absorb. Before the digital era, information was limited by our means to contain it. Publishing was restricted by paper and delivery costs; broadcasting was circumscribed by available frequencies and airtime. The Internet, on the other hand, has unlimited capacity at near-zero cost. There are more than 70 million blogs and 150 million Web sites today—a number that is expanding at a rate of approximately ten thousand an *hour*. Two hundred and ten billion e-mails are sent each day. Say goodbye to the gigabyte and hello to the exabyte, five of which are worth 37,000 Libraries of Congress. In 2006 alone, the world produced 161 exabytes of digital data, the equivalent of three million times the information contained in all the books ever written. By 2010, it is estimated that this number will increase to 988. Pick your metaphor: we're drowning, buried, snowed under.

The information age's effect on news production and consumption has been profound. For all its benefits—increased transparency, accessibility, and democratization—the Internet has upended the business model of advertising-supported journalism. This, in turn, has led news

outlets to a ferocious focus on profitability. Over the past decade, they have cut staff, closed bureaus, and shrunk the newshole. Yet despite these reductions, the average citizen is unlikely to complain of a lack of news. Anyone with access to the Internet has thousands of free news sources at his fingertips. In a matter of seconds, we can browse *The New York Times* and *The Guardian*, *Newsweek* and *The Economist*, CNN and the BBC.

News is part of the atmosphere now, as pervasive—and in some ways as invasive—as advertising. It finds us in airport lounges and taxicabs, on our smart phones and PDAs, through e-mail providers and Internet search engines. Much of the time, it arrives unpackaged: headlines, updates, and articles are snatched from their original sources—often as soon as they're published—and excerpted or aggregated on blogs, portals, social-networking sites, rss readers, and customizable homepages like My MSN, My Yahoo, myAOL, and iGoogle. These days, news comes at us in a flood of unrelated snippets. As Clay Shirky, author of *Here Comes Everybody: The Power of Organizing without Organizations*, explains, “The economic logic of the age is unbundling.” But information without context is meaningless. It is incapable of informing and can make consumers feel lost. As the AP noted in its research report, “The irony in news fatigue is that these consumers felt helpless to change their news consumption at a time when they have more control and choice than ever before. When the news wore them down, participants in the study showed a tendency to passively receive versus actively seek news.”

There has always been a large swath of the population that is not interested in news, of course, just as there has always been a portion that actively seeks it out. What's interesting about the current environment is that despite an enormous increase in available news and information, the American public is no better informed now than it has been during less information-rich times. “The basic pattern from the forties to today is that the amount of information that people have and their knowledge about politics is no worse or no better than it's been over that sixty-year period,” explains Michael X. Delli Carpini, dean of the Annenberg School for Communication at the University of Pennsylvania. For example, a 2007 survey conducted by the Pew Research Center for the People & the Press found that 69 percent of Americans could correctly name the vice president, only a slight decrease from the 74 percent who could in 1989.

This phenomenon can be partially explained by our tendency to become passive in the face of too much information. It can also be attributed to the fact that the sheer number of specialized publications, the preponderance of television channels, the wide array of entertainment options, and the personalization and customization encouraged by digital technologies have made it far easier to avoid public-affairs content. “As choice goes up, people who are motivated to be politically informed take advantage of these choices, but people who are not move away from politics,” explains Delli Carpini. “In the 1960s, if you wanted to watch television you were going to watch news. And today you can avoid news. So choice can be a mixed blessing.”

Markus Prior writes in his book, *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections*, “Political information in the current media environment comes mostly to those who want it.” In other words, in our supersaturated media environment, serendipitous exposure to political-affairs content is far less common than it used to be. Passive news consumers are less informed and less likely to become informed than ever before.

The tragedy of the news media in the information age is that in their struggle to find a financial foothold, they have neglected to look hard enough at the larger implications of the new information landscape—and more generally, of modern life. How do people process information? How has media saturation affected news consumption? What must the news media do in order to fulfill their critical role of informing the public, as well as survive? If they were to address these questions head on, many news outlets would discover that their actions thus far—to increase the volume and frequency of production, sometimes frantically and mindlessly—have only made things more difficult for the consumer.

While it is naïve to assume that news organizations will reduce their output—advertising dollars are involved, after all—they would be wise to be more mindful of the content they produce. The greatest hope for a healthy news media rests as much on their ability to filter and interpret information as it does on their ability to gather and disseminate it. If they make snippets and sound bites the priority, they will fail. Attention—our most precious resource—is in increasingly short supply. To win the war for our attention, news organizations must make themselves indispensable by producing journalism that helps make sense of the flood of information that inundates us all.

**The Limits of Human Attention** Ours is a culture of multitasking, of cramming as many activities as possible into as short a period of time as possible. We drive and talk on our cell phones, check e-mail during meetings and presentations, eat dinner while watching TV. In part, says Maggie Jackson, author of *Distracted: The Erosion of Attention and the Coming Dark Age*, such multitasking “is part of a wider value system that venerates speed, frenetic activity, hyper-mobility, etcetera, as the paths to success. That’s why we’re willing to drive like drunks or work in frenzied ways, although it literally might kill us.”

Many young people multitask to the extreme, particularly when it comes to media consumption. I’ve witnessed my twenty-two-year-old brother watch television while talking on the phone, IMing with several friends, composing an e-mail, and updating his Facebook page. A widely cited 2006 study by the Henry J. Kaiser Family Foundation found that 81 percent of young people engage in some form of media multitasking during a given week. But as cognitive psychologists have long known, human attention is quite limited. Despite our best efforts, when we try to do more than one thing at once, we are less efficient and more prone to error. This is because multitasking is actually a process of dividing attention, of toggling back and forth between tasks.

Acquiring new information requires particularly focused attention, which includes the ability to ignore distractions. In order to absorb the information contained in a CNN newscast, for example, we must not only direct our attention to the person talking, but also filter out the running headlines, news updates, and financial ticker on the lower part of the screen. Torkel Klingberg, a professor of cognitive neuroscience at Karolinska Institute in Sweden and author of *The Overflowing Brain*, puts it simply: “If we do not focus our attention on something, we will not remember it.” In other words, attention is a critical component of learning.

Michael Posner, a researcher who has dedicated his career to studying attention and a professor emeritus of psychology at the University of Oregon, explains attention as a system of three networks—alerting, orienting, and executive. Alerting refers to the state of wakefulness necessary to attend to information,

while orienting is the process by which we respond to stimuli, such as movement, sound, or noise. Executive attention is the highest-order network, the one that we have conscious control over. If we are trying to study for a test or read a novel, we use it to direct and maintain our focus, as well as to suppress our reaction to competing stimuli like the din of a nearby conversation or television.

The information-saturated environment that we live in is, unsurprisingly, extremely demanding of our attention. Modern life—both at work and at home—has become so information-rich that Edward Hallowell, a Boston-area psychiatrist, believes many of us suffer from what he calls an attention-deficit trait, a culturally induced form of attention-deficit disorder. As he pointed out in a 2005 interview with CNET News, “We’ve been able to overload manual labor. But never before have we so routinely been able to overload brain labor.” According to Hallowell and other psychiatrists, all these competing inputs prevent us from assimilating information. “What your brain is best equipped to do is to think, to analyze, to dissect, and create,” he explains. “And if you’re simply responding to bits of stimulation, you won’t ever go deep.” Journalist John Lorinc noted as much in an elegant article on distraction in the April 2007 issue of *The Walrus*:

It often seems as though the sheer glut of data itself has supplanted the kind of focused, reflective attention that might make this information useful in the first place. The dysfunction of our information environment is an outgrowth of its extraordinary fecundity. Digital communications technology has demonstrated a striking capacity to subdivide our attention into smaller and smaller increments; increasingly, it seems as if the day’s work has become a matter of interrupting the interruptions.

In a recent report, *Information Overload: We Have Met the Enemy and He Is Us*, the research firm Basex concluded that interruptions take up nearly 30 percent of a knowledge worker’s day and end up costing American businesses \$650 billion annually. Other studies show that interruptions cause significant impairments in performance on IQ tests.

In many ways, the modern age—and the Internet, in particular—is a veritable minefield of distractions. This poses a central challenge to news organizations whose mandate is to inform the public. Research by Pablo Boczkowski, who teaches communication studies at Northwestern University, has revealed that when we consume news online we do so for significantly less time than in print and that we do it while we’re working. Further complicating matters is the disruptive nature of online advertising. Intrusive Web advertisements—[washingtonpost.com](http://www.washingtonpost.com) recently featured one in which a Boeing helicopter flies right across the text of a news story—exploit our orienting network, which evolved to respond quickly to novel stimuli. Could we train ourselves to suppress our tendency to be distracted by such advertising? “You can get somewhat better, but it’s hard to resist because it’ll produce orienting,” Posner explains. “The way you resist it is you bring your attention back as quickly as you can.” Yet even if we were somehow able to eliminate ads, the sheer number of articles, headlines, and video and audio feeds on news Web sites makes focused attention difficult. Having to decide where to direct our attention and then maintain it makes reading and retaining news online a formidable task. **The Attention Economy** One of the most useful frameworks for understanding journalism’s challenges and behavior in the information age is the notion of

the attention economy. Economics is the study of the allocation of resources and the basic principles of supply and demand, after all, and about a decade ago a handful of economists and scholars came up with the concept of the attention economy as a way of wrestling with the problem of having too much information—an oversupply, if you will—and not enough time or people to absorb it all.

The dynamics of the attention economy have created a complicated and hypercompetitive arena for news production and consumption. News media must not only compete with one another, as well as with an ever-increasing assortment of information and entertainment options, but also with the very thing that supports their endeavors—advertising. In fact, the advertising industry has been struggling with the dynamics of the attention economy for a couple of decades now. As the advertising landscape becomes more saturated, advertisers must work harder to get their messages to the consumer. But as Mark Crispin Miller, professor of media ecology at New York University, notes in the *Frontline* documentary *The Persuaders*:

Every effort to break through the clutter is just more clutter. Ultimately, if you don't have clean, plain borders and backdrops for your ads, if you don't have that blank space, that commons, that virgin territory, you have a very hard time making yourself heard. The most obvious metaphor is a room full of people, all screaming to be heard. What this really means, finally, is that advertising is asphyxiating itself.

The news media also run the risk of self-asphyxiation in an information landscape crowded with headlines, updates, and news feeds. In order to garner audience attention and maintain financial viability, media outlets are increasingly concerned with the “stickiness” of their content. According to Douglas Rushkoff, host of *The Persuaders* and author of the forthcoming book *Life Incorporated*, the question for these organizations has become, “How do we stick the eyeballs onto our content and ultimately deliver the eyeballs to our sponsors?” As he dryly points out, “That’s a very different mandate than how do we make information—real information—available to people. The information economy, then, is a competitive space. So as more people who are information providers think of themselves as competing for eyeballs rather than competing for a good story, then journalism’s backwards.” The rise of sound bites, headlines, snippets, infotainment, and celebrity gossip are all outgrowths of this attempt to grab audience attention—and advertising money. Visit a cable-news Web site most any day for an example along the lines of police: Woman in Cow Suit Chased Kids (CNN); or Man Beats Teen Girl Waiting in McDonald’s Line (Fox News). As Northwestern’s Boczkowski points out, “Unlike when most of the media were organized in monopolistic or oligopolistic markets, now they are far more competitive; the cost of ignoring customer preferences is much higher.”

Meanwhile, the massive increase in information production and the negligible cost of distributing and storing information online have caused it to lose value. Eli Noam, director of the Columbia Institute for Tele-Information, explains that this price deflation is only partly offset by an increase in demand in the digital age, since the time we have to consume information is finite. “On the whole—on the per-minute, per-line, per-word basis—information has continuously declined in price,” says Noam. “The deflation makes it very difficult for many companies to stay in business for a long time.”

Thus, we come to the heart of journalism's challenge in an attention economy: in order to preserve their vital public-service function—not to mention survive—news organizations need to reevaluate their role in the information landscape and reinvent themselves to better serve their consumers. They need to raise the value of the information they present, rather than diminish it. As it stands now, they often do the opposite.

**More-Faster-Better** “Living and working in the midst of information resources like the Internet and the World Wide Web can resemble watching a firefighter attempt to extinguish a fire with napalm,” write Paul Duguid and John Seely Brown, information scientists, in *The Social Life of Information*. “If your Web page is hard to understand, link to another. If a ‘help’ system gets overburdened, add a ‘help on using help.’ If your answer isn’t here, then click on through another 1,000 pages. Problems with information? Add more.”

Like many businesses in the information age, news outlets have been steadily increasing the volume and speed of their output. As the proliferation of information sources on the Web continues at a breakneck pace, news media compete for attention by adding content and features—blogs, live chat sessions with journalists, video and audio streams, and slideshows. Much of this is of excellent quality. But taken together, these features present a quandary: Do we persevere or retreat in the face of too much information? And as the AP study showed, even young news consumers get fatigued.

In psychology, passivity resulting from a lack of control is referred to as “learned helplessness.” Though logic would suggest that an increase in available news would give consumers more control, this is not actually the case. As Barry Schwartz, the Dorwin Cartwright Professor of Social Theory and Social Action at Swarthmore College, argues in his book *The Paradox of Choice: Why More is Less*, too many choices can be burdensome. “Instead of feeling in control, we feel unable to cope,” he writes. “Freedom of choice eventually becomes a tyranny of choice.”

A recent study by Northwestern University's Media Management Center supports this phenomenon. It found that despite their interest in the 2008 election, young adults avoid political news online “because they feel too much information is coming at them all at once and too many different things are competing for their attention.” The study participants said they wanted news organizations to display *less* content in order to highlight the essential information. “Young people want the site design to signal to them what's really important . . . instead of being confronted by a bewildering array of choices,” write the researchers in their final report, *From “Too Much” to “Just Right”: Engaging Millennials in Election News on the Web*.

The instinct that more is better is deeply ingrained in the modern psyche. David Levy, a professor at The Information School of the University of Washington, uses the phrase “more-better-faster” to describe the acceleration of society that began with the Industrial Revolution. According to Levy, we tend to define productivity in terms of speed and volume rather than quality of thought and ideas. “We are all now expected to complete more tasks in a smaller amount of time,” writes Levy in a 2007 journal article. “And while the new technologies do make it remarkably efficient and easy to search for information and to collect masses of potentially relevant sources on a huge variety of topics, they can't, in and of themselves, clear the space and time needed to absorb and to reflect on what has been collected.” In the case of news production, Swarthmore's Schwartz agrees. “The rhythm of the news cycle has changed so dramatically

that what's really been excluded," he says, "is the time that it takes to think."

**Implications for Democracy** Our access to digital information, as well as our ability to instantly publish, share, and improve upon it at negligible cost, hold extraordinary promise for realizing the democratic ideals of journalism. Yet as we've seen, many news consumers are unable or unwilling to navigate what Michael Delli Carpini refers to as the "chaotic and gateless information environment that we live in today."

When people had fewer information and entertainment options, journalistic outlets were able to produce public-affairs content without having to worry excessively about audience share. As the Internet and the 24/7 news cycle splinter readership and attention spans, this is no longer the case. "Real journalism is a kind of physician-patient relationship where you don't pander to readers," says Bob Garfield, a columnist for *Advertising Age* and co-host of NPR's *On the Media*. "You give them some of what they want and some of what you as the doctor-journalist think they ought to have." Unfortunately, many news outlets feel they can no longer afford to strike the right balance.

As information proliferates, meanwhile, people inevitably become more specialized both in their careers and their interests. This nichification—the basis for *Wired* editor Chris Anderson's breakthrough concept of the Long Tail—means that shared public knowledge is receding, as is the likelihood that we come in contact with beliefs that contradict our own. Personalized home pages, newsfeeds, and e-mail alerts, as well as special-interest publications lead us to create what sociologist Todd Gitlin disparagingly referred to as "my news, my world." Serendipitous news—accidentally encountered information—is far less frequent in a world of TiVo and online customization tools.

Viewed in this light, the role of the journalist is more important than ever. "As society becomes splintered," writes journalist and author David Shenk in *Data Smog*, "it is journalists who provide the vital social glue to keep us at least partly intact as a common unit." Journalists work to deliver the big picture at a time when the overload of information makes it hard to piece it together ourselves. "The journalist's job isn't to pay attention simply to one particular field," explains Paul Duguid. "The job is to say, 'Well, what are all the different fields that bear on this particular story?' They give us the breadth that none of us can have because we're all specialists in our own particular area." In other words, the best journalism does not merely report and deliver information, it places it in its full and proper context.

**Journalism's New Role** The primacy placed on speed and volume in the information age has led to an uneven news landscape. "There is an over-allocation of resources on breaking and developing news production and constant updates," observes Boczkowski. "I think many news organizations are overdoing it." While headlines and updates are undoubtedly important, their accumulation is problematic. "Increasingly, as the abundance of information overwhelms us all, we need not simply more information, but people to assimilate, understand, and make sense of it," write Duguid and Seely Brown.

The question, then, is how?

As David Shenk presciently noted more than a decade ago, "In a world with vastly more information than we can process, journalists are the most important processors we have." The researchers who conducted

the study for the AP concluded that the news fatigue they observed among young adults resulted from “an overload of basic staples in the news diet—the facts and updates that tend to dominate the digital news environment.” In other words, the news they were encountering was underprocessed.

In order to address the problem, the AP has made a number of changes in the way it approaches news production. For starters, it instituted a procedure it calls 1-2-3 filing, which attempts to reduce news clutter and repetition (the days of endless write-throughs are over) while also acknowledging the unpackaged and real-time nature of news in the digital world. With 1-2-3 filing, reporters produce news content in three discrete parts, which they file separately: a headline, a short present-tense story, and, when appropriate, a longer in-depth account. By breaking down the news in this way, the AP hopes to eliminate the redundancy and confusion caused by filing a full-length article for every new story development. In 1-2-3 filing, each component replaces the previous component: the headline is replaced by the present-tense story, which is then replaced by the in-depth account.

The AP has also launched a series of initiatives aimed at providing consumers with deeper, more analytical content. It has created a Top Stories Desk at its New York headquarters to identify and “consider the big-picture significance” of the most important stories of the day. It has also begun developing interactive Web graphics to help explain complicated and ongoing stories like Hurricane Katrina and the Minnesota bridge collapse. And for 2008, the AP launched “Measure of a Nation,” a multimedia series dedicated to examining the election “through the prism of American culture, rather than simply the candidates and the horse race.” “Measure of a Nation” packages take a historical approach to covering such notions as myth, elitism, and celebrity in American presidential politics. In one article published in late August, for example, journalist Ted Anthony explains the powerful political influence of the Kennedy family over the past fifty years, drawing parallels between the campaigns of JFK and RFK and that of Barack Obama. As the AP writes in its report, these changes in approach represent “a concerted effort to think about the news from an end-user’s perspective, re-emphasizing a dimension to news gathering and editing that can get lost in the relentless rush of the daily news cycle.”

Much like educational institutions, the best news organizations help people convert information into the knowledge they need to understand the world. As Richard Lanham explains in *The Economics of Attention*, “Universities have never been simply data-mining and storage operations. They have always taken as their central activity the conversion of data into useful knowledge and into wisdom. They do this by creating attention structures that we call curricula, courses of study.” Institutions of journalism do it by crafting thoughtful and illuminating stories. “Journalists who limit their role to news flashes are absolving themselves of any overarching obligation to the audience,” writes Shenk in *The End of Patience*. “Mere telling focuses on the mechanics of transmitting information of the moment, while education assumes a responsibility for making sure that knowledge sticks.” The most valuable journalism is the kind that *explains*. “The first and foremost role that a journalist plays is to provide the information in a context that we wouldn’t be able to get as amateurs,” says Delli Carpini. “And I think that’s where journalism should be focusing.”

As it turns out, explanatory journalism may have a promising future in the market for news. On May 9, in partnership with NPR News, *This American Life* dedicated its hour-long program to explaining the



housing crisis. “The Giant Pool of Money” quickly became the most popular episode in the show’s thirteen-year history. CJR praised the piece (in “Boiler Room,” the essay by Dean Starkman in our September/October issue) as “the most comprehensive and insightful look at the system that produced the credit crisis.” And on his blog, *PressThink*, Jay Rosen, a journalism professor at New York University, wrote that the program was “probably the best work of explanatory journalism I have ever heard.” Rosen went on to note that by helping people understand an issue, explanatory journalism actually creates a market for news. It gives people a reason to tune in. “There are some stories—and the mortgage crisis is a great example—where until I grasp the whole, I am unable to make sense of any part,” he writes. “Not only am I not a customer for news reports prior to that moment, but the very frequency of the updates alienates me from the providers of those updates because the news stream is adding daily to my feeling of being ill-informed, overwhelmed, out of the loop.”

Rather than simply contributing to the noise of the unending torrent of headlines, sound bites, and snippets, NPR and *This American Life* took the time to step back, report the issue in depth, and then explain it in a way that illuminated one of the biggest and most complicated stories of the year. As a result of the program’s success, NPR News formed a multimedia team in late August to explain the global economy through a blog and podcast, both of which are called “Planet Money.” And on October 3, *This American Life* and NPR aired a valuable follow-up episode, “Another Frightening Show About the Economy,” which examined the deepening credit crisis, including how it might have been prevented and Washington’s attempts at a bailout.

Along with supplying depth and context, another function of the modern news organization is to act as an information filter. No news outlet better embodies this aim than *The Week*, a magazine dedicated to determining the top news stories of the week and then synthesizing them. As the traditional newsweeklies are struggling to remain relevant and financially viable, *The Week* has experienced steady circulation growth over the past several years. “The purpose of *The Week* is not to tell people the news but to make sense of the news for people,” explains editor William Falk. “Ironically, in this intensive information age, it’s in some ways harder than ever to know what’s important and what’s not. And so I often say to people, ‘With *The Week*, you’re hiring this group of really smart, well-versed people that read for you fifty hours a week and then sit down and basically give you a report on what they learned that week.’ ”

Rather than merely excerpting and reprinting content, this slim magazine takes facts, text, and opinions from a variety of sources—approximately a hundred per issue—to create its own articles, columns, reviews, and obituaries. As Falk explains, there’s a certain “alchemy” that occurs when you synthesize multiple accounts of a news story. And *The Week*’s success suggests that consumers are willing to pay for this. “We’re a service magazine as much as we are a journalism magazine,” says Falk. “People work ten, eleven hours a day. They’re very busy. There are tremendous demands on their time. There are other things competing for your leisure time—you can go online, you can watch television or a dvd. So what we do is deliver to you, in a one-hour package or less, is a smart distillation of what happened last week that you need to pay attention to.”

One ally in journalism’s struggle to deal with information overload, meanwhile, may be the digital machinery that brought it about in the first place. While digital archiving and data tagging cannot replace

human interpretation and editorial judgment, they have an important role to play in helping us navigate the informational sea. As any news consumer knows, searching for or following a story can be frustrating on the Internet, where information is both pervasive and transient. In its study, the AP observed that young consumers struggled to find relevant in-depth news. So the wire service stepped up an effort begun in 2005 to tag all its articles, images, and videos according to a classification system of major news topics and important people, places, and things. These tags allow consumers, as well as news organizations and aggregators, to more effectively find and link to AP content. A number of other organizations, including *The New York Times* (check out the Times Topics tab on [nytimes.com](http://nytimes.com)), *The Washington Post*, and CNN have similar projects under way, promising an opportunity to rapidly—and often automatically—provide consumers with a high level of detail, context, and graphical means of explanation.

The Web site for BBC News may be the best example of how journalistic organizations can deliver context in the digital environment. A news story about the Russia-Georgia crisis, for example, is displayed alongside a list of links to a map of the region, a country profile, an explanation of the crisis, a summary of Russian foreign policy, and related news articles and video footage. All online BBC News stories are presented in this manner, giving consumers multiple ways to learn about and understand an issue. While no American site is this comprehensive, a handful of major news outlets, from CNN to NPR to the *National Journal*, have used this approach in creating special election 2008 Web pages. By linking stories to one another and to background information and analysis, news organizations help news consumers find their way through a flood of information that without such mediation could be overwhelming and nearly meaningless.

**Why Journalism Won't Disappear** While it's true that the Web allows the average individual to create and disseminate information without the help of a publishing house or a news organization, this does not mean journalism institutions are no longer relevant. "Oddly enough, information is one of the things that in the end needs brands almost more than anything else," explains Paul Duguid. "It needs a recommendation, a seal of approval, something that says this is reliable or true or whatever. And so journalists, but also the institutions of journalism as one aspect of this, become very important."

Moreover, the flood of news created by the production bias of the Internet could, in the end, point to a new role for journalistic institutions. "We're expecting people who are not librarians, who are not knowledge engineers to do the work of knowledge engineers and librarians," says Jonathan Spira, CEO and chief analyst for the business research firm Basex and an expert in information overload. In other words, most of us lack the skills—not to mention the time, attention, and motivation—to make sense of an unrelenting torrent of information. This is where journalists and news organizations come in. The fact that there is more information than there are people or time to consume it—the classic economy-of-attention problem—represents a financial opportunity for news organizations. "I think that the consumers, being subjects to this flood, need help, and they know it," says Eli Noam. "And so therefore they want to have publications that will be selecting along the lines of quality and credibility in order to make their lives easier. For that, people will be willing to pay." A challenge could become an opportunity.

In fact, journalism that makes sense of the news may even increase news consumption. As Jay Rosen points out on his blog, explanatory journalism creates a "scaffold of understanding in the users that future

reports can attach to, thus driving demand for the updates that today are more easily delivered.” In a similar fashion—by providing links to background information and analysis alongside every news story—the BBC gives consumers frameworks for understanding that generate an appetite for more information.

The future of news depends on the willingness of journalistic organizations to adjust to the new ecology and new economy of information in the digital age. “I think in some ways, we need a better metaphor,” says Delli Carpini. “The gatekeeping metaphor worked pretty well in the twentieth century, but maybe what news organizations should be now is not gatekeepers so much as guides. You don’t want gatekeepers that can say you can get this and you can’t get that. You want people who can guide you through all this stuff.”

Ironically, if out of desperation for advertising dollars, news organizations continue to chase eyeballs with snippets and sound bites, they will ultimately lose the war for consumer attention. Readers and viewers will go elsewhere, and so will advertisers. But if news organizations decide to rethink their role and give consumers the context and coherence they want and need in an age of overload, they may just achieve the financial stability they’ve been scrambling for, even as they recapture their public-service mission before it slips away.