



Dædalus

Journal of the American Academy of Arts & Sciences

Spring 2010

on the
future
of news

Loren Ghiglione

Herbert J. Gans

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& Jeffrey A. Gottfried

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Seattle Post-Intelligencer

P-I: TRADITION IN TRANSITION

P-I PRESSES FALL SILENT

From print to pixels - seattlepi.com assumes venerable legacy



No ruling yet on SR 520 west-side design

Choice 'can wait' for December's impact statement

BY DEBERA CARLTON HARRELL
P-I reporter

The Legislature likely will authorize the Evergreen Point Bridge tolling and new pontoons this session but will put off deciding the freeway's west-side design — much to the dismay of many Seattle residents.

"The west side does not need to be resolved in this session — but I think there is agreement regarding the pontoons, which are of huge concern," House Speaker Frank Chopp said in a recent interview.

Replacing the floating bridge pontoons and implementing tolling are the governor's prime concerns for the aging span, said Ron Judd, spokesman for Gov. Chris Gregoire.

"Here's what we're going to leave the session with: early tolling on 520 only, some further direction as to analysis of I-90 tolling, which is still in question, and early pontoon construction," he said.

Resolving design issues on the Seattle side of the bridge "can wait" until after the completion of an environmental impact statement — due in December, Judd said.

But Seattle residents in the state Route 520 corridor — and Seattle Mayor Greg Nickels — worry the delay means renewed life for Plan L, the most unpopular of the three designs forwarded to the Legislature by a state-mandated mediation team.

"We thought the Legislature was going to make a decision on the west-side design this session," said a baffled Virginia Gubly, a mediation team member who helped craft the A plan.

The mediation team, composed of volunteers, citizens, local leaders, transportation experts and others, came up with two plans, dubbed K and A, but forwarded L at the suggestion of Washington State Transportation Department officials. The three are being studied in an environmental impact statement.

The K plan, supported by the broadest coalition of Seat-

SEE BRIDGE A26

SEATTLEPI.COM

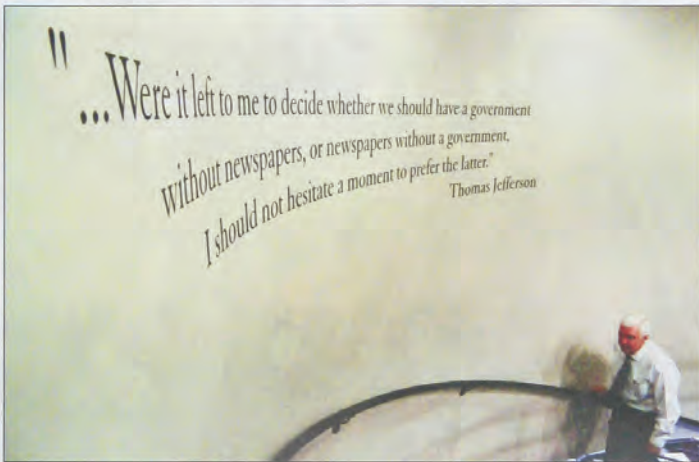
Visit seattlepi.com/transportation/ 267408_520bridge19.html to see the bridge designs.

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Seattle P-I Publisher Roger Oglesby walks past a quote by Thomas Jefferson above a P-I staircase after telling the staff that Tuesday's edition is the last.

BY DAN RICHMAN AND ANDREA JAMES
P-I reporters



Staff members react Monday as they first get the news that today's Seattle P-I would be the paper's final edition.

Last deadline cuts like knife

For P-I staff, it's day of tears, hugs and toasts

BY LEWIS KAMB
P-I reporter

Early on a cold, gray morning of the final day, before the announcement came, online producer Jake Ellison entered the hall light of a second-floor office on the edge of Filbert Bay, fired up his computer and began the first scheduled work shift of a mortally wounded icon.

The sound of Ellison's fingertips

on the keyboard — remaining in the newsroom surrounding him — struck the lonely first chords of another workday at the Seattle Post-Intelligencer.

Tap tap, tap tap, tap tap, tap tap. "Just like any other day," Ellison, a news veteran here of nearly a decade, would later recall.

But slowly as the morning wore

SEE LAST DAY, A25



Online reporter Monica Guzman listens Monday to Seattle P-I Publisher Roger Oglesby's announcement to the newsroom that Tuesday's print edition will be the last, but that the news operation will move online.

The Seattle Post-Intelligencer has printed its last edition. You're reading it.

The Hearst Corp. said Monday that it would stop publishing the 146-year-old newspaper, Seattle's oldest business, and halt delivery to more than 117,600 weekday readers.

The company said, however, that it would maintain the P-I's Web site, seattlepi.com, making it the nation's largest daily newspaper to shift to an entirely digital news product.

"Tonight we'll be putting the paper to bed for the last time," Editor and Publisher Roger Oglesby told a silent newsroom Monday morning. "But the headlines will live on."

In a news release, Hearst Chief Executive Frank Bennack Jr. said, "Our goal now is to turn seattlepi.com into the leading news and information portal in the region."

The new operation won't try to replicate the newspaper, said Steven Swartz, president of Hearst Newspapers. The so-called community platform, employing about 20 P-I staffers, will include breaking news, columns from prominent Seattle residents, community databases, photo galleries, 150 citizen bloggers and links to other journalistic outlets.

About 150 other P-I employees will lose their jobs.

The landmark neon globe will remain in place atop 1011 Elliott Ave. W., as the Web site will continue to be produced from offices in that building, Oglesby said.

On Jan. 9, News York-based Hearst put the P-I up for sale and said it would stop printing the paper if a buyer couldn't be found within 60 days. Despite community concern, no buyer emerged. The P-I lost

SEE P-I, A24

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GENE STOUT: Pop music critic remembers wonderful times. B1

Online switch marks the start of a new era

BY JOSEPH TATAROFF
P-I reporter

The Hearst Corp.'s decision to end the print edition of the Seattle P-I but maintain its Web site marks the first time that a major metropolitan daily has attempted the switch from print and online to digital only.

As newspapers' traditional business models continue to unravel, the shift could eventually be replicated in cities across the United States.

But at least in Seattle and likely in other cities, the new digital product will be very different from the old operation — in both size and tradition.

Managers of the new seattlepi.com said the site will have an editorial staff of 20, down from more than 150. An additional 20 people are being hired to sell advertising. Among those remaining on staff are columnist Joel Connelly and cartoonist David Horsey. Sports columnist Art Thiel and Jim Moore will freelance two pieces a week.

The operation won't have specific reporters, editors or producers — all staff are expected to write, edit, take photos, shoot video and produce multimedia, according to a statement:

SEE ONLINE, A25



Inside front cover: Front page of the final print edition of the *Seattle Post-Intelligencer* in Seattle, Washington, March 17, 2009. The Hearst Corporation, which failed to find a buyer for the venerable daily, planned to move some of the newspaper's workers to the new, free online business, while offering others severance packages. The fate of the *Seattle Post-Intelligencer*, which Hearst said is the largest daily newspaper to evolve entirely into an online version, highlights the impact of a digital-age revolution that has news readers and advertisers increasingly moving from print to online products. Photograph © REUTERS/Marcus R. Donner.

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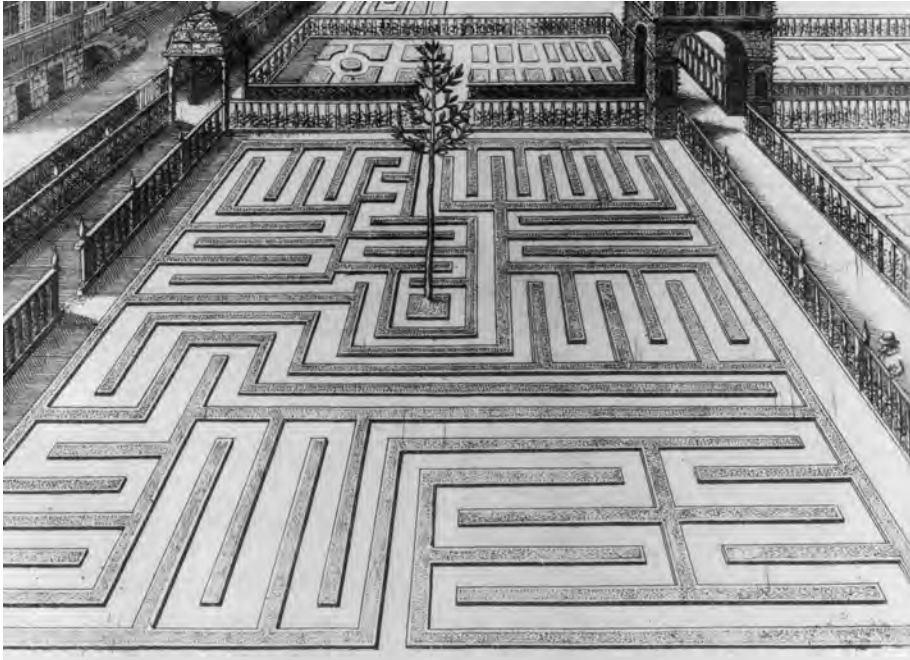
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Dædalus

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Design for the hedge maze is by Johan Vredeman de Vries, from *Hortorum viridariorumque elegantes & multiplices formae: ad architectonicae artis normam affabre delineatae* (Cologne, 1615).

Dædalus was founded in 1955 and established as a quarterly in 1958. The journal's namesake was renowned in ancient Greece as an inventor, scientist, and unriddler of riddles. Its emblem, a maze seen from above, symbolizes the aspiration of its founders to "lift each of us above his cell in the labyrinth of learning in order that he may see the entire structure as if from above, where each separate part loses its comfortable separateness."

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Introduction: the future of news

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implications for democracy*

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What is happening to news?

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*Does science fiction – yes, science fiction –
suggest futures for news?*

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Loren Ghiglione

Introduction: the future of news

ABC News vows to cut its news staff by three hundred to four hundred, about 25 percent. More than one-quarter of the public now gets news from cell phones. Bankruptcies, buyouts, and bolting advertisers send one message: The sky, filled with pink slips for reporters, is falling on mainstream news media.

Three magazines displayed next to each other at a bookstore blame different culprits for the mainstream news media's plight. A *New Yorker* Nostradamus describes an entertain-or-die media world of nonstop news on the Web and high-decibel argument on cable TV.¹ An *Atlantic* column points to the shift in readership from lengthy newspaper articles to Internet articles that "get to the point."² An *Utne Reader* article cites plummeting international coverage by U.S. media, down by about 40 percent in 2008.³

The authors of all three magazine pieces, whatever their differences, probably agree with the assumption that drives this issue of *Dædalus* about the future of news: A democracy depends on a citizenry informed by the free flow of serious news and an independent journalism that continuous-

ly casts a skeptical eye on the powerful and provides original, reliable reporting.

This issue's first article – by Herbert J. Gans, the Robert S. Lynd Professor Emeritus of Sociology at Columbia University – calls for rethinking the theory of the press as a bulwark of democracy. Kathleen Hall Jamieson, Director of the Annenberg Public Policy Center at the University of Pennsylvania, and Jeffrey A. Gottfried, senior researcher at the Center, follow with an article that credits news media with traditionally educating citizens about national issues. But the article questions whether, based on coverage of the 2008 presidential campaign, the media "still sift fact from fabrication."

Those who see informed citizens as key to a democracy worry, often apocalyptically, about the advertising-supported U.S. media that traditionally have provided news and credible journalism. Print newspapers are closing, commercial radio news is disappearing, and television news operations are slashing staff to survive. What business models will provide the income for news organizations to do the ambitious, expensive journalism that covers wars abroad and investigates corruption at home?

Is there a role for foundation grants and government subsidies? (Advocates say government help is nothing new, citing bargain postal rates and other federal practices and policies.) If, as Joseph Pulitzer maintained, “Our Republic and its press will rise or fall together,” should we be establishing nonprofit or endowed newspapers, whether on paper or online? In his article for this issue, Robert H. Giles, Curator of the Nieman Foundation for Journalism at Harvard University, explores new economic models for U.S. journalism. Jill Abramson, Managing Editor of *The New York Times*, looks at the preservation of quality journalism from the inside of a prestigious news organization that is embracing online as well as print products and is exploring payment by online readers who want to receive all *Times* content.

Three articles focus on key aspects of accountability journalism that historically have defined U.S. news media at their best. Brant Houston, the John S. and James L. Knight Foundation Chair in Investigative and Enterprise Reporting at the University of Illinois, examines the potential for investigative journalism in the rise of nonprofit newsrooms; the expanding use of computers, Web software, social media tools, and data analysis; and the growth of reporting networks that rely on amateurs and collaboration.

Donald Kennedy, former Editor-in-Chief of *Science* and President Emeritus of Stanford University, worries aloud about coverage of science and technology. He explains that “more so than at any other time within memory,” policy decisions in Washington have “deep science and technology content.” And Ethan Zuckerman, senior researcher at the Berkman Center for Internet & Society at Harvard University, describes the

challenge of building interest in international news when interactive media permit people to focus on only news that already excites them. He recalls with a sense of hope what happened in Iran when almost a half-million users of Twitter commented on the first two weeks of protests following the disputed 2009 presidential election in that country. Users became active producers, not merely passive consumers, of news.

The revolution occurring in the news media provides an opportunity for four authors to reconsider the practice of journalism, regardless of what technologies and platforms are used by the news providers and aggregators of the future. Mitchell Stephens, Professor of Journalism at New York University, calls on journalism to aim higher than telling what just happened – to provide “a wise take,” based on expertise, judgment, and insight, on what happened. Jane B. Singer, Associate Professor in the School of Journalism and Mass Communication at the University of Iowa, addresses what the structural changes in the journalism of today and tomorrow mean for the ethics of journalism.

Michael Schudson, Professor at the Columbia University Graduate School of Journalism, suggests journalism increasingly take advantage of databases (“databases ‘r’ us”) and nonpartisan academic research, nonprofit advocacy groups, and other expert “political observatories” that monitor governmental activity to enhance the reporting capacity of streamlined news organizations. Jack Fuller, former President of Tribune Publishing Company, recommends that journalism call on the lessons of neuroscience. Driven by deep reasons, for example, emotional pre-

sentations of information are being used more often and working better with audiences; serious journalists need to come to grips with this reality to win the battle for attention.

The final three authors submit that the pace of change, like the pace of news, is likely to accelerate for the media and journalism. Paul Sagan, President and Chief Executive Officer of Akamai Technologies, and Tom Leighton, Chief Scientist at Akamai and a Professor of Applied Mathematics at MIT, anticipate the transformative impact on news and society of real-time, interactive, TV-quality video. Susan King, Vice President and Director of the Journalism Initiative at Carnegie Corporation of New York, discusses innovation in the education of the next generation of journalists, a multimedia generation as attuned to Facebook as to traditional news media. And I examine potential futures for news suggested by speculative fiction.

Absent any silver-bullet scenario, the future of news is likely to be a messy *mélange* of multimedia experiments. The successful business models for those experiments may not yet be on the horizon. The salaries for journalists, especially in the freelance online world, may rival the not-so-living wages of actors and poets. The range of narrative and non-narrative tools – maps, graphics, charts, photos, videos – may grow. And *Dædalus* readers and other people who used to be called journalism’s audience may be asked to partner and participate with professional journalists to provide the judgment, knowledge, context, interactivity, and depth that characterize the quality journalism essential to a democracy. But emerging from the chaos of change will be a wonderfully exciting, if nerve-racking and brain-bending, future for news.

ENDNOTES

- ¹ Ken Auletta, “Annals of Communications: Non-stop News,” *The New Yorker*, January 25, 2010, 38 – 47.
- ² Michael Kinsley, “Cut This Story!” *The Atlantic*, January/February 2010, 35.
- ³ Deborah Campbell, “The Most Trusted Name in News?” *Utne Reader*, January – February 2010, 64 – 69.

Herbert J. Gans

*News & the news media in the
digital age: implications for democracy*

Modern American journalism considers itself a “bulwark of democracy.” Journalists argue that they report the news so that the citizenry can inform itself and participate in the “conversation” that journalists believe is crucial to a democracy. According to what might be called bulwark theory, being informed also enables citizens to participate in politics, choose their political representatives, and instruct them on how they want to be represented.

The theory expresses journalism’s noblest democratic ideals, but it could stand some rethinking. Being informed is neither a motive nor a requirement for talking about or participating in politics. How well most citizens are informed is a debatable question, and since politics is a divisive conversational topic, precious few participate in the democratic conversation. Some citizens do, but some of them shout and scream. In reality, most political conversing, including that which is heard by elected officials, comes from journalists, commentators, panel talk shows, and journalist bloggers. And it is the news media themselves that offer up the public outlet for this continuing conversation.

To be sure, some ordinary citizens talk to their elected representatives, write letters to the editor, and email, blog, text, and tweet in political cyberspace. Nonetheless, the public opinion polls continue to be the most visible example of that citizen conversation, even if it is only one way and even if those willing to be polled are merely answering the pollsters’ questions.

Citizen participation has always been limited to a few, motivated mainly by self-interest or membership in a social movement. Consequently, it often generates protest or hard-to-satisfy demands. Politicians are therefore not always eager to have citizens participate, except at election time.

Working journalists are practitioners, not theorists, and do not concern themselves unduly with the shortcomings of bulwark theory. They see their job as supplying the news, leaving others to worry whether the citizenry is properly informed and performs its democratic duties.

Because the future of news is uncertain, it is necessary to go beyond bulwark theory to ask what exactly the news media and journalists do for democracy, and what will happen if the current mainstays – newspapers, mag-

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azines, and TV news – undergo drastic change and are replaced by websites and other digital media. However, I also want to ask what more the news media, old and new, could and should do for democracy, and what is beyond their power to do. My answers will deal mainly with the national news media although they would not differ significantly for regional and local news media.

Monitoring the Political Environment and Assuring the Country that the Polity Will Survive. Most members of the news audience are monitors; they use the news to keep up with the parts of society they cannot monitor personally. (The rest of the audience can be divided into “news buffs” and occupational users, that is, professionals and others – including many readers of this journal – who need the news to do their work.) Monitors use the news primarily to learn what is going wrong in the country’s political and other institutions and the world beyond, and to assure themselves thereby that the rest of society is still functioning normally.

Journalists demonstrate political and other societal normalities by reporting regularly that the president, his major colleagues, and others exercising leadership are doing their jobs. Even when they report bad news about corrupt politicians, failed leaders, and unexpected crises, their news stories almost always end with what is being done to restore political and social order.

Demonstrating normality may seem trivial and perhaps unnecessary, but imagine the irregularities that would develop, the rumors that would circulate, and the panics that would be sure to follow if people were not told regularly that the societal sun continues to rise and set every day as predictably as the sun that brings us day and night.

Reporting the Actions and Decisions of Elected Officials. The news media are also messengers for the political leadership so that it can tell the citizenry what it will do and has done for them and the country. Journalists serve as messengers for only a few: the White House and congressional leadership, as well as a handful of cabinet agencies, including State, Defense, and since the start of the Great Recession, the Treasury and the Federal Reserve. Most other government agencies and activities become newsworthy only rarely, generally when they are malfunctioning.

When journalists function as messengers, they are essentially passive reporters, and media critics accuse them of being stenographers for the political leadership. Of course, the leadership, like most other news sources, wants the messengers to be stenographers; that is why a number of the Bush administration’s unsavory domestic and foreign policies that journalists did not report are only now being brought to light.

All journalists prefer to do active reporting, identifying details of political and governmental actions – including those details politicians would prefer to be left out of news stories. When news organizations are economically healthy and news staffs are at full strength, active reporting complements and sometimes corrects the stories of colleagues who must function as stenographers.

Airing Political Disagreements and Conflicts. Most active reporting is devoted to describing the political leadership’s disagreements and conflicts. Moreover, when politicians argue and fight, they are believed to attract the attention of audience members who are “grabbed” by dramatic stories.

The news media as well as much of the audience usually have patience for no more than “both sides” of every argu-

ment – a convenient number in a country with a two-party polity. Two-sidedness also enables the news media to restrict its ideological spectrum. Stephen Colbert once pointed out that reality has a liberal bias, and the news media’s reluctance to lean left seeks, among other things, to pacify conservatives who in effect complain about the news media’s preoccupation with reality.

Defending Democratic Values. Perhaps journalists’ proudest activity is to uphold a particular set of norms and values of a democratic polity, most dramatically by exposing theft, dishonesty, hypocrisy, and other forms of corruption, as well as inefficiency, “waste,” incompetence, and other kinds of malfeasance. Although they are not always aware of it, journalists as a profession are advocates of good government or “goo-goods,” a business and civic movement that arose concurrently with modern journalism at the start of the twentieth century. Here is the profession’s most consistent bias!

In the process, journalists move beyond their strictly professional role to act as the polity’s moral guardians and transform themselves from reporters to watchdogs. Elsewhere, I have described them as guarding altruistic democracy, which expects elected officials to devote themselves to a selfless pursuit of the public interest.

Watchdogging takes several forms. *Everyday watchdogging* goes with journalists’ very presence at important events. When they are around, even if equipped only with notepads and pencils, politicians have to speak respectfully about the political process, watch what they say about other subjects, and refrain from scandalous acts. Corrupt politicians take their hands out of the till, and the military is careful not to shoot at civilians if the news media are watch-

ing. When journalists are able to be active reporters, they try to ask at least a few questions to remind elected officials that their everyday watchdogging never stops. As a result, journalists drive some activities underground, but that gives them a chance to expose these through investigative reporting.

Investigative reporting is the most active form of journalism, and when it is successful in exposing criminal behavior and the villains involved end up in jail, investigative journalists become eligible for the Pulitzer, DuPont, and other prestigious professional awards. Investigative reporting contributes to democracy mainly by helping identify public officials who act illegally to benefit themselves and their friends at the expense of their constituents.

Although these lawbreakers may not do as much damage to their constituents as the law-abiding leaders who exercise economic or political power over them, journalists mainly guard good government, not economic and political fairness. The news audience is not always as excited about good government and altruistic democracy as journalists, but investigative reporting is thought to sell papers and increase ratings. More important, it reinforces – and enforces – the political standards set by everyday watchdogging.

Journalists working in the traditional print and electronic news media are very worried about the future of the news. They are upset by the arrival of new and competing communication technologies, the decline of the news audience and of advertising revenue, and the resulting closure of several newspapers and a serious downsizing of news staffs in many others.

Consequently, many journalists, media critics, and political observers are

concerned that citizens will encounter difficulties in keeping themselves informed and that representative democracy will suffer as a result. However, investigative reporting, which is very expensive, is expected to suffer even more, resulting in the coarsening of American politics. The most pessimistic observers fear that the country might return toward a level of political corruption, incompetent policy-making, and governmental mismanagement that occurred not only between 2000 and 2008, but also in earlier periods of American history.

Although journalists' pessimism is justified, particularly in the short run, from a long-term perspective, the changes must also be viewed and analyzed as a process: an ongoing technological shift in the country's news media, which is perhaps still in its early phases. At the moment, the traditional news media are still supplying most of the news but losing the audience and the income to pay for it all. Meanwhile, news websites and websites that offer news on their home pages are gaining audiences, but their income from advertising is too small for them to afford their own news organizations. Currently, they are parasites feeding off the economically sick traditional news media.

Nonetheless, the Web is slowly becoming the main home for the consumption of news. The home is still being built and no one knows now what it will look like when finished, but someday people will probably be viewing and reading the news solely on digital or post-digital screens, including perhaps late-stage Kindles and now yet unimagined devices. Eventually, historians will try to figure out why their ancestors tolerated obtaining their news from large pieces of folded paper that had to be delivered to their doors and from electric boxes

that supplied the news only at prescheduled and frequently inconvenient times.

Meanwhile, the Web news media may be evolving, whether as summaries of the traditional news media, or as new outlets invented for the Web, such as *Salon*, *The Daily Beast*, *The Huffington Post*, and *Talking Points Memo (TPM)*. They are Web versions of the old print media, but streaming websites as well as YouTube and its peers are primitive forms of future visual news media. True, none are making money, and for the moment they are being kept alive by hopeful venture capitalists and by mostly young and enthusiastic but underpaid journalists.

No one can now predict which of today's news websites will survive and grow into news media with news organizations that can meet the news needs of a democratic society. If the past offers any precedent, in the long run, most of the news audience will click on a handful of major news websites owned by giant corporations, perhaps even the ones that own today's surviving newspaper chains and television networks. But first someone has to figure out "how to monetize the Web."

Local news media face an even more uncertain future. News about state and local governments and politics never attracted much audience interest, and professionally staffed digital news media may be viable only in larger localities. Neighborhood websites may look forward to a more promising future when and where people are interested in their neighbors and are willing to trust amateur journalists to supply sought-after news about them.

Other changes are taking place that may have more positive effects for the supply of news, even if they do not contribute to the economic health of the

traditional news media or to the employment prospects of professional journalists.

For example, while the paying news audience is declining, the actual audience may be growing. If that audience is counted, not as the number buying or tuned into the various news media, but as the number exposed to the day's major news stories, the arrival of digital news may have enlarged this news audience. True, the total audience is spread across many more news outlets than a daily paper, a TV network news program, and a handful of cable channels and radio stations. Now that the news cycle is 24/7 and even search engines carry news stories, the total amount of news programming available to the audience has risen considerably.

Similarly, the reduction in the number of employed journalists has been counteracted at least partially by the appearance of citizen journalists. In reality, and despite their name, they are amateur journalists resembling the stringers that have reported news, and still do, from places to which news organizations cannot afford to send professionals. If the amateurs are properly supervised or edited by trained journalists, they could increase the total supply of news. To be sure, they are also free or very cheap labor who may further shrink the full-time labor force, a process now occurring all over America, including in the academy.

The new stringers have appeared both in traditional news media and on the Web, in part because, equipped with cell phones and similar technologies, they are sometimes in the right places at the right time, just as newsworthy events are beginning to happen. A handful have already supplied otherwise unavailable news, as from Iran, and unearthed scoops that profes-

sional journalists then turned into major stories. Remember, however, that nearly forty years ago, two young police reporters in Washington, D.C., discovered a story that felled a president.

The most drastic change so far has taken place in the amount of opinion available, as new bloggers continue to appear. In addition, many news websites supply a good deal of opinion, in part because it is considerably cheaper to produce than news. Most of the opiners and their commenting accompanists, though, are not journalists, and they appear on personal and other small blogs that attract tiny audiences.

Nonetheless, in sum, these new opinions contribute to the total amount of democratic conversation. Since many bloggers offer opinions that do not appear on journalist-supervised news media, either for ideological reasons or because they lack a proper factual base, they add, for better or worse, to the diversity of the democratic conversation.

Of course, a public appearance on the Web still lacks the visibility of being on television. Consequently, the digital democratic conversation does not appear so far to have had a significant impact on the output of professional columnists and other opinion-makers who attract large audiences. With some notable but individual exceptions, the amateur commentators have not yet influenced the publicly stated opinions and decisions of the country's major elected officials.

Perhaps the arrival of news and blogging websites contributed to the larger number of young people who voted in the 2008 presidential election. Even so, their post-election impact, if any, is small compared to that of the major political parties or, more important, the array of lobbies that play such a significant role in national political decision-

making. Although organizations like MoveOn that raise money on the Web and use it to lobby elected officials have had some effect on some political decisions, they are not connected to the news media but are the Web successors to the political organizations that once raised money via snail mail.

In addition, the Web's various amateur editorialists are perpetuating two historic shortcomings of the democratic conversation. One, they maintain what Richard Hofstadter long ago called the paranoid style of American politics, spreading conspiracy theories and angry or hateful messages, often about imaginary enemies.

Such opinions have long been part of the oral repertoire of American politics, particularly at the local level, and they have been diffused through whatever communication media were available at the moment. Indeed, they contribute considerably to the general public's low opinion of politics. Cable television news, radio talk shows, and even the network news programs too often turn the paranoid conversation into national news; one must hope that they, and the hateful blogs they help to inspire, do not infect the body of the democratic conversation.

A second, less obvious shortcoming of the public democratic conversation is its class bias, for all the media that engage in it are more accessible to the better off, the more highly educated, and the more articulate parts of the population. What I call "upscale democracy" pervades the polity, and while low-income people without even a high school diploma may add to the oral conversation, they do not often blog or tweet. However, they did not send out mimeographed flyers either, and probably rarely contacted their elected representatives. They have frequently contributed their viewpoints

to the democratic conversation in ways that were considered neither democratic nor conversation by their better-off fellow citizens.

Currently, the major challenge for the news media, for journalists, and, thus, for American democracy is how to deal with the possibility that advertising may never again be able to finance the commercial news media as much as it once did. Perhaps that is all to the good: the democratic cause may benefit if the news is no longer supplied mainly by firms that seek a profit by assembling audiences for advertisers. Why, after all, should informing the citizenry be dependent on whether shareholders, Wall Street financiers, and venture capitalists can profit from it?

Although the financial overseers of the news media do not influence the news as much as is commonly believed, journalists cannot easily distance themselves or what they report from the corporate capitalist system in which they (the public news media, too) are embedded. A new business model may be desirable as well as necessary.

Such a model should be diversified, somewhat like the public news media, which are supported by a combination of commercial, nonprofit, governmental, and audience funds. For the moment, all possible and even some currently impossible alternatives should be explored. If elected officials are eager for stenographic reporting, they could fund a modern version of the party press. If the news media are as essential to the perpetuation of society and the polity as I have suggested, perhaps they should be organized as limited profit utilities.

If the European licensing fee system still cannot be imported to America, a case can be made for user fees, at least for the more detailed and specialized

news sought by news buffs and those using the news media in and for their work. Today, many people pay hundreds of dollars a year in newspaper and newsmagazine subscriptions, and they should be able to afford such fees for the digital news media they need.

And if news is vital to representative democracy, then government can play a role, not only by turning access to the Web into a free public good, but by offering financial support for news that does not attract other funding sources. Thirty years ago I proposed an Endowment for News, modeled on the federal arts and humanities endowments, and I continue to think it is a good idea.

Investigative reporting is most in need of a new business model, and ideally, it should be free both of government and private enterprise, the targets of most of its investigations. Some news websites, like the traditional news media, are already conducting such reporting with funds from a variety of supporters.

The current hope is that foundations will step in the breach if and when extra funds are needed, although even the largest foundations are vulnerable to self-censorship and to pressure from the powerful, especially those on whom they depend for support themselves. Diversity of funding may again be the best solution, for if all funders of the news media contribute, preferably indirectly, to the cost of investigative reporting, it may be difficult to ask individual ones to halt threatening investigations.

Even as a new business model is being developed, journalists, media critics, and others should be thinking about how the news can contribute further to democracy. Most of the proposals for changes in the news, including mine that follow, will likely attract news buffs and occupational users rather than monitors, but

they are also the citizens most actively concerned about the state of the country's democratic institutions. I suggest seven changes.

First, *conduct more active reporting*. Passive stenography has its place, and pooling it, for example in reporting the talks and actions of the political leadership, would save some money. As a result, other journalists would be free to delve into the details of the talks and actions that make the news and also into the socio-political-economic contexts in which they take place.

Concurrently, journalists ought to pay more attention to the now almost totally ignored cabinet agencies and other executive, legislative, and judicial agencies that play important roles in a democratic society and in the everyday life of the news audience. Local and state reporters should follow the same path.

Second, *increase and broaden economic reporting*. American journalism could be characterized fairly as capitalism's attempt to keep an eye on and regulate government for the benefit of capitalist institutions, for except in economic crises, most national news is about government. Economic news is normally relegated to the business pages, but these pages are written mostly for investors.

However, because the country's – and American democracy's – well-being depends on its economy and because economic power holders can exert so much political power, the economy ought to be covered as closely as government. Wall Street, the large corporations and their lobbies, large investors, unions, and others speaking and acting for employees all need to be in the news more often. Indeed, the news ought to be reporting on the political economy.

Third, *cover citizen news*. If journalists want to do more for democracy, they must report on the role that citizens play

– and do not play – in it. Citizens are currently not newsworthy very often, but citizen leaders, citizen lobbies, protestors, and other activists do make news when they are active, when they are prevented from being active, and indirectly even when they are inactive. How elected and appointed representatives – federal, state, and local – serve, service, ignore, and reject citizens is another story told too rarely.

Moreover, citizens become newsworthy if they participate in the democratic conversation, both as regular and irregular contributors. Summarizing the overwhelming number of blogs and other forms of political texting is probably impossible, but a regular overview of those seen by elected representatives would be desirable. Polls asking additional and different questions than those chosen by commercial and mainstream pollsters should be included in the news as well.

Still, the biggest need is for news from or about unrepresented citizens, the people who never vote and are almost never heard from publicly in any way.

Fourth, *report additional perspectives on America*. The unrepresented citizenry is necessary to the news for another reason: their perspective on the country diverges in many respects from the mainstream ones. National news, coming as it does from the political and economic leadership and being reported by mostly upper-middle-class professionals, often looks at the country top down. The newsmakers and journalists, too, are participants in upscale democracy.

Needless to say, newsworthiness is defined also by what journalists perceive to be of interest to their audience, but since that audience is ideologically and otherwise heterogeneous, journalists work hard to report the news with what they consider to be detachment, fairness, and objectivity. The result is a political and

economic centrism that is too narrow to encompass the country's diversity. Consequently, newsworthiness must be broadened to include facts, viewpoints, and opinions – not to mention solutions for the country's problems – advanced by people outside the mainstream.

Fifth, *increase watchdogging*. As noted above, journalists and others are particularly fearful that the news media's technological changes and economic difficulties threaten investigative reporting that results in exposés. Efforts to find new financial and institutional support for it are already under way.

The major need may be for more of what I have called *everyday investigative reporting*: the daily routine of keeping an eye on elected and appointed officials, economic decision-makers, and other influentials. Keeping *them* honest, and reporting their often petty but continuing corruption or malfeasance, is as important as uncovering dramatic misdeeds that result in prize-winning exposés. In fact, extending the sweep of everyday investigative reporting might be the most productive policy for the never-covered and thus never-watched elected or appointed officials who are most likely to ignore or evade the several public interests they are supposed to serve.

Everyday investigative reporters who are always on the scene may also notice continuing systemic deviations from democratic and other norms and can thereby underscore the need for systemic reform. Catching villains without carrying out systemic reform only produces new villains once exposés are forgotten.

So-called citizen journalists can sometimes be helpful in this role. Properly trained stringers who are in or can get to the right places at the right times should be able to conduct simpler forms of everyday investigative reporting, es-

pecially in parts of society that are normally not covered by or are otherwise inaccessible to the news media.

Yet one other kind of watchdogging may be even more necessary: *analytic investigative reporting*, which goes beyond the descriptive reporting of daily journalism and its emphasis on individual actors. Knowing the various social forces, structures, and agents that influence what people in important public positions do and say helps us understand why the country functions as it does. Learning why existing structures malfunction and new initiatives go wrong is required to determine the policies and politics needed to correct them.

This kind of watchdogging is usually reported in journalists' books years after the fact, but by then it is dramatic history rather than useful news. Journalism should be devoted to understanding society and informing its audiences rather than producing first drafts of history.

Many journalists believe that analysis should be left to social scientists and other academics, but they too rarely march to topical drummers. More journalists must be trained to be analytic, even though their analysis will often be instant. Academics can then still follow with their kinds of analyses.

Sixth, *make room for informed opinion*. Journalists are probably the last logical positivists left in the modern world; they will report only what they perceive to be facts. Worse yet, they are complemented by commentators who too often supply opinions with insufficient attention to the relevant facts.

Limiting the news to perceived facts may enable journalists to practice the detachment needed to serve their ideologically diverse audience, but it also deprives that audience of help in drawing conclusions about important issues and problems. Investigative and other

active reporters should therefore be actively encouraged to offer their opinions on subjects which they have reported intensively.

Seventh, *enlarge the news audience*. Although the actual news audience may be larger than the counted one, the news media could make greater efforts to expand it further. Such efforts may need to include some structural changes in the news. For example, people who believe that they need to monitor the news only every few days should be able to find appropriate news media – perhaps even electronic and digital versions of the weekly newsmagazine.

Also, some less educated and older audience members comprehend only a part of what they read, hear, and view, and may require more simply presented stories. Novel forms of news presentation may attract some of the people who now make do without the news.

Even so, many people will not seek out more news unless and until they need it almost as badly as groceries. That is unlikely to happen until people become directly aware that government, the economy, and other major news sources play as central a role in their lives as those groceries. In the meantime, teaching young people about politics and economics beginning in the higher grades of elementary school might help as well.

Moreover, if the news is to play so central a role, the news media need to reinvent national news. If this is even possible in a country the size of a continent, the national news media cannot all be located in the Northeast, as they are now, and they must figure out how to focus regular national attention on datelines other than Washington, D.C., on people other than political elites, and on stories other than theirs.

Many of the above proposals require larger news organizations and are currently too expensive even to be tried. However, they deserve to be tried, if only to determine whether and when the news can have a continuing impact on democratic politics. At present, the news media are clearly necessary for the maintenance of existing forms of democratic politics, but they are insufficient to affect it significantly.

For one, news stories are too brief and superficial to supply detailed information about policy and political decision-making processes. Consequently, the news is also inadequate for serious citizen political activity, other than perhaps voting in elections. Knowledge is said to lead to power, but the knowledge we call news cannot do so. Nor can it bring about the greater participation in power essential to a properly representative democracy.

Turning America into such a democracy requires action on a variety of political and policy issues. Among other things, citizens must somehow obtain enough power to eliminate unrepresentative institutions beginning with the Electoral College; to reform the Senate so as to reduce the excessive decision-making power of senators from the small states; to redraw the boundaries of unfairly drawn congressional districts; and to prevent the presidency from turning into a unitary executive.

Above all, economic power must be disconnected as much as possible from political power. As long as the lobbies and monies of the economically powerful can exert undue influence on elections as well as on elected officials once in office, the citizenry cannot be properly represented. Ultimately, truly representative democracy requires a politically and economically more equal America.

If journalists agree that these issues are relevant to the democratic conversation, they should develop ways of reporting on them. In the process, they would also be building a more powerful bulwark for democracy.

Kathleen Hall Jamieson & Jeffrey A. Gottfried

Are there lessons for the future of news from the 2008 presidential campaign?

When news does its job, attentive citizens are better able to understand both the challenges facing the country and the competing visions of those seeking to lead it. Indeed, some argue that “the purpose of journalism is to provide people with the information they need to be free and self-governing.”¹ In years past, those studying media have reliably found that consumers of traditional news were better informed about issues of national concern.² However, the growth of a new media culture in which partisans are able to envelop themselves in like-minded content raises a question: in the world of ideologically tinged cable news, opinion-talk radio, and viral email, does news in any of its various incarnations still sift fact from fabrication and, in the process, heighten a voter’s knowledge about those aspiring to lead?

Our study of the presidential general election campaign of 2008 suggests that traditional news sources are not the custodians of fact that they once were. At the same time, sources that blend discussion of news with what we call opinion-talk are at least occasional purveyors of unbalanced issue coverage and misinformation. In this transformed media envi-

ronment, presidential debates hold up as one of the only venues, if not the sole source, that heightens citizens’ campaign knowledge. These conclusions arise from our study of how newspapers, national and local broadcast and cable news, Internet, talk radio, and debate audiences responded to questions about the central deceptions advanced by the major party candidates.

In the general presidential election of 2008, viewers in battleground states were assaulted by deceptive claims, among them that Arizona Senator and Republican Party nominee John McCain wanted to cut Social Security and stay in Iraq for one hundred years and that Illinois Senator and Democratic Party nominee Barack Obama did not take Iran seriously and had a close relationship with former Weather Underground leader William Ayers.³ The two most prevalent distortions, each backed by multimillion dollar ad buys, involved taxation. Specifically, the Democrats alleged that McCain would impose a net tax on health care benefits, and the Republicans insisted that Obama would raise taxes on working families including “yours.” Where the Obama campaign spent \$43 million on broadcast ads asserting the first claim, the

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McCain campaign devoted \$53 million to spots alleging the second.⁴

The Democratic nominee's rhetoric failed the truth test by suggesting that the Republican would tax employer-provided health benefits, a statement that sins by omission because the tax would have been offset with a credit of \$2,500 per individual or \$5,000 per family. "It could all unravel," said one of the Obama ads. "Your health care under John McCain. McCain would tax health benefits for the first time ever, meaning higher income taxes for millions." On the other side, McCain trafficked in the false conclusion that Obama planned on raising middle-class taxes. "Times are tough. Obama voted to raise taxes on people making just \$42,000," noted one McCain ad. "He promises more taxes on small businesses, seniors, your life savings, your family." Obama had forecast raising taxes, but only on those households making over \$250,000.⁵ Each side rebutted the false charges: Obama in counter-advertising, debates, and speeches; McCain in the latter two. In a moment, we will argue that McCain's decision not to rebut using advertising was consequential.

An Annenberg Public Policy Center post-election survey found widespread public ignorance about the facts underlying the nominees' exchanges on taxes.⁶ When respondents were asked which candidate(s) they thought would raise middle-class taxes, one in five (22 percent) answered correctly that neither planned on doing so; four in five (78 percent) either did not know the answer or answered incorrectly, including one in six (17 percent) who embraced the deception that Obama would raise taxes. When asked about McCain's health care plan, four in ten (42 percent) knew that his tax on health care benefits would be offset, while six in ten (58 percent) did not know

the correct answer, including 15 percent of the sample that believed that benefits would be taxed without the offsetting credit.⁷

The questions we address here are: how effectively did the candidates, news media, and debates blunt these central deceptions and increase audiences' knowledge? And did embracing either of the false beliefs affect the way people voted?

Our first finding is straightforward. Exposure to ads increased the impact of the deception, but only when it was not rebutted. By counter-advertising, Obama negated the effect of McCain's attack. When his campaign decided not to do the same, McCain left audiences vulnerable to the false inference invited by Obama's ads.

Because candidates most often reach voters with ads in slots surrounding local news, news-viewing is a rough indicator of ad exposure. Further, because local news focuses not on presidential campaigns but, rather, on crime, sports, and weather,⁸ unless the other side rebuts an attack, higher local news consumption should predict embracing the rhetoric in the ads. Unsurprisingly then, we find that the more that people relied on local news, the more they believed that McCain would tax health benefits without the offsetting credit, but the less likely they were to hold that Obama would raise middle-class taxes.⁹ Specifically, those who watched local news every day were one-and-a-half times more prone to believe the deception about McCain than those who watched no local news, but were 1.7 times less likely to believe the deception about Obama.

When covering politics, broadcast and cable media tend to engage in tactical assessments and "he said/she said" reporting, failing in the process to cor-

rect the deceptions offered by either or both sides.¹⁰ Consistent with this supposition, broadcast and cable news more often than not restated the suspect allegations without challenging the misinformation they contained. This excerpt from *NBC Nightly News* is illustrative:

Brian Williams: I mentioned we have more new poll numbers tonight, and our NBC News political director Chuck Todd is here with those.

Chuck Todd: [...] [L]ook at [his] advantages on the issues, Brian. This sort of underscores the 10-point lead for Obama. He leads by 39 on handling health care. He leads by 21 points on handling the economy, by far and away the biggest issue in [the] poll. Fourteen points on taxes. This is happening because Obama has been pounding McCain on the airwaves on health care and taxes, saying he's going to tax your health care benefits. And that's why he's got a lead now on that. All that's left for McCain is Iraq.¹¹

From this segment's focus on tactics, audiences could learn that Obama was advantaged by his assault on McCain's plan. Because the Democratic nominee's allegation was presented without correction, the deception was reinforced. Still, as the following excerpt from *CBS Evening News* suggests, broadcast journalists occasionally debunked the fabricated claims:

Wyatt Andrews: John McCain wants a multitrillion-dollar tax on the middle class? Here are the facts. Obama has the tax part correct, but the impact on the middle class is exaggerated. Most people will see tax cuts. McCain does want to tax the health insurance benefits that 60 million Americans now buy through their employers tax free. However, McCain also proposes to give the money back as a tax credit, \$2,500 for individuals, \$5,000 for families.¹²

Although we find no evidence that watching broadcast network news increased the likelihood of embracing either deception, neither did we find that those news viewers were more likely to know the candidates' position on either issue. In other words, we cannot say that network news did any harm, but it also did not do any good.

Because partisans seek reinforcement from like-minded media outlets, the rise of partisan media has increased the likelihood that those of one ideological bent will be protected from information that might challenge their presuppositions. The ideological dispositions of the audiences of cable news channels differ. Those calling themselves moderates and liberals are more likely to watch CNN, and those wearing the conservative label are more likely to tune to FOX News. In our sample, liberals and moderates were two-and-a-half times more prone to watch CNN as their primary cable news channel, and conservatives were over three-and-a-half times more likely to watch FOX News. Our survey contained too few MSNBC viewers to permit reliable estimates for that network.

Research conducted in 2004 found that cable news networks debunk false claims about the candidate closer to their ideology and embrace falsehoods being floated about the other candidate. By so doing, conservative media (for example, FOX News and Rush Limbaugh) "create a self-protective enclave hospitable to conservative beliefs... [and enwrap audiences] in a world in which facts supportive of Democratic claims are contested and those consistent with conservative ones are championed."¹³ Some research has found that this pattern is characteristic of both conservative and liberal media:

“Conservative assumptions are more likely to go unchallenged on FOX’s talk shows than on CNN’s, and liberals are more likely to be required to defend their premises. The opposite is true on CNN.”¹⁴

Contrary to the finding from the 2004 presidential election, in 2008 we do not find a pro-Obama effect for CNN. CNN neither increased belief in the deception nor increased the accuracy of respondents’ answer to either issue. Similar to network news, CNN neither did harm nor good.

However, we do find a pro-McCain effect for FOX. Specifically, that channel fortified the deception that Obama would raise middle-class taxes. On FOX, both pundits and invited guests alleged that the middle class had much to fear from the Democrat at tax time.

Scott Rasmusen: But Sean, what’s happening is Barack Obama is running a great ad campaign in battleground states. He keeps talking about cutting taxes for 95% of Americans. I know you’d argue about that.

Sean Hannity: It’s not true.¹⁵

In another FOX piece, an invited guest uncritically repeats the deceptive claim:

Martha MacCallum: I know that you mentioned you are fearful about an Obama presidency because you think that this tax – raising taxes on so many people in this country would sort of throw a cold blanket over this – or a wet blanket, I should say – onto any recovery that we might have.

Stephen Moore: [...] It’s those small businessmen who may be hiring five or 10 or 20 workers, that are going to be facing a higher income tax burden under this plan. And this is the one question, by the way, that Barack Obama has never been able to answer: How do you create more jobs

for this economy if you’re levying higher taxes on the small businesses that create 80 percent of those new jobs?¹⁶

Consistent with this analysis, watching FOX News increased the belief that Obama would raise middle-class taxes; viewers reliant on that outlet were roughly three times more likely to believe the deception and 1.4 times less likely to know that neither candidate proposed raising such taxes.

Similarly, regular listeners of conservative talk radio host Rush Limbaugh were 1.7 times more likely to believe the deception about Obama. Like FOX News, Limbaugh reinforced deceptions about Obama’s plans. Unlike FOX, though, listeners to Rush Limbaugh were more likely – indeed, one-and-a-half times more likely – to know the correct answer about McCain’s health care plan.

Neither the newest medium on the scene, the Internet, nor the oldest, the newspaper, enabled those who relied on them to make sense of either claim. Knowledge of the facts behind the fabrications wasn’t increased by using the Internet for information about the presidential election or by reading major city or national newspapers. Importantly, however, neither medium increased audiences’ embrace of the deceptions. Put simply, these two outlets also neither helped voters nor harmed them.

Our findings up to this point are disappointing. The news media did not serve as effective custodians of fact in 2008; instead, some outlets performed a function one would expect of campaign surrogates. However, the citizen seeking political substance did have a recourse. For almost five decades, studies have confirmed the power of presidential debates to increase voter knowledge,¹⁷ and 2008 was no exception.

The debates' two-sided clash of competing ideas, unmediated by interpretation from reporters, spiked voter knowledge. In these often disparaged encounters, the presidential and vice presidential nominees took on the deceptions perpetrated by the other side, including those on health care and taxing proposals. On no fewer than ten occasions across three debates, Barack Obama insisted either that he would not raise taxes on households making less than \$250,000 a year or that 95 percent of Americans would get a tax cut. When McCain made the charge, Obama responded:

John McCain: Senator Obama's secret that you don't know is that his tax increases will increase taxes on 50 percent of small business revenue.... I've got some news, Senator Obama, the news is bad. So let's not raise anybody's taxes, my friends, and make it be very clear that I am not in favor of tax cuts for the wealthy. I am in favor of leaving the tax rates alone and reducing the tax burden of middle-income Americans.

Barack Obama: [...] [L]et's be clear about my tax plan and Senator McCain's.... I want to provide a tax cut for 95 percent of Americans, 95 percent. If you make less than a quarter of a million dollars a year, you will not see a single dime of your taxes go up. If you make \$200,000 a year or less, your taxes will go down. Now, Senator McCain talks about small businesses. Only a few percent of small businesses make more than \$250,000 a year. So the vast majority of small businesses would get a tax cut under my plan.¹⁸

The debates afforded McCain the same opportunity. So, for example, the third debate included this exchange:

Barack Obama: Here's the problem – that for about 20 million people, you may find

yourself no longer having employer-based health insurance [with Senator McCain's plan].... And once you're out on your own with this \$5,000 credit, Senator McCain, for the first time, is going to be taxing the health care benefits that you have from your employer. And this is your plan, John. For the first time in history, you will be taxing people's health care benefits.

John McCain: [...] Now, 95 percent of the people in America will receive more money under my plan because they will receive not only their present benefits, which may be taxed, which will be taxed, but then you add \$5,000 onto it.¹⁹

As this Obama example illustrates, the candidates were occasionally more accurate in characterizing their opponents' plans in the debates than they were in ads. Still, the Arizona senator regularly suggested that the Democratic nominee would raise taxes, especially on small businesses while he supported "reducing the tax burden" of the middle class. At the same time, his Illinois counterpart repeatedly implied that McCain's health care plan would raise taxes on many.

However, because each side had the opportunity to correct the other's misstatements, watching the debates increased knowledge. In the presence of a robust list of controls, including political ideology, party identification, political knowledge, and news consumption, those who tuned into all four debates were one-and-a-half times less likely than non-viewers to believe the deception that Obama would raise middle-class taxes, and were one-and-a-half times more likely to know that neither candidate had proposed upping them on the middle-class. Those who watched all four debates were not only not more likely to believe Obama's deception about McCain, but were 3.8

times more likely than non-viewers to know that a credit would offset the tax.

All of this matters because, even in the presence of a robust list of controls, being misled about these issues affected vote choice.²⁰ Voters who were convinced that McCain would impose a net tax on health care benefits were 2.8 times more likely to cast their ballot for Obama. Similarly, those who believed that Obama would raise middle-class taxes were 7.8 times more likely to vote for McCain. To calibrate the importance of these findings, note that embracing deception is almost as strong a predictor of vote as party identification.²¹ When they reinforced deceptions, news outlets had the same distorting effect on voting behavior.

In short, with the exception of Rush Limbaugh's correction of distortions of McCain's health care plan, other media we studied failed to increase citizens' understanding of the facts underlying the charges and counter-charges from the campaigns. In some cases, news exposure actually magnified belief in a deception: viewers of FOX and listeners to Rush Limbaugh were more likely to endorse McCain's contortion of Obama's position. Candidate advertising was successful in correcting misstatements by the other side. However, the hero in our story is not a traditional news outlet, a partisan news source, or paid advertising. It was not reliance on any of these sources, but rather viewing presidential debates that increased voter knowledge and undercut the power of the deceptions from both sides.

Still, the new media environment carries with it an increased capacity to locate accurate campaign information. In 2008, the *St. Petersburg Times* added PolitiFact to a menu of existing sources dedicated to making politicians account-

able for their assertions. Similarly, *The Washington Post's* Michael Dobbs regularly unmasked the deceptions in candidate ads. And FactCheck.org (run by the Annenberg Public Policy Center) continued to play the role it introduced in the 2004 election.²²

All three sites devoted space to challenging distortions in broadcast and cable advertising and suspect content in cyberspace. Of course, the disposition of news outlets to replicate the effort of these sites is dampened by a commercial environment in which one-newspaper towns are giving way to no-newspaper towns; surviving news outlets are laying off staff; and audiences for traditional news are scattering to a wide range of alternative sources.²³ Although we assume that exposure to sites debunking fabrication will increase knowledge, our survey contained too few respondents to test that hypothesis.

In his 1805 inaugural address, Thomas Jefferson expressed confidence that “[t]he public judgment will correct false reasoning and opinions on a full hearing of all parties.”²⁴ In 2008, news failed to help the public perform the role Jefferson envisioned for it, and citizens did not live up to the expectations Jefferson set for them either. Still, the debates served the public well.

As the audience for traditional news erodes, as cable and websites proliferate, and as audiences increasingly gravitate to sources that reinforce their beliefs, the concerns that Jefferson's statement invites raise at least three questions. To what sources can the public turn in order to gain a “full hearing of all parties”? How does a democracy motivate citizens to select such sources? And, finally, are there alternative ways in which “public judgment” can be adequately informed?

ENDNOTES

- ¹ Bill Kovach and Tom Rosensteel, *The Elements of Journalism: What Newspeople Should Know and the Public Should Expect* (New York: Crown, 2001), 17.
- ² For example, see Steven H. Chaffee, Xinshu Zhau, and Glenn Leshner, "Political Knowledge and the Campaign Media of 1992," *Communication Research* 21 (1994).
- ³ For a more in-depth look at the major deceptions throughout the 2008 presidential election, see Joe Miller, "The Whoppers of 2008," September 25, 2008, http://www.factcheck.org/elections-2008/the_whoppers_of_2008.html; Viveca Novak, "The Whoppers of 2008 – the Sequel," October 31, 2008, http://www.factcheck.org/elections-2008/the_whoppers_of_2008_-_the_sequel.html.
- ⁴ The two deceptions of focus in this paper were chosen because they had the most advertising expenditure of all the deceptive claims during the election; all advertising spot counts, estimated expenditures, and ad transcripts were provided by Campaign Media Analysis Group (CMAG).
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- ⁶ The 2008 Annenberg Claims/Deception Survey was conducted by Princeton Survey Research Associates International for the Annenberg Public Policy Center at the University of Pennsylvania. A total of 3,008 adults 18 years and older were surveyed by phone between November 5 and November 18, 2008. The survey has a margin of error equal to 2.3 percent for results based on a full sample.
- ⁷ Wording of the question regarding middle-class taxes is "Which candidate or candidates would have raised taxes on middle-class households?"; for the question regarding McCain's health care plan the wording is "As best you know, if a family has health insurance provided by an employer . . . would Senator McCain's plan have taxed those health benefits but given the family \$5,000 that would have covered the tax, or would Senator's McCain's plan have taxed those health benefits and given the family no help to pay the taxes, or would Senator McCain's plan NOT have taxed those health benefits at all?"
- ⁸ See Martin Kaplan, Ken Goldstein, and Matthew Hale, "Local News Coverage of the 2004 Campaigns: An Analysis of Nightly Broadcasts in 11 Markets," February 15, 2008, <https://www.policyarchive.org/bitstream/handle/10207/6408/LCLNFinal2004.pdf?sequence=1>. This focus on local crime, sports, and weather instead of presidential campaign coverage and analysis of the accuracy of presidential ads is consistent with the public's expectations of local news as a "good neighbor" instead of a watchdog; see Don Heider, Maxwell McCombs, and Paula M. Poindexter, "What the Public Expects of Local News: Views of Public and Traditional Journalism," *Journalism and Mass Communication Quarterly* 82 (2005).
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Robert H. Giles

New economic models for U.S. journalism

One morning last summer, over coffee in the northern Michigan town of Lake Leelanau, a young journalist named J. Carl Ganter was describing his news organization, Circle of Blue (www.circleofblue.org), which reports on the global freshwater crisis. Its online publication, WaterNews, is produced out of an office in nearby Traverse City by an international network of journalists, scientists, and communications design specialists. WaterNews is published in three editions – World, Science+Tech, and Business – that can be translated at the click of a mouse into one of eleven languages. The site is updated weekly with posts of long-form stories, news items, the results of scientific exploration and field data, and the trends the site monitors, all presented in a compelling and colorful package, including video reports with high production values. The breadth of the coverage embraces other significant issues, from infectious disease to climate change, that the site’s editors deem relevant to the freshwater crisis.

Ganter is a prototype of the new entrepreneurial journalist: an award-winning broadcast reporter, writer, and pho-

tojournalist whose work has appeared in major magazines and newspapers and on television and radio networks. As the early-morning sun warmed us, Ganter spoke of the impact of Circle of Blue’s journalism. “We understand what drives public opinion,” he said. “We want our stories to be personal and relevant as a way of raising awareness around water.” Ganter and his colleagues are often on stage in places where policy-makers and opinion leaders gather, such as the World Economic Forum in Davos and forums sponsored by the Aspen Institute. The organization’s reporting has been quoted by *National Geographic*, *The Christian Science Monitor*, and *Vanity Fair*. The Council on Foreign Relations calls Circle of Blue a “must read.” A global public opinion survey commissioned by Circle of Blue was released at World Water Week in Stockholm last August, reporting a series of findings that placed water issues as the planet’s top environmental problem – greater than air pollution, depletion of natural resources, loss of habitat, and climate change.

Ganter’s organization is one of many news-gathering experiments that are changing the face of journalism. As journalism quickens the pace of its move to the Web, Circle of Blue is filling a niche by providing specialized content that is

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considered essential by an audience of shared interests but that can't be found in such detail anywhere else. In many ways, it is reflective of a shift in how we define journalism, or at the very least, in how we go about producing and sharing it.

Some of these new ventures will fail, some will succeed. But the vitality of the start-up culture suggests that if the twilight of newspaper journalism is upon us, a fresh capacity to sustain journalism is charging forward. The murkier question, the question underlying the seismic disruption roiling the news industry, is whether there are sufficient resources to pay for journalism over the long term. At the moment, journalism is trying to figure out its worth in a new delivery system that may or may not allow that worth to be tangibly recognized.

Tracking this hunt-and-peck search for workable business models was the impetus behind the decision of the Nieman Foundation for Journalism at Harvard University to launch the Nieman Journalism Lab (www.niemanlab.org) in October 2008. From the start, the Lab has tapped into a deep well of interest in learning about the latest ideas and experiments in how high-quality journalism can survive and thrive in the Internet age. By its first anniversary, the Lab's website had passed one million page views and had well over twenty thousand followers on Twitter. It now ranks as one of the top journalism sites. "The beautiful thing about this time in journalism is that there are so many experiments, so many new models being tried," says Joshua Benton, creator of the Lab and its director. "The sad thing is that it's taken a disruption this threatening to get all this creativity flowing."

Circle of Blue is among several non-profit news organizations testing one of the industry's most-discussed ideas: that serious journalism can be supported with funding from a variety of sources behind carefully constructed firewalls built on traditional standards of journalistic ethics. It is a prototype of a business model that supports specialized coverage, but it in fact embraces characteristics common among other start-ups and experiments that hold promise as a new way of paying for serious journalism.

The organization seeks to provide authoritative, in-depth coverage of a major global problem – the freshwater supply – that few, if any, mainstream news organizations can match. Indeed, as newspapers, television news, and weekly news-magazines shrink their staffs and sharply reduce, if not eliminate, foreign coverage, a news organization focused on a single issue can fill a critical void in public understanding. Circle of Blue's authoritative reporting and research are relevant to an audience of international organizations concerned with water issues, and out of that relevance comes the potential to make a difference. It is providing a form of public-service journalism that evokes comparison to the influence of newspaper investigations in shaping local and national conversations and actions. It invites public engagement, recognizing value in the collective wisdom of diverse voices. It offers one possible form for the newspaper of the future: an online publication narrowly focused on a specific topic, with content that includes interpretation, analysis, investigative reporting, and interactive engagement and that utilizes all of the tools of multimedia storytelling. In its singular focus, it may fulfill on a global scale an important mission of the local daily newspaper – that is, community influence.

Circle of Blue is building partnerships and obtaining financial support in ways that are challenging conventional thinking about how to pay for serious journalism. To a considerable extent, its economic model is an example of how new journalism outlets are making innovative connections while striving to maintain the independence essential to practicing journalism free from the influence of supporting individuals and institutions. Circle of Blue is a nonprofit affiliate of the Pacific Institute, which is described as a “nonpartisan research institute that works to advance environmental protection, economic development, and social equity.” Funding for Circle of Blue comes from foundations, government grants, individual donations, and corporate contributions. Ganter emphasizes the rigor of Circle of Blue’s “church and state” ethic: donors that choose to fund particular reporting projects understand that their funding will not influence content. Its website states that Circle of Blue adheres to the codes of ethics of both National Public Radio and the Society of Professional Journalists, considered to be standards for professional behavior in broadcast and print journalism.

Specialized publications have a long history in the United States as a business model designed to siphon readers from daily newspapers and weekly magazines. During the 1960s, for example, general-interest magazines such as *Look* and *The Saturday Evening Post* began to die off as reader interest shifted to new publications like *Sports Illustrated* and *People*, which gained a large audience among those interested in sports and celebrities. Start-up online news organizations are making similar bets that they can become essential sources of serious news at a time when general-interest news-

papers are losing readers and advertisers and are shrinking their news staffs, leaving critical gaps in news coverage.

ProPublica is one such enterprise, an independent, nonprofit newsroom with a mission of producing investigative stories with “moral force.” It was launched in January 2008 with major, multiyear funding from the Sandler Foundation, whose philanthropic mission was established by Herbert Sandler, founder of Golden West Financial Corporation, and his wife, Marion. Foundations are supporting other investigative reporting ventures, including the Center for Public Integrity, established as an independent news organization in the time before the Internet; the Center for Investigative Journalism, based in northern California; and New England’s Center for Investigative Journalism, which is built on a partnership with Boston University. The Center for Public Integrity has survived since its inception in 1990 through foundation grants and the demanding task of raising operating funds year after year through campaigns that offer individual donors a menu of giving opportunities. These initiatives are emerging in response to the widely held fear that investigative journalism is at risk. More and more, local newspaper newsrooms lack the resources to commit reporter time and the money required to dig deeply into topics of interest to their communities; indeed, at many newspapers, investigative reporting is increasingly seen as a luxury that reporters are asked to do in addition to covering their regular beats.

Across the country, nonprofit online journalism enterprises are being launched, in part to offset declining coverage in local daily newspapers and in part to home in on essential community issues. In Minnesota, MinnPost.com recruited a staff of journalists with years

of experience at the Minneapolis *Star Tribune* and the St. Paul *Pioneer Press* to report in-depth on critical issues in the Twin Cities and across the state, with the caveat that it doesn't try to "be all things or serve all people." The MinnPost.com business model draws support from corporate sponsors, advertisers, and members who make annual donations, along the lines of individual gifts sought from listeners of public broadcasting.

Individual funders are coming forward to enable regional journalism start-ups to take hold. Texas Tribune was founded by John Thornton, a venture capitalist based in Texas, and launched last November with a mission of covering Texas political and policy news. Thornton put up \$1 million of his own money and raised another \$2.5 million from individuals and foundations. A partnership between KQED and the University of California, Berkeley, has been funded with a start-up gift of \$5 million from financier Warren Hellman to create an open dialogue about civic and community news in the Bay Area through original journalism.

For now, foundation grants are making an impact in supporting news-gathering enterprises that provide specialized news content or alternate voices to fill the void created by shrinking newspaper coverage. The John S. and James L. Knight Foundation is investing \$25 million over five years to fund digital innovations that will serve communities and provide new outlets for serious journalism, and has pledged an additional \$15 million to help develop new economic models for investigative reporting on digital platforms. In spite of the current evidence of philanthropic commitment to helping save journalism, foundations are not constituted to provide long-term funding. Their missions typically focus on start-up grants that will carry an orga-

nization or an idea for several years, with the expectation that independent resources will be found to sustain it for the long term. So, a critical question looms: what will sustain promising news organizations launched with foundation money once initial grants expire or as foundations lose interest and turn their attention to other causes?

Alex Jones, director of the Shorenstein Center on Press, Politics and Public Policy at Harvard University, tells in a new book, *Losing the News*, of his "personal fantasy," which he sees as one possible answer to the uncertainty of long-term nonprofit funding. He writes that he dreams of a \$2 billion endowment that would turn *The NewsHour with Jim Lehrer* (now *PBS NewsHour*) "from an hour-long television program of talking heads and analysis into the nation's best television news program, the product of a new news organization dedicated to being the leader at television news." The income from such an endowment, Jones writes, "would provide \$100 million a year for reporters and editors, and other professionals who could mount a worldwide effort at television news that would inspire viewers and embarrass every other television news operation."¹

Independent-minded journalism in search of financial support struggles with the ethical concerns that are raised when a potential funder is perceived to have an agenda. It may be a well-intentioned agenda, such as human rights or health care, but the idea of being allied with an advocacy group gives pause. Online news organizations and foundations are experimenting with firewalls built on traditional journalistic ethics standards designed to shield the news-gathering from sacred cows and other forms of inappropriate influence. The struggle to find an ethical comfort zone will test the willingness of online news

ventures to resist compromises in working with potential funders.

GlobalPost is a commercial online enterprise launched in early 2009 from Boston with the ambition to become a major global news organization. Phil Balboni, who built New England Cable News into a regional television news powerhouse, raised more than \$8 million to start GlobalPost. He and his executive editor, Charlie Sennott, an experienced correspondent with *The Boston Globe*, hired an international reporting staff of more than seventy journalists, most with impressive pedigrees built on years of reporting from foreign lands. The journalists who signed on as founding correspondents saw an opportunity to reach a global audience while continuing to write freelance pieces and carry out reporting assignments for other news organizations. They accepted a GlobalPost compensation package that includes an equity stake in the company and a monthly fee of \$1,000. The experience and reputation behind most of the bylines gave GlobalPost dispatches an immediate cachet. This economic model is built on tight expense control and three sources of income: advertising; syndication agreements with news organizations worldwide that use GlobalPost content; and Passport, an interactive service that invites members to offer story ideas and engage in weekly calls with correspondents in the field. By its first anniversary in January 2010, GlobalPost had exceeded its goals for building an audience, recording 3.9 million visitors from 232 countries including a high of 758,000 unique users in November 2009. It has forged editorial partnerships with an impressive array of news organizations, including CBS News, Reuters, and the *PBS NewsHour*, but much remains to be done to reach its goal of profitability in 2012.

The thought that the digital revolution in journalism may take decades to play out is reinforced by the American historian Elizabeth Eisenstein in her book *The Printing Press as an Agent of Change*. She tells the story of how typography, as a result of Gutenberg's invention of movable type in the 1500s, became "indispensable to the transmission of the most sophisticated technological skills." It enabled the general public to access books and knowledge that previously had been available only in the most limited way to elite audiences through handwritten manuscripts. The long transition to movable type invites comparisons to the sweep and consequences of the Internet revolution. Eisenstein's 1979 book is now experiencing something of a rebirth, providing a fresh understanding of the nature of the revolutionary change that the Internet is forcing on journalism and traditional news organizations.² One doubts, however, that access to books gave people in the sixteenth century any sense of loss such as that being widely shared today over the decline of newspapers in the technological revolution.

In his widely quoted piece, "Newspapers and Thinking the Unthinkable," Clay Shirky, a professor at New York University's Interactive Telecommunications Program who has been writing about the Internet since 1996, described the uncertainty of the Internet revolution this way: "That is what real revolutions are like. The old stuff gets broken faster than the new stuff is put in its place. The importance of any experiment isn't apparent at the moment it appears; big changes stall, small changes spread. Even the revolutionaries can't predict what will happen."³

The search for new economic models for U.S. journalism is, in large part, a search to save or replace newspaper-

style journalism. Newspaper journalism is generally considered to be an indispensable monitor of public and civic behavior, and understood to have a duty to hold people in powerful positions accountable. Without this kind of journalism, it is thought, our democracy will suffer. Without newspapers to serve as watchdogs for the public, it is feared, those who would steal public funds and mismanage public responsibilities will go unchecked. Without adequately funded news organizations to underwrite the legal battles for access to public offices and public records, more of the public's business will be carried out unobserved.

No one knows whether the endgame is near for an economic model built on advertisers paying the bill for news-gathering, a model that has supported newspapers since the early days of Benjamin Franklin's *Pennsylvania Gazette*. But as Clay Shirky has noted, "[W]e had a very unusual circumstance . . . where we had commercial entities producing critical public goods. We had ad-supported newspapers producing accountability journalism." It was a "historic circumstance, and it lasted for decades. But it was an accident. . . . The commercial success of newspapers and their linking that to accountability journalism wasn't a deep truth about reality. Best Buy was not willing to support the Baghdad bureau because Best Buy cared about news from Baghdad. They just didn't have any other good choices."⁴

While this model gave general-interest newspapers an extraordinarily profitable run, newspaper executives should have recognized the long, slow slide in circulation was an early indicator that public appetite for general-interest publications was beginning to wane. The newspaper industry invests little in research and development and, as a consequence, has

been content to piggyback on new innovations as they come along, skillfully adapting new methods and new technologies invented by others. During the last quarter of the twentieth century, newspapers invested in computer-driven news and ad production and digital-based typesetting, leading to substantial reductions in operating expenses that went mostly to the bottom line. These reductions resulted in a period of robust profits even as circulation and advertising lineage declined.

In the 1970s, an entrepreneur named George Valassis started a company in Oak Park, Michigan, that offered advertisers colorful freestanding inserts of advertisements and coupons printed on slick paper at rates significantly lower than newspapers charged. Valassis was relentless in marketing his new service, which eventually displaced many forms of traditional in-paper advertising. Newspapers were not prepared to compete, either in printing quality or in price, and have lost billions in revenue over the years since Valassis bought his first printing press.

The rise of the newspaper insert market is but one example of how innovative disruption is breaking down the newspaper economic model. The term was coined by Clayton Christensen, a Harvard Business School professor and consultant to the American Press Institute (API) on its 2006 project, *Newspaper Next*, to test new business models for the newspaper industry.⁵ During the early 1990s, newspapers tried to respond to the coming of the Internet by forming partnerships with companies like Prodigy and America Online. Publishers were surprised by how quickly the Internet took hold and by the swift and nimble way innovators and start-ups moved to claim a growing place in emerging sectors of the cybersphere. In this revolu-

tionary atmosphere, newspapers scrambled to find ways to survive. Their initial responses centered on preserving old forms of newspaper organization. “The details differed,” Clay Shirky wrote, “but the core assumption behind all imagined outcomes . . . was that the organizational form of the newspaper, as a general-purpose vehicle for publishing a variety of news and opinion, was basically sound, and only needed a digital facelift.”⁶

API’s Newspaper Next project, described as a “Blueprint for Transformation,” concluded that if newspapers are to survive, they would do so as niche products delivering content in both print and electronic forms to targeted audiences of people and businesses that need information, including advertising. In a follow-up report, entitled “Making the Leap Beyond Newspaper Companies,” API introduced the idea that newspapers must become local “information and connection utilities” with a mission of recognizing “important jobs to be done” across their markets and figuring out how to get those “jobs” done.⁷

While the newspaper industry is working to prevent the endgame from being played out, it is poorly organized to agree on and institute fundamental change. As part of its effort to craft new economic strategies that will sustain the life of the printed daily and Sunday papers, newspaper executives met privately in Chicago last May for a summit to consider a revenue strategy based on paid content and “fair use.” In a white paper prepared by the API, the executives were told that “newspapers can make the leap from an advertising-centered to an audience-centered enterprise,” and that they must get on with it immediately. Called “The Newspaper Economic Action Plan,” it is built on the

concept of a paid content wall that would establish a principle of “fair use” by compelling Google and other aggregators to pay for original reporting that newspapers have been giving away.⁸ A united Internet strategy among newspaper publishers would be hard to achieve, to be sure, but doing so would establish, as the API plan suggests, true value for news content online. API also urges newspapers to “invest” in technologies, platforms, and systems that provide content-based e-commerce and data-sharing solutions and to shift their focus from advertisers to consumers and users.

The conversation continues. In September 2009, Google submitted a memo to the Newspaper Association of America offering a service run by Google that would handle billing and subscription services of premium content creators, such as newspapers. The newspaper executives also heard from Steve Brill about his well-publicized venture to charge for online content, known as Journalism Online. Brill’s idea is that once you get past the news everyone is covering, most newspapers publish enterprise stories that are distinctive and may be exclusive or of exceptional quality. As a result, some readers will pay for these stories. Brill says, “Companies representing or owning over 1,200 publications have all signed letters of intent” with Journalism Online. It is a high-profile start-up, in part because its founders, Steve Brill and L. Gordon Crovitz, are media celebrities. (Brill founded *The American Lawyer* magazine and launched Court TV; Crovitz is former publisher of *The Wall Street Journal* and executive vice president of Dow Jones.) Their business model is based on the idea that serious journalism should be paid for. Journalism Online offers consumers a password-enabled payment system to purchase annual or monthly sub-

scriptions, day passes, and single articles from multiple publishers. Publishers have the discretion to decide which content to charge for and how much to charge.

Newspapers gave away news content online for years in the belief that this would attract mass audiences and justify high advertising rates. Newspapers expected online advertising to begin to make up for the loss of classified and retail ad revenue in the print editions. After a few years of encouraging growth, online ad revenue has stalled. According to Ryan Chittum, writing for the *Columbia Journalism Review*, newspapers earned “just \$3.1 billion from online ads last year, a number that is on pace to decline significantly in 2009.”⁹ These returns compare to daily newspaper ad revenue in 2008 of \$37.8 billion. The new reality that revenue from online ads won’t come close to covering the cost of serious news coverage anytime soon is driving the newspaper industry to pursue a new strategy of getting the public to pay for news online. The urgency of the quest for a new strategy is reinforced by the stark reality of the decline of newspaper advertising sales. Based on results of the first three quarters of 2009, newspapers will record the lowest advertising sales since 1986 and a 43 percent drop from their all-time peak in 2005. In other words, Alan Mutter writes:

Newspapers appear to have gotten mighty close to losing almost half of their revenue base in a mere four years – a decline that began well before the economy began to unravel. . . . The collapse of the newspaper business most assuredly was aggravated by the downturn of the economy. But it is important to note that the sales decline was well underway before the economy cratered. It is a grave mistake to think, as

some industry leaders apparently do, that the industry’s problems will be solved when the economy improves.¹⁰

One strategy has the newspaper industry looking for ways to tap into the billions Google, Yahoo, *The Huffington Post*, and other aggregators are making by selling advertising based on the high volume of visitors to these sites who are then following links to original newspaper content. The Associated Press (AP), the world’s largest news-gathering organization, is moving aggressively, on its own behalf as well as in the name of the member news organizations, to force Google News and others to pay news organizations for their original work. In a speech at a recent meeting of the Newspaper Association of America, Dean Singleton, CEO of MediaNews and chairman of AP’s board of directors, said, “We can no longer stand by and watch others walk off with our work under misguided legal theories.” AP plans to rethink what it means to be a wire service on the Internet. Nieman Lab reported that AP recently distributed to AP executives, board members, and member organizations a confidential document entitled “Protect, Point, Pay – An Associated Press Plan for Reclaiming News Content Online,” which opens with the statement, “The evidence is everywhere: original news content is being scraped, syndicated and monetized without fair compensation to those who produce, report and verify it.” AP contends that it is difficult to overstate the importance of taking action at this moment. It continues:

With its traditional media customers under unprecedented financial pressures, AP simply can’t continue to provide the same quality of global news coverage under the current rules, where secondhand news gets most of the eyeballs. Embold-

ened by the uncertain state of the law around content use online, third parties are moving quickly to fortify their own positions. AP has both business and legal imperatives to assert its intellectual property rights, make affirmative efforts to protect them and create a structured way to enforce them.

The core of AP's plan is to identify and protect its news assets through the AP News Registry, which identifies, records, and tracks every piece of content AP makes available to its members and other paying customers. AP would "leverage its news content and information management tools to harness online traffic in ways that reduce misappropriation, expand audience and deepen engagement." The final piece of the strategy – maximizing revenue – would be accomplished by aligning the commercial terms under which AP's products and services are available on its many platforms.

Peter Osnos, founder of Public Affairs Books and a senior fellow for media at the Century Foundation, argues in the *Columbia Journalism Review* that ways must be found to make the public pay for original reporting, especially investigative reporting, which is so expensive and so essential to our democracy.¹¹ Osnos offers a framework of three principles – fair conduct, fair use, and fair compensation – as the underpinning of a new system of monetizing original news content. Osnos believes that "the rules of the road for distributing traffic on the Internet need to include recognition, in simple terms, of who got the story." Fair use is a more complex issue to sort out in setting standards for the use of copyrighted material under rules that ostensibly protect original newspaper content. And fair compensation,

Osnos writes, is how to pay for stories on the free access sites that newspapers and magazines offer. "Based on my own reporting, the answer could be in some combination of individual payments or cable and telephone fees," he suggests.

The online subscription model is a strategy that has been around for several years and remains in practice or under consideration in thinking about the future of newspapers. FT.com, the online outlet of *Financial Times*, experienced slow growth after becoming a paid site in 2002, but now has 117,000 subscribers. *The Wall Street Journal* is best known among the subscription news sites, with more than one million subscribers, according to Crain's New York Business (www.craainsnewyork.com).¹² *The New York Times* experimented with this model, charging for online access to its columnists and archives through TimesSelect, but the paper abandoned it in 2007.

USA Today now has a daily e-Edition that replicates the print edition with additional interactive features. It is free to subscribers of the print edition and is offered at 25 cents a day to those who want to access it only online. Another version of this model is found in Little Rock, where the *Arkansas Democrat-Gazette* charges \$59 a year for access to local news online, a service that is free to subscribers who also pay \$59 a year to have the paper home delivered. The owner, Walter Hussman, believes this strategy has protected the circulation of the print edition, which has increased over the past ten years. The *Democrat-Gazette's* success is shared by many smaller community papers that have followed Hussman's strategy of not giving away local news coverage and strengthening the paper's deep roots in the community. Other newspaper experiments with pay models include offering premium digital content for sports and other high-

interest, high-volume topics. The *Journal Sentinel* in Milwaukee is an example of this hybrid approach, mixing paid and free online content. The paper puts some of its coverage of the Green Bay Packers behind a pay wall. It charges \$7 a month or \$45 a year for *Packer Insider*. It draws readership and generates revenue but still represents a challenge as a means of growing a subscription base.

In a much-discussed cover story in *Time* last February, Walter Isaacson, former managing editor of the magazine and now president and CEO of the Aspen Institute, laid out a plan for a micro-payment system, in which “a newspaper might charge a nickel for an article or a dime for that day’s full edition or \$2 a month for a month’s worth of Web access. Some surfers would balk, but I suspect most would merrily click through if it were cheap and easy enough.”¹³ In a study by Boston Consulting Group, 48 percent of Americans said they would be willing to pay for news online, including on mobile devices. That number is substantially lower than several Western European countries, where more than 60 percent said they would pay.¹⁴

One of the most-watched evolving economic models is *The New York Times*, with a popular website (www.nytimes.com) and a relatively stable print readership that is both local and national. *Times* editors say the most encouraging sign of stability about the future of the printed paper is found in the eight hundred thousand subscribers that have bought the paper for more than two years; that’s eight hundred thousand willing to pay between \$608 a year locally and \$769 a year in national markets to read the *Times*. Moreover, Nielsen NetRatings reports that nytimes.com had an average of 17.9 million monthly visitors during 2009, making it the best-read newspaper news site, with nearly twice as

many visitors as *USA Today*. The *Times* is working toward narrowing the gap between the time spent reading the print version and the online version. The newspaper reports that readers spend an average of forty-six minutes a day with the paper but only seventeen minutes reading the *Times* online each day. In January, the *Times* announced that, starting in January 2011, it would charge some frequent readers for access to its website. Visitors will be allowed to view a certain number of articles free each month; to read more, the reader must pay a flat fee for unlimited access. In its own story, the newspaper described the reaction from media analysts and consumers as ranging from “enthusiastic to withering.”

Martin Langeveld, blogging for the Nieman Lab, reports that more than 96 percent of newspaper reading is still done in the print editions, and the online share of the newspaper audience attention is only a bit more than 3 percent. In the context Langeveld provides, these figures are not as good as the newspaper industry would like them to appear. In March 2009, each of the top three news destinations on the Web (MSNBC, CNN, and Yahoo!News) individually drew more than half the unique visitors to the websites of the entire newspaper industry. Newspaper sites get the attention of the U.S. online audience just 1.2 percent of the time.

At the City University of New York Graduate School of Journalism, in a project funded by the John S. and James L. Knight Foundation and the McCormick Foundation, four online business models are being explored. The project begins with the assumption that local daily newspapers will have ceased publication, that there will be a market demand for high-quality journalism to

serve as watchdogs of those in power, and that the market will find a way to meet this demand. The four models are: town or neighborhood sites that can be supported by local advertisers; a successor news organization to the local newspaper, built around traditional journalistic roles and supported by local and national ads in a traditional way; journalism supported by individuals, foundations, and perhaps companies that can play a role in the mix of local news outlets; and a framework to support the community's new news economy by bringing together all the independent players to form advertising networks, support mutual promotion, and facilitate other collaborative projects.

Other projects and discussions abound. The Aspen Institute devoted a recent conference to the theme "Of the Press: Models for Preserving American Journalism."¹⁵ Among the presentations was "New Business Models for News," based on the work of Steve Shepard of the City University of New York and Jeff Jarvis, whose blog Buzz Machine has been a platform for outspoken commentary on how the news industry was lagging in its response to the challenges and opportunities of the Web.

In October, Columbia University School of Journalism released a report by Leonard Downie, Jr., former executive editor of *The Washington Post*, and Michael Schudson, a professor at the school, with ideas addressing what the authors see as the reality that current advertising models won't continue to support accountability journalism. Among the recommendations is a national Fund for Local News created with money the Federal Communications Commission now collects from or could impose on telecom users, television and radio broadcast licensees, or Internet service providers and that

would be administered in open competition through state Fund for Local News Councils. The federal government already provides assistance to the arts, humanities, and sciences through independent agencies that include the National Endowment for the Arts, the National Endowment for the Humanities, the National Science Foundation, and the National Institutes of Health.¹⁶ Moreover, the argument goes, the government spends well over \$1 billion a year to support commercial news publishers through tax breaks, postal subsidies, and the printing of public notices.¹⁷

Jim Barnett, who left a twenty-year career as a newspaper reporter to start covering nonprofit news organizations and is now blogging for the Nieman Journalism Lab, says the start-ups that are being recognized are the ones that "have developed a deeper relationship with their readers and have succeeded in converting readers into donors. They see it as a two-way conversation, and they like to host events for their readers. They interact with their readers, which is not something that comes naturally to newspapers."¹⁸

Michael Shapiro, writing in the *Columbia Journalism Review*, argues that "journalism's crisis offers an opportunity to transform the everyday work of journalism from a reactive and money-losing proposition into a more selective enterprise of reporting things that no one else knows. And choosing quite deliberately to ignore much of what can be found elsewhere."¹⁹

The quest for an economic model for journalism, whether commercial or nonprofit, remains elusive. A new day in which newspaper executives would act boldly and in concert to save their industry is hard to imagine; they are risk averse and, by nature, too inde-

pendent. Yet the power of the institutions they represent, institutions that can provide accountability journalism, is profoundly important. Journalism will thrive on many new platforms, but neither singularly nor collectively are the online news outlets likely to replace fully the institutional heft behind a well-crafted newspaper investigation. Many of the economic models being tried are promising but do not have a track record sufficient to demonstrate that funding can be found to sustain them for the long term. Other ideas are being imag-

ined, researched, discussed, and debated; some will surely be tested in real time. While nothing before us or on the horizon promises to replicate precisely the depth and sweep of the daily newspaper, the search must continue. The absence of a definitive answer means the reality for now is that serious journalism will survive, with much uncertainty, both on the pages of the struggling local newspaper and in an online world of many economic models and experimentation.

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Jill Abramson

Sustaining quality journalism

It is well past time to reject the artificial divide between the guardians of print journalism and the boosters of blogs, Internet news aggregators, and other new media. Rather than battling over whether bloggers are real journalists or whether newspapers need to be preserved, the fight should focus more on championing serious, quality journalism, no matter who produces it or where it is published.

Rigorous news-gathering plays a vital role in our society, especially in holding the largest and most important institutions accountable. It is easy to forget how afraid of centralized power the founders of this country were, and how the press was envisioned by them as a bulwark protecting the free flow of critical information about the powerful. No single form of news-gathering, single platform, or single news organization can by itself uphold this mission or supply all the intelligence, energy, and muscle needed to dig behind the most complex stories and cover them with the kind of depth that has elevated journalism's civic role over the last century.

There is a human need and desire for quality journalism. In the Age of Too Much Information, it seems absurd to

argue that the supply of quality news is running low, but it is. The most expensive forms of news-gathering, especially international coverage and investigative reporting, are suffering deep cuts in many of the country's newsrooms – which are themselves dwindling in number. While many promising, Internet-based news sites have sprung up over the past few years to help fill the gap, they have not kept pace with what has been lost.

Meanwhile, during a difficult digital transition, the business model for supplying quality journalism has come under severe stress, and an industry-wide rethinking is under way. Until now, the idea that news on the Web should be free has prevailed, and during years of expansive advertising, this ethos saw the flowering of thousands of different news sites and a healthy democratization of voices of authority. Journalism became more participatory and collaborative. "Content, like wild horses, wanted to be free," wrote Richard Perez-Pena in *The New York Times* in December 2009, and consumers grew accustomed to a huge assortment of free news, photos, and videos.

But the severe economic downturn, accompanied by steep advertising cutbacks, has meant that new revenue sources are

needed to sustain quality journalism. It takes millions of dollars annually, to cite but one example, for the *Times* and the few other news organizations able and willing to commit the necessary resources to maintain fully staffed bureaus in Baghdad and Kabul for coverage of two international wars. Most major news organizations are now weighing whether to ask their online readers to pay for at least some of their content, as some newspapers already have. The *Times* recently announced it would institute a paid metered model on its website and some other digital platforms in 2011.

Many different versions of pay walls have been proposed, as well as partnerships among the major news-gatherers. While this may limit consumer choice and reduce the audiences for some paid sites, media companies that once assumed that advertising on the Web would continue to expand exponentially are faced with the cold reality that without shifting some of the cost burden to consumers, they may be forced into ever more drastic cuts or even face the prospect of shutting down. These challenges have been especially acute for the newspaper business.

Indeed, just as newspaper executives were trying to hang on and adapt to new realities, the economic crisis of late 2008 hit. For newspapers, disappointing third quarters were followed by murderous fourth quarters, with huge drops in advertising revenue as many sectors – especially help wanted, financial, and real estate – severely cut their ad budgets.

Alex S. Jones, a Pulitzer Prize-winning journalist, provides a cogent history of these stormy times in his recently published book, *Losing the News*. He notes the constant drumbeat of bad news, including the shuttering of foreign and domes-

tic news bureaus. As testament to the rough times, he cites his own inbox crammed with email messages from newspaper journalists who have lost their jobs. In a particularly chilling example, Jones describes the excellent reporting done by *The San Diego Union-Tribune*, which won a Pulitzer for its investigation into allegations of corruption surrounding former California Representative Randal “Duke” Cunningham. The paper’s Washington bureau, which did most of the reporting on that story, was closed during a round of cost-cutting, along with the Washington bureaus of many other newspapers.¹

Given that the news media were criticized for being too compliant during the Bush administration, it would seem a dangerous and inopportune moment to be cutting the collective investigative muscle of journalism in the nation’s capital. Indeed, without robust investigative reporting by *The Washington Post* on secret CIA prisons or *The New York Times’* revelations about warrantless eavesdropping by the NSA, readers might still be ignorant about such secret counterterrorism policies. Given the keen national interest in the Obama administration and in the administration’s approach to governing, news organizations should be beefing up, not diminishing, their coverage. Without aggressive, professional reporting, the public might not have known about the special deals buried within the health care reform legislation or how Wall Street is currently lobbying to water down new financial regulations.

The few cities that still had competing newspapers have seen the weaker ones fail: for example, the closing of the print editions of the *Seattle Post-Intelligencer* and the *Rocky Mountain News*. Two major metropolitan newspapers, the *San Francisco Chronicle* and the *Minneapolis Star-Tribune*, have been teetering on the brink and

have endured extremely deep staff cuts. Other storied names, like the Tribune Company and Knight-Ridder, have filed for bankruptcy or gone out of business.

International reporting has also taken a terrible hit. In 2003, there were more than a thousand foreign journalists covering the war in Iraq. Today that number has dwindled to fewer than one hundred. Even in major and news-intense cities like Moscow, there are few U.S. journalists left, with the recent retreats of *The Baltimore Sun*, *Chicago Tribune*, and *The Philadelphia Inquirer*. *The Boston Globe*, a member of the *Times* family and a newspaper with a distinguished tradition of international reporting, was forced to close all of its foreign bureaus and eliminate the job of foreign editor. The *Times'* bureau chief in Cairo, Michael Slackman, said that when he was assigned there less than five years ago he had an array of print and broadcast competitors. Now he has just a single full-time American newspaper competitor: the *Los Angeles Times*. Full-time American correspondents are seldom seen in many other international capitals.

Large layoffs in newsrooms have become a daily reality. It was sobering to read the recent assessment offered by one of journalism's cheerleaders, Warren Buffett, who in his 2007 report to shareholders wrote: "When an industry's underlying economics are crumbling, talented management may slow the rate of decline. Eventually, though, eroding fundamentals will overwhelm managerial brilliance." Buffett took little comfort in the Internet as a remedy for the decline, noting, "The economic potential of a newspaper Internet site – given the many alternative sources of information and entertainment that are free and only a click away – is at best a small fraction of that existing in the past for a print newspaper facing no competi-

tion." Although Buffett reiterated his belief in the centrality of a free and vigorous press, even he conceded that if the news became an irreversible cash drain on his company, he might be forced to sell his beloved *Buffalo News*.²

At *The New York Times* there is a fierce determination to protect the core of our news-gathering, including the most robust international and investigative coverage. As part of a business strategy developed years ago, we have integrated our Web and print operations, overcoming a once ingrained internal culture that sprouted from the world of print. We have avoided some of the destructive rivalries between different platforms that have erupted at other news organizations. While the Web has added to the workload of many in our newsroom, it has also excited and broadened our staff, who have learned to tell stories in new ways. For our journalists based abroad, the Web has given an immediacy and greater impact to their work that goes beyond the satisfaction of seeing their articles in print.

For example, when the *Times* published a recent investigative series on Putin's Russia, the articles were translated into Russian simultaneously so that readers there could dissect the stories and post their comments, which were translated back into English on the *Times'* site. So the Web does, quite literally, democratize the news.

Quality journalism is produced on many platforms. I applaud the announcement that *The Huffington Post* will be underwriting original investigative reporting, perhaps giving work to journalists who have lost their jobs. ProPublica, a nonprofit established to produce the highest quality investigative journalism, is also doing important work. (I am a member of ProPublica's outside Board

of Advisors.) In the international arena, GlobalPost is supplying quality content by professional journalists, some of whom were laid off from traditional news companies, and is partnering with several of these same news organizations, including CBS News.

However, when millions of voices boom on the Web, there is also space for rumor, incorrect facts, and just plain nonsense. Amateur citizen-journalists sometimes do not have the skills and background to produce the most accurate journalism. Newspapers, with professional reporters and editors, still account for breaking the vast majority of important news stories, and some websites and bloggers are mainly drawing from news already published by newspapers. On some stories, especially those dealing with intelligence matters or complex business deals, it can take months for experienced reporters to convince sources to talk and for the reporters to obtain sensitive documents. They win the confidence of their sources because of their knowledge, the depth of their reporting, their courage, and their reputation. The work of *Times* correspondent and author Dexter Filkin in Iraq and Afghanistan, for example, required years of training and experience.

Our challenge, then, is to find a business model that suits Web-based journalism while sustaining quality journalism. Advertising on the Web, even in more robust times, is still less profitable than advertising in print. Readers spend less time with the *Times* online than in print: on average, a visitor to the website spends about thirty-six minutes per month, just a little more than the typical print *Times* reader would spend per day. As a 2007 report by Harvard's Joan Shorenstein Center on the Press, Politics and Public Policy

notes, "It is estimated that a newspaper has to attract two or three dozen online readers to make up for, in terms of lost advertising revenue, the defection of a single hard-copy reader."³

While some media analysts have argued that newspapers should ditch their expensive printing presses and elaborate distribution chains and go Web-only, it is hard to envision, especially in the current economy, how enough revenue would be generated to support a paper's large and highly experienced news-gathering staff.

Everywhere, the self-assured prophets of journalism are spouting their proclamations: readers will never pay for news on the Web; readers must pay for news on the Web. Journalism must find a way to generate more profits; journalism must become a nonprofit.

Anyone who claims to have a silver-bullet solution isn't playing straight. There isn't one answer that will save every news organization. The differences within the news industry, from small, hyperlocal newspapers and websites to national publications like *The Wall Street Journal* and *The New York Times*, are too vast. Not every newspaper is going to make the transition across the digital divide.

There have been some serious proposals put forth that bear consideration, but almost all carry risks. As *The Economist* noted in August 2009:

It will not be easy. For ten years readers have been enjoying free news online, and the BBC, public-radio stations and commercial television news outlets like CNN will continue to supply it. A newspaper that tries to charge will jeopardize online advertising, which often accounts for 10 – 15% of revenues.⁴

One approach is to erect a pay wall around stories on the Web, while making an exception for print subscribers. With its business news focus, *The Wall Street Journal* has charged for online subscriptions for years, but its formula may not necessarily apply to other general-interest newspapers. Some publications have charged for a digital simulacrum of their print editions, which certain readers find easier to navigate than a newspaper website. (*The New York Times* offers the Times Reader.) The *Financial Times* keeps readers on a meter, charging those who look at more than a certain number of stories a month. Some, including former *Time* magazine editor Walter Isaacson, have proposed micropayments for individual articles or a menu of coverage. Smartphones, with customized news applications, are another possible source of paid revenue.

The best minds in journalism are mapping out new strategies to adjust their business models for producing quality journalism in the digital age. I am confident that in the next few years we will see experimentation and adjustments along the way.

Decades from now, the quality newspapers that remain may not be literally on paper. They may be on portable tablets or some other device we haven't yet envisioned. But journalism will continue to thrive. My optimism is based on the fact that there is a human craving for trustworthy information about the world we live in – information that is tested, investigated, sorted, checked again, analyzed, and presented in a cogent form.

Yet people don't crave just information. They seek judgment from someone they can trust, who can ferret out information, dig behind it, and make sense of it. They want analytic depth,

skepticism, context, and a presentation that honors their intelligence. They want stories that are elegantly told and compelling, with quality pictures and videos. And they want to be part of the conversation.

In print, the *Times* has developed a loyal audience of highly educated and informed readers who are passionate about their relationship with the newspaper and who have proved willing to pay handsomely for it. While Web news browsing and the habits of Internet readers are different, the digital audience also turns to trusted brands and reliable news filters. During the months leading to the 2008 election, for example, nytimes.com had an audience of more than 20 million unique visitors per month. These readers, of course, were also likely supplementing their journalism diet with other sources of political news. The process of creating an engaged and informed citizenry takes a variety of forms, none necessarily more perfect than the other.

Quality journalism plays an irreplaceable role in our society. It is time to move past all the shouting over which platform or which business model is best and to join in an urgent and collective effort to protect what matters most: quality journalism and the journalists who create it.

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Brant Houston

The future of investigative journalism

When I was working at the *Hartford Courant* in Connecticut in the early 1990s, an editor came up with the theory of constant mass in a newsroom. He said that if you watched closely you would see that when one journalist went on a diet another one gained weight. But no matter the losses and gains, he said, the general mass of the newsroom stayed the same.

A similar theory might be applied to investigative journalism in the twenty-first century. While investigative reporting has drastically diminished in traditional and mainstream newsrooms, it has rapidly expanded into different forms and combinations in Web ventures and at universities throughout the world.

There is little dispute about whether there should be a future for investigative reporting. The issues are how will it be defined, how will it maintain high standards and quality, in what forms and with what methods will it thrive, and how will it be financed.

The definition of investigative journalism is multifaceted. It is original reporting full of rigorous documentation and numerous interviews. It is fiscally con-

servative, probing waste, fraud, and abuse in government agencies. It is adversarial and populist, challenging the powers that be. It brings with it moral judgments.

In *From Yahweh to Yahoo!* author Douglas Underwood tracks the origins of investigative reporting back to sixteenth-century England and its religious reformers, who traced their zeal to the New Testament. “Many elements of the prophetic tradition – the spirit of righteousness, the indignant moralism, the effort to maintain the purity of values, the call for spiritual and ethical renewal, the fierce sense of corruption abounding everywhere – are as typically found in today’s best investigative reporters or crusading editors.”¹ In fact, in 1975, The Christian Church, Disciples of Christ, was closely involved in the formation of IRE (Investigative Reporters and Editors) and the choice of its apt acronym.² The work thus brings with it heavy ethical burdens that underlie the standards – fairness, accuracy, thoroughness, and transparency – for the investigative journalism of the future.

Because of its adversarial qualities, investigative journalism is always under threat or attack – physically, legally, or financially. Now, with enormous losses in advertising revenue and ensuing lay-

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offs at news organizations, the worries about the future are constant. “Hardly a week goes by without someone lamenting the death of investigative reporting,” wrote veteran reporters Donald Barlett and James Steele in *Nieman Reports*. “It’s a familiar litany: The media are cutting back; crucial stories aren’t being covered; democracy will suffer.” (They added that the support given to investigative reporting by publishers in the twentieth century had often resembled the enthusiasm of drunken sailors at a prayer meeting.)³

Each year that I served as executive director of IRE, from 1997 to 2007, journalists interviewed me (as they had my predecessors) about the pending death of investigative journalism. But the ongoing deterioration of the mainstream media, particularly in the United States, and the sometimes overly partisan and amateurish practice of journalism on the Internet have raised the concerns to a much higher level.

Publishers and editors have countered that watchdog reporting is “the franchise” of the industry, and, to be sure, many investigative stories continue to be published and posted if one looks at daily blogs such as *The Muckraker* (<http://www.centerforinvestigative-reporting.org/blogs>) or *Extra!Extra!* (<http://www.ire.org/extraextra>). But even those with the best intentions have been unable to maintain investigative reporting at previous levels as newspapers have closed, declared bankruptcy, or slashed staffs to stay in business.

Robert Rosenthal, a former top newspaper editor and now the executive director of the Center for Investigative Reporting, has said some mainstream newsrooms are “toast,” with some having been “eviscerated.” He explained:

What that means is that on every level there’s less information, less government being covered, from the community to the state to the region. And part of what’s happening is the investigative reporting is something that’s being shoved aside in newsrooms that really have to feed the beast. I think the negative impact on all of us is drastic.⁴

The decline in print newsrooms actually began in the very late 1980s. For example, at the *Hartford Courant* the investigative team was reduced from nine to none by 1993, with reporters reassigned to beat or specialty reporting. Those kinds of reassignments have been repeated at other newspapers. The loss of a team of designated investigators meant many long-term probes were not produced, and the overall cuts in newsroom staffs meant reporters on town and regional beats had less chance to pursue public-service stories.

Longtime investigative reporter Laura Frank, in a 2009 piece for *Exposé*, a PBS program on investigative journalism, wrote:

The story line has been repeated time after time: The Internet is killing mainstream media, sending the Fourth Estate into record-breaking revenue declines. Online ads garner only a fraction of the dropping print revenue. When faced with cuts, investigative reporting is often the first target. Investigative journalism takes more time and more experienced journalists to produce, and it often involves legal battles. It’s generally the most expensive work the news media undertakes.

But Frank found a different story in her investigation. She discovered that the push by newspapers for high profit margins that began in the 1990s led to cost-cutting – like that at the *Hartford Courant* – that severely limited the quantity

and the quality of newspapers and, specifically, investigative reporting long before the advertising crisis hit.⁵ In 2006, a survey of one hundred newspapers by Arizona State University students reported, “Newspapers care about investigative stories, but they frequently don’t back that up with resources that reporters say they need to do in-depth work.”⁶

By 2009, plunging advertising revenues were added to the mix, and more than twenty-five thousand journalists had left the field over a two-year period in the United States alone, with many investigative journalists among them.⁷ At the same time, the elimination or reduction of investigative teams accelerated and the termination of investigative reporters increased. Interviews in 2007 with staff at twenty medium-sized and large newspapers revealed that investigative reporters and teams had been eliminated or sharply cut at more than half the papers. By 2008, two of the papers that had maintained a strong commitment the previous year – *Rocky Mountain News* and the *Post-Intelligencer* in Seattle – had closed. (The *Post-Intelligencer* retained a small portion of its staff to operate an online version.)⁸

Even though newspapers are where most investigations happen, the damage from cuts to staff and resources has rippled outward throughout the entire media system. “The most extensive, substantive public-service journalism in America in the past century has been started, supported, and published by the nation’s newspapers,” wrote Charles Lewis, a founder of the Center for Public Integrity, which does state, national, and international investigations. He and his coauthor, Bruce Siever, noted that the losses affect “not only the newspapers themselves but also the multitude of radio and television outlets

that have depended on this information for the substance of their own broadcasts.”⁹ The losses, in turn, undercut the content of news aggregators such as Google and Yahoo, which rely on other media to provide their stories.

Investigative journalists, because of the dedication and the zealotry they bring to their work, persist in the worst of times; sometimes they seemingly flourish when the challenges are greatest. “The people who are drawn to it and perform it are so dogged they are not going away,” said Tom Casciato, the executive producer of the PBS series *Exposé*, which has profiled investigative reports and the journalists doing them since 2006. “They got into it because they think it’s important. They can’t not do it.”¹⁰ The result is that reporters and editors themselves have provided the models for how investigative journalism can proceed into the future.

One model for the future is that of the lone practitioner, as exemplified by I. F. Stone, who self-published an investigative newsletter in the twentieth century that relied on his copious and meticulous review of government documents. Other examples of this type include Seymour Hersh, who has done many independent investigations with little initial support from mainstream media, and Loretta Tofani, who recently did award-winning reporting on abuses in Chinese factories although no mainstream media financed her work.

“Back 40 or 50 years ago, some of us did it for nothing,” said Lowell Bergman, a longtime and internationally recognized investigative journalist. “Remember that when Sy Hersh did the My Lai story, which is a Pulitzer Prize-winning story about massacres in Vietnam, he had to go to the only existing nonprofit organization at the time, the Fund for Investigative Journalism, and get a grant

to cover his expenses. It's the same place I went to in those days."¹¹

Following the recent layoffs there are more investigative journalists looking for financial support from nonprofit groups and foundations. But there also are more nonprofit organizations and donors to fund them. In addition to the Fund for Investigative Journalism are the Nation Institute, which has given grants to many notable progressive investigations, and the Pulitzer Center for Crisis Reporting, which supports international reporting and provided the financing for Tofani's work. Among foundations supporting individuals' work are the Alicia Patterson Foundation, which has given investigative fellowships since the early 1960s, and the Open Society Institute. Some new Web ventures and individual journalists are asking the public to suggest specific investigations and to send money to support them, although such practice risks raising ethical questions.

Playing the more prominent role in creating a future for investigative journalism are three phenomena: the rise of nonprofits, the rise of machines (computers and their software), and the rise of networks. These factors mean more focus to the investigative journalism itself, more citizen involvement in shaping stories, and more collaboration rather than competition. In fact, the past few years have seen remarkable growth in nonprofit newsrooms and greater use of data analysis and Web software by groups composed of journalists, computer scientists, and citizens. These initiatives then use new technology to create networks of newsrooms to share information, to improve the quality of their investigations, and to create cost-efficiencies.

Since 2007, investigative reporters who left mainstream news began creating local and regional reporting centers

throughout the United States, including Wisconsin, Massachusetts, Colorado, California, New Jersey, North Carolina, Missouri, Texas, Illinois, and the state of Washington. Similar centers have been established in other countries. These efforts, most of which began as ideas without financial backing, bear out a statement from *The Elements of Journalism*: "History promises that a market economy has the capacity to renew itself from the grassroots."¹²

These groups are meeting the need that Edward Wasserman, a Knight Chair in Journalism at Washington and Lee University, identified when he commented:

What's important is recognizing that investigative work doesn't solely mean national stories. Fundamental to the civic role of small and midmarket news organizations has been their work on zoning scams, courthouse favoritism, environmental degradation, political cronyism, and all manner of wrongdoing that may not register on a scale of national significance but that shapes municipal life in powerful ways.¹³

The centers and networks are based largely on principles developed by IRE. Reporters and editors began IRE as a way of trading story ideas, facilitating cross-training, and collating training tips and guides to improve the quality of investigative journalism. IRE also headquartered itself at a university, where it could receive support and work with students. The IRE association model (and its Arizona Project, discussed below) was an inspiration for investigative journalists in other countries who have consciously copied and adapted the IRE model. This trend started in Sweden and Western Europe and then spread to Eastern Europe and Latin America.

Because it has been such a role model, IRE's history is worth recounting in a bit more detail. Started by a handful of journalists from different organizations across the United States and with only a small amount of foundation funding, IRE began in 1975 and held an annual conference of three hundred journalists within its second year. With little industry support, its membership grew to more than four thousand as it steadily increased the number of seminars and conferences it offered and published educational materials.

IRE engaged in its only investigative project when a founding member was killed by a car bomb in Phoenix, Arizona, in 1976. The six-month investigation involved about forty journalists from twenty-eight different news organizations across the United States and expanded on the murdered reporter's work on organized crime and public corruption. The investigation resulted in a high-profile twenty-three-part series known as the Arizona Project. The project also set off years of unsuccessful, but costly, lawsuits against IRE. As a result, IRE revised its mission to focus on education, so that its resources might spawn many more stories than just one a year.

IRE also showed the strengths of associating with a journalism school when, in 1979, it moved to the University of Missouri School of Journalism. At Missouri, IRE received free office space and financial and administrative support in return for teaching and working with students and helping those students get jobs.

Most new centers are entering into some kind of arrangement with a university journalism program in which the centers receive administrative and faculty support in return for providing education and internships for students. At public universities, the centers have

usually incorporated themselves as independent nonprofits, such as is the case with the Wisconsin Center for Investigative Journalism at the University of Wisconsin. At private universities, the centers often become a part of the university, as with the New England Center for Investigative Reporting, a part of the College of Communications at Boston University, or the Investigative Reporting Workshop at American University.

In both forms, the universities and centers realize that the collaboration affords mutual benefits. "I hold the view that universities with journalism programs are ideally suited – and perhaps even obligated – to help replace the loss of investigative reporting that had long been left to the for-profit news media," says Tom Fiedler, the dean of the College of Communications at Boston University. He lists several assets that a university offers to support journalism:

- Motivated students who can be trained to carry out much of the legwork that characterizes investigative reporting, especially the extensive culling of records or reports;
- A faculty that more often than not includes former investigative reporters who can supervise these students;
- Access to resources from other parts of the university that can assist investigations, including trained library researchers, extensive databases, law students eager to file Freedom of Information Act requests and other documents to aid in record searches, and experts in virtually every field (for example, business-school students and faculty to help student reporters understand corporate filings);
- Access to funding from foundations and from an alumni base of potential contributors;

- An infrastructure to support the investigative teams' needs related to personnel, legal liability, insurance, office space, and more; and
- The ability to use the university's reputation and goodwill to attract media partners and gain credibility with sources.

"Of course the university also benefits by enabling its journalism students to work alongside experienced investigative reporters on meaningful projects," Fiedler points out.¹⁴

Even some universities without centers are offering opportunities for investigative journalism. At these schools, typically one or two faculty members work with students to produce investigative stories that are published or broadcast through traditional media. In the 1980s, Northwestern University professor and investigative journalist David Protes received much recognition for the work he and his students did on wrongful prosecution cases. He has continued that work with students since then – work that has resulted in the release of those imprisoned through wrongful prosecution.

As investigative journalists have left their corporate newsrooms they have taken jobs as instructors or professors and followed in Protes's footsteps. At Northeastern University, former *Boston Globe* investigative editor Walter Robinson and his students produced nearly a dozen stories that appeared on the *Globe's* front page. *New York Times* award-winning investigative reporter Walt Bogdanich has his students aid him in his work that appears in the *Times*.

The new centers that have formed independently of universities have also integrated the model of two other long-time nonprofit organizations: the Center for Investigative Reporting, begun in 1977, and the Center for Public Integrity

in Washington, D.C., begun in 1989. These two centers are dedicated to doing long-term investigative stories independently or in collaboration with broadcast or other print newsrooms. They depend mostly on foundations and individual donors for ongoing financial support.

As other nonprofit centers have proliferated, their founders predictably have embraced data analysis, the Web, and social media tools to do more with less. Investigative journalism has long been the research and development arm of the industry, and it took the lead in understanding and promoting computer-assisted reporting (that is, data analysis) in the 1990s.

Investigative reporters have constantly sought new techniques to employ in their work, and most reporters starting the new centers were already using the new Web tools and data analysis when they left their newsrooms. While still at newspapers or TV stations in the 1990s, they had already integrated social science methods and data analysis into traditional methods of on-site observation, face-to-face interviews, and Freedom of Information requests.

They were responding to a decades-long call by journalist and futurist Philip Meyer for journalists to prepare themselves for the new journalism environment. In his book *Precision Journalism*, Meyer said, "[T]hey are raising the ante of what it takes to be a journalist," pointing out that at one time a successful journalist needed only dedication, energy, and talent for writing. From the time his book first appeared in 1978, Meyer recognized the need for new skills for journalists: "The world has become so complicated, the growth of available information so explosive, that the journalist needs to be a filter, as well as a trans-

mitter; an organizer and interpreter, as well as one who gathers and delivers facts. . . . In short a journalist has to be a database manager, a data processor, and a data analyst.”¹⁵

More recently, academic computer scientists have upped the ante yet again, calling for the creation of a new field: “computational journalism.” They foresee the development of algorithms that can automatically do much of the data analysis and pattern recognition now being done manually.¹⁶

These predictions and new realities are beginning to shape a part of the future of investigative journalism into “mash-ups”: journalists, computer scientists, and developers working together to seek large government data sets in order to detect favoritism, incompetence, and corruption through the visualization of data. Sunlight Foundation is one of the prominent groups engaged in this cross-disciplinary initiative, and it has targeted congressional data sets.

A mash-up of old and new journalism nonprofit groups also is occurring. In the summer of 2009, twenty nonprofit groups gathered to confront the changes in investigative journalism. In attendance were the new state centers and longtime nonprofits like National Public Radio and the Public Broadcasting Service. From that meeting attendees issued a declaration of purpose and created the Investigative News Network, a network that would share administrative and journalistic resources and become a distributor of local, national, and international content produced by the members.¹⁷

That effort actually mirrored an earlier international meeting of nonprofit groups. In 2003, a small group of journalists gathered in Copenhagen to create the Global Investigative Journalism Network, which is now composed of

nearly forty nonprofit investigative centers from thirty countries and holds conferences biannually.¹⁸

Meanwhile, a longtime nonprofit network, the Associated Press (AP), is itself trying to adjust to the new financial landscape for journalism. The investigative editor for the AP, Richard T. Pienciak, said that the AP has begun placing four sets of investigative teams in regions around the country. The teams come up with months-long reports or breaking news stories, some of national interest and others more regionally focused.¹⁹ In 2009, AP entered into a trial run to distribute the work of the four investigative nonprofit centers.

The advent of the nonprofits has led newspapers to embrace collaboration, especially with nonprofits, as one way to counter the decline of staff and resources. Leonard Downie, who is a former editor of *The Washington Post* and writes about changes in journalism, said collaboration is growing quickly among newspapers, broadcasters, and nonprofits as they combine resources for stories.²⁰

He and others observed that in the past, newspapers have been reluctant to collaborate because media competition encouraged one organization to publish a story exclusively. Being first with a story meant being at the top. But now that any citizen with a camera or the ability to post to Twitter (“tweet”) can be first with the news, a newsroom gains credibility through its ability to explain, interpret, or investigate, often in a collaborative way.

Stimulated by the ease of using Web software, the new model of investigative journalism includes citizens who provide expertise or bloggers who contribute analysis or review of documents – what is commonly called “crowd-sourc-

ing.” “Online is about connections and collaboration,” says Jeff Jarvis. “Bloggers rely on the resource that mainstream media puts into this [the news], but they also can collaborate. They can help push the story, they can help add facts to the story.”²¹

The for-profit website *Talking Points Memo*, which has won investigative awards, also acknowledges the site’s interdependence with reporting by other news outlets. But the site’s primary strength is in seeking the public’s help in analyzing government documents to ferret out wrongdoing, abuses, or malfeasance.

While the nuances of collaboration and networking are being worked out, the question of how investigative journalism is paid for remains to be solved. “If, like an endangered species, there will be fewer sightings of serious, independent, high-impact ‘truth-to-power’ national reporting, will this kind of vital, no-holds-barred truth-telling become a thing of the past, like the dodo bird?” asked Charles Lewis. “No, but what is needed are new, sustainable economic models for in-depth news and a new, much greater ownership and management commitment to publishing it ‘without fear or favor.’”²² The same question and need for a new business model apply to local and regional reporting as well as the new investigative centers.

The expense of a single investigation can range from a few thousand dollars to hundreds of thousands of dollars, depending on the salary costs and the travel expenses. The maintenance of an investigative staff can be \$1 million or higher. For example, the newest, largest nonprofit center, ProPublica, has a staff of twenty and a budget of \$10 million a year.

“Good journalism does not come cheap. The most powerful journalism – breakthrough journalism – can be shockingly expensive,” said Marty Baron, editor of *The Boston Globe*, in 2008. “The first story in the *Globe*’s Pulitzer-winning investigation of sexual abuse in the Catholic Church, and a 40-year cover-up, was published in January 2002, but it required eight months of reporting and major litigation before a single word appeared in print.” Baron said a second year of reporting on the issue by a team of eight staff members resulted in the publication of one thousand stories, but “the overall cost of this effort was probably more than \$1 million in staff salaries, and tens of thousands of dollars in legal costs.”²³

A more recent example shows how costly a single in-depth project can be. Reporter Sheri Fink did a long investigative article on a New Orleans hospital where patients were euthanized after Hurricane Katrina struck the city. It appeared in *The New York Times Magazine* after she spent nearly two years working on the piece while a fellow at a journalism program and then at ProPublica. Estimates of the overall cost for the story, including the fellowship, salaries, photographs, review by lawyers, travel, and editing went as high as \$400,000.²⁴

Currently, the bulk of the money for existing and new nonprofit centers originates mostly from a handful of national media foundations. A recent study reported that since 2005 foundations have contributed \$56 million to investigative centers and projects.²⁵ The amount of money has surprised some journalists and also raised the specter of partisan influence. The Open Society Institute has supported both progressive, left-leaning coalitions and nonpartisan centers. The Sam Adams Foundation and related entities, whose leadership is conservative

and libertarian, is opening statehouse investigative operations under the Franklin Center for Government & Public Integrity. Its stated mission is:

To promote social welfare and civil betterment by undertaking programs that promote journalism and the education of the public about corruption, incompetence, fraud, or taxpayer abuse by elected officials at all levels of government. The Franklin Center will accomplish these goals by networking and training independent investigative reporters, as well as journalists from state based news organizations, public-policy institutions and watchdog groups.²⁶

Mainstream journalists at centers supported by the Open Society or by the Franklin Center say they will have editorial control over what they do. They assert that their organizations will be transparent in their funding and that centers with different sources of funding likely will be watchdogs of each other.

In any case, many centers and journalists do not see foundation donations as a sustainable model. Edward Wasserman has suggested a series of strategies of possible donor and in-kind revenue sources – what he calls “the more promising dimensions of the emerging regime under which investigative reporting can survive and flourish.” He has outlined strategies that call for enlisting the public’s help to supplement reporting on specific investigations. His strategies entail using part-time non-journalism professionals, such as lawyers and accountants; persuading donors to endow an investigative position in a newsroom; using city-wide foundations to make grants for individual projects or to assist ongoing newsroom operations; and creating specialized commercial newsletters whose revenue would support investigative efforts.²⁷

Some new strategies are already being tried. The online Voice of San Diego is a nonprofit and relies on large gifts from individual donors, grants from philanthropic organizations, and reader pledge drives, but is working on increasing its online ads to achieve sustainability. Other centers are considering memberships, subscriptions, data analysis for other newsrooms, and online ads to supplement donations.

But media critics Robert McChesney and John Nichols believe nonprofits will fail without new government policies and subsidies. In *The Nation* magazine, they wrote:

The fatal flaw in so many sincere but doomed responses to the current crisis is that they try to do the impossible, to create a system using varying doses of foundation grants, do-gooder capitalism, citizen donations, volunteer labor, the anticipation of a miraculous increase in advertising manna and/or a sudden – and in our view unimaginable – reversal on the part of Americans who have thus far shown no inclination to pay for online content. At best, these are piecemeal proposals when we are in dire need of building an entire edifice. The money from these sources is insufficient to address the crisis in journalism.²⁸

One example they suggest “eliminate[s] postal rates for periodicals that garner less than 20 percent of their revenues from advertising. This keeps alive all sorts of magazines and journals of opinion that are being devastated by distribution costs. It is these publications that often do investigative, cutting-edge, politically provocative journalism.”

U.S. journalists have resisted direct government support while international journalists, particularly in Europe, are more comfortable with it. But media observers note that the U.S. government

has supported or influenced the operations of the media for years through broadcast regulation, postal rates, and other policies.

Whatever the funding strategies, the future of valuable investigative journalism appears to rest in the paradoxical ability to do hyper-local reporting and/or international reporting, sometimes in the same story. For example, a detailed investigation into soybean production in central Illinois could easily include information and reporting from Brazil since soybean production can affect prices in Illinois.

Charles Lewis, who has chronicled the rise of investigative nonprofits, has envisioned a future in which reporting networks he calls WIRE use the latest technology to do investigations around the world and quickly distribute them. “[T]hese vast networks became both specialized markets for the work of WIRE’s international cadre of reporters . . . and pathways to new information resources, crowd-source experts, and potential citizen muckrakers.”²⁹

Mark Feldstein of George Washington University subscribes to a theory of a cyclical pattern of investigative journalism. He has described an environment in which such a vision might flourish:

Investigative reporting reaches a critical mass when both its supply (stimulated by new technologies and media competition) and its demand (by an aroused public hungry for exposés in times of turmoil) is high. This explanation includes political, social, and cultural causes, since such foment increases demand for exposé journalism; and it includes economic, technological, and legal causes as well, since new media outlets with greater reach and latitude boost the supply of muckraking.

Feldstein said this explanation of why investigative reporting thrives seems to offer a larger, overarching analysis for the twentieth century’s two prime eras of investigative reporting, which for him are the eras of the so-called muckrakers at the turn of the twentieth century and of the investigative reporters in the 1970s.³⁰

When considering investigative journalism’s future, Feldstein’s view of the interplay of new technologies and public demand bodes well for a third era, whether it is now attaining critical mass or maintaining its constant mass through migration. David Boardman, who straddles the worlds of old and new as executive editor of *The Seattle Times* and as an advisory board member for the Center for Investigative Reporting and ProPublica, puts it thus: “We may be entering a period of renaissance as the struggles crystallize in the public mind about the essential service of investigative journalism and create an awakening and concern of what democracy would be without it.”³¹

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Donald Kennedy

The future of science news

At a recent lunch, I asked Phil Taubman, an old friend who has had a distinguished career at *The New York Times*, what he would say about the future of respected daily papers like his that are made by printing with ink on newsprint. Phil suggested that he wasn't sure they had a future. Neither am I.

I am particularly concerned with the news crisis because it has the potential to undermine the public understanding of science. Why is that so important? At this moment, more so than at any other time within memory, more of the policy decisions facing Congress and the administrative agencies of government have deep science and technology content. The nexus between science and policy is so vitally important that major efforts are under way to shape the proper relationship between science and its outcomes in regulatory policies or allocation decisions.

Before we go further, I should disclose my own personal relationship with news, and particularly the portion of it that deals with science and technology. It consists of regular breakfast encounters with *The New York Times* and frequent auditory contact with

National Public Radio. I advised the science unit of the *NewsHour* with Jim Lehrer from time to time, and watch the program almost nightly if I can. For eight years (2000 – 2008) I was editor-in-chief of *Science*, the weekly journal of the American Association for the Advancement of Science. It regularly supplies science news to mainstream media outlets and has an active news section itself.

The reader may conclude that I am hopelessly addicted to “trusted sources.” I am; that's why I am in mourning about this discouraging prognosis. We hear everywhere that the news business is experiencing a growing economic malaise. Regional distress and national attention followed the demise of the *Rocky Mountain News* and the flight to an electronic version by the Seattle *Post-Intelligencer*, one that conferred an unanticipated benefit on its rival, the *Times*. The near-death experience of *The Boston Globe* came about despite its ownership by The New York Times Company – doubtless a threatening sign to outlets such as the *Los Angeles Times* and the *Chicago Tribune* that were amid bankruptcy proceedings. Cities that were two-paper towns got joint operating agreements in the 1980s; some of them are now no-paper towns.

All that is bad enough. But it is worse still that a large number of metropolitan daily newspapers have done away with special science pages as well as those reporters who had developed special talents for explaining difficult science to the public. In any given year, our democracy has to decide on a host of issues that have important scientific and technological content: what to do about climate change, how to organize human or robotic exploration of space, how to develop a sustainable national energy policy, how to treat the health potential offered by embryonic stem cells, and the like. To vote intelligently, citizens will increasingly require a level of scientific literacy. Of course, we also need to develop a layer of committed scientists who will lead the march of discovery, providing the basic research findings that will serve as seed corn for the next generation of new developments. In making that kind of commitment, young people are often inspired by the dramatic research accomplishments being made by scientists and interpreted by those who write about the work.

Those are the elements that support science in our culture, and they all depend on the singularly important relationship between scientists and science journalists. There are a number of respects in which that relationship is in good health: the best reporters have learned a lot of science and the best scientists have forged productive relationships with journalists. Nevertheless, complaints are being heard from both sides – enough to encourage a kind of caricature of misunderstanding. Scientist A complains that the reporter hasn't troubled himself to get some background on climate change science, and instead has to be educated from scratch; after a certain amount of that

background, the reporter writes a story in which A's view is paired with criticism from a denier of global warming. Understandably, the public wonders whether this really represents two equal sides of a scientific controversy, while A is left to ponder this case of "barnyard equity."

The traditional news sources rely on a cadre of professionals: reporters who cover events like congressional hearings about climate change, natural disasters, or the spread of disease caused by infectious pathogens. Reporting on such topics requires an experienced familiarity with science and technology, especially when these event stories are followed by background pieces. Sometimes called "the news behind the news," these pieces allow deeper analyses of the background of events. Working science journalists receive assignments from editors, who apply experienced judgments about what to cover. Editors also organize and prioritize the pieces by their placement within an individual issue. Editors must take some responsibility for the reliability of what is reported; therefore, if a central issue is scientific, it will be important for an editor to be at least science-literate. In the end, an editor's attention is what makes the paper accountable to the public for the validity of its reporting. That is the journalism of verification.

Before deciding whether newspapers are becoming extinct and, if so, what might replace them, it should be noted that this crisis is arising just as the definition of "writing" is expanding, and as the relationship between writers and speakers, on the one hand, and their audiences, on the other, is being changed and even intermixed. These analyses portend something that has already become visible: the role played by "citizen journalists," who are beginning to make news by blogging, by sending

their videos to television stations for the nightly news, or by developing Internet sites that function as regular sources of news.

Those commentators predicting a cloudy future for print newspapers add to the crisis all by themselves, and too often the reaction of journalists is to consider moving on. Because I was involved with the editorship of *Science*, I've had a special interest in the fate of good science coverage in the media. Alas, I have watched as one metropolitan daily after another, out of economic necessity, has dropped its serious science page, and as the weekly Science section of *The New York Times* has gone steadily toward greater emphasis on issues of medicine and health rather than basic science. One explanation for the general apprehension holds that something autocatalytic is happening here. The loss has been selective for science journalists, and the climate of despair about news, especially science news, reminds me of the way Alfred Kahn, one of President Jimmy Carter's leading economists, treated the much-discussed growth of inflation in the late 1970s. Kahn said that the continuous talk about the phenomenon was itself scaring readers and encouraging more of the same! His solution was to refer to inflation in his writings as "banana," as in "double-digit banana."¹

Thoughtful observers have pointed to a number of plausible explanations for the demise of newspapers. One is the increasing control of news organizations by larger organizations – holding companies with other missions that sometimes have little to do with news. Another contributor is the growing incidence of mergers and assimilations, in which distinguished outlets merge with others whose larger markets give them

takeover capacity. Also, advertisers are deserting the traditional press in favor of online sources or the rampantly growing number of local no-cost journals. In my hometown of Palo Alto, California, where my ever-thinning copy of *The New York Times* is delivered daily to my house for \$700 each year, there is a serious, first-class local paper, the *Palo Alto Weekly*, linked to a daily e-version. Interested in local news, I gladly read it. But it now coexists in the same space with two daily print throwaways, called the *Daily News* and the *Daily Post*, each with smatterings of mostly local crime or sports news and endless pages of real estate ads. In these papers there is little or no attention paid to science and technology, even in the midst of Silicon Valley.

Such alternatives will account for some of the loss of product advertising experienced by mainstream papers. Perhaps a more significant loss has been in the domain of classified advertising – both for people and for services. This has had an interesting impact on the scientific job market, having damaged the traditionally reliable sites where professional opportunities have been offered. Craigslist and other Internet sites offer as much or even more exposure than the back-of-the-paper sheets that used to be part of your average metropolitan daily or professional scientific journals like *Science* or *Nature*. As a result, job seekers and hiring companies are happy to make use of these newer outlets.

The changes that are driving news to online outlets have had important effects on science news; but to understand them it is necessary to look at what has been happening to the structure of the "old news" as it is morphing into the "new news." Naturally, the traditional outlets began to fight back as soon as the downward trends

for conventional newspapers became clear. At first, major newspapers experimented with e-versions that initially looked quite a lot like pages of newsprint, but these quickly evolved into much more navigable sites in which the reader can preselect the kinds of content he or she wants to access. But there is a diminished sense of how and where the priorities lie; try to get a clue from the *Times* online about what is “above the fold” and what isn’t! In a more recent development, your daily newspaper can increasingly be seen as pages displayed on a screen, like Amazon’s Kindle or Sony’s e-reader. You can subscribe to *The New York Times* on Kindle for only about \$14 per month, a quarter of what I pay for the one that lands on my porch. Now Plastic Logic has a much larger screen on which regularly updated news from any outlet can be displayed. The Hearst Corporation, owner of fifteen newspapers, is a major investor in e-Ink, the company responsible for the Kindle and other products still in the experimental phase. Some are predicting that moving images and clickable advertising will be features of the new “pages on a screen” world; we’ll have to see whether that happens and, if so, whether the customers like it.²

The economic plight of the traditional news outlets has been noticed by fringe alternatives. Their growth has been widely hailed as a triumph of citizen journalism. In discussing the contemporary state of “the news” it is impossible to ignore the omnipresence of news, including some very well-reported science news, that is available exclusively online (*Slate*, *Seed*, for example). The cable channels for television “news” can now be counted on to have a reliable political slant (*The O’Reilly Factor* on FOX News; *Countdown with Keith Olbermann* on MSNBC). Among blogs are the con-

servative *Drudge Report* and its liberal competitor, *The Huffington Post*, not to mention the social networking sites like Facebook and MySpace. The most interesting transition between the traditional and “new news” universes has been the growth of the Huffington blog into *The Huffington Post*, an Internet source that is sometimes cited in mainstream media. There is a new entrant in e-space that is hoping to take advantage of dwindling coverage of international news in the major metropolitan dailies in the United States. GlobalPost has added reporters from a number of major print media who will be based in other countries and living there.³ It should be watched in the future: an American audience may want a daily diet of the kind many now get weekly from *The Economist*, and owing to the distribution of GlobalPost reporters, readers may get more science than they get from other outlets.

An interesting aspect of this transition is the change in political impact of the “new news” compared with traditional media. In a thoughtful article in *The New York Times Magazine*, Michael Sokolove reports revisiting his hometown of Philadelphia to watch the threatened *Inquirer* (long a solid source of good science, especially relevant to environmental issues) and the *Daily News* (his old paper) struggle to stay afloat. He points out that a major metropolitan newspaper, unlike most Internet sites, has an additional local focus that is important to it and its readers. That feature adds significant value, but Sokolove concedes that it also makes the *Inquirer* vulnerable in a way that *The New York Times*, *The Washington Post*, and *USA Today* are not. These papers have brands, and if they survive and even prosper, it will be in part because of the strength of those brands. A few other news outlets will survive by being really good at local

news. Finally, stellar investigative reporting, especially on issues entailing science and policy, will still weigh positively, both for metropolitan newspapers and for major national outlets that can command increasing reputational benefits.

Although some insist that a number of traditional outlets may hold on based on special kinds of value, most observers point to the likelihood that we are experiencing a major transition, one in which citizen journalists and bloggers are using the Internet to dispense news, opinion, and anything else that seems important or interesting. One feature of this transition is that the roles of deliverer and audience (source and sink) become intermeshed: news is captured by volunteer videographers, and new insights or hypotheses about science and its possible influence on public policy may spread widely on the Internet. Because the traditional media are on average more dedicated to fact-checking and editorial caution, some view this transition as unfortunate. In a recent program on National Public Radio, Terry Gross quoted Alex S. Jones, the director of the Joan Shorenstein Center on the Press, Politics and Public Policy at Harvard, as describing the transition as one from “the journalism of verification to the journalism of expression.”⁴

Some observers have noted that the economic template has changed radically in the news universe. From a system in which the major outlets functioned in an oligopolistic fashion, we have entered an environment closer to perfect competition. What has changed is that the supply of news and information is widely distributed and has become a public good, without significant barriers to entry. Most news outlets can get a lot for nearly nothing, and there will be free competition among them.⁵ The

competitive challenge, then, will be which among the multiplicity of new outlets earn more trust than others.

The disruptive reorienting of the news terrain has raised other questions, including some about whether good science journalism can survive the transition. In the old geography, news people were generally regarded as respected professionals. Bloggers and other citizen journalists now have ambitions that go well beyond second-class citizenship. They would hope for – and they very well may achieve – a status that entails professionalism of a recognized sort.

Indeed, some of the best-known bloggers are cited as news sources by traditional TV or newspaper people. Matt Drudge, whose outlet is best described as an Internet news aggregator, assembles information primarily designed to please conservatives. He received attention for revealing the name of Monica Lewinski and for introducing the mainstream press to the Swift Boat campaign against John Kerry. Now the liberal *Huffington Post* has developed a more successful Internet formula, with a greater circulation than all but a few newspaper sites. Its *modus operandi* is quite different from Drudge’s; it has developed a community through Huffington’s personal connections to a network of writers, politicians, and celebrity bloggers who contribute news and commentary. In a fascinating *New Yorker* piece, “Out of Print,” Eric Alterman explores how one of the *Huffington Post*’s organizers describes its strategy. He calls it “business up front, party in the back.” Distrustful of most user-generated commentary, the site puts most of that at the end, reserving the front page for news material that gets careful editing for quality control. Thus the site wins loyalty from sponsors and mainstream news outlets;

meanwhile, its fans are posting and carrying on arguments in the back.

The migration of interested and often knowledgeable members of the public into the news space has naturally generated debate about verification and certification. What is “journalistic credibility” in this context? Just as the First Amendment mentions freedom of the press without defining what makes up “the press,” laws that confer limited protection on journalists do not generally say what a journalist is. In federal law, the narrow constitutional protection afforded journalists has rarely been used or tested. But thirty-three states have “Shield Laws,” and in most of the applicable cases, judges have sought to balance the relevance and importance of the information the journalists are being asked to provide, against the damage to the journalist and his or her sources. There has been some discussion of a strengthened privilege in federal law for journalists. Some bloggers have insisted that they should belong to that protected category. At this writing, however, the matter remains undecided, and may well be settled on a state-by-state basis.

Insofar as science and technology converge with public policy, the conversion of news to information is critical. In this transaction, traditional sources of science – universities and government laboratories, for example – produce data and experiments that will be noted and analyzed by science journalists. Eventually, if the news treatment is convincing and the findings are confirmed by later studies, the news becomes information, available for use by other scientists or by those who make public policy.

In this context, news on the Internet has some values that news as ink on paper cannot claim. One of these is trace-

ability. When a major blog or a newspaper’s site contains a number of stories, their individual fates can be followed as readers move to other sources. The success of a news posting thus can be estimated not only by the number of readers who accessed it directly, but also by the destinations they visit next. This traceability has potential value for editors, but one can expect that individual readers may eventually be linked to particular product purchases they have made – a potential source of value for publishers, too!

The Obama campaign has been hailed as a triumph for citizen journalism, including the roles played by email and social networking sites, both of which were important elements in securing Obama’s election success. It is true that contact through “new media” can affect democratic outcomes by broadening the opportunity for political positions and commitments to be communicated to voters. Since Obama’s election victory, those same networks have been deployed in support of the new administration’s interests in securing legislative objectives – in particular, its hopes for significant revisions in health care policy.

The speed and facility with which people who are subjected to repression or danger can get their messages out is another important development. Following the 2009 election in Iran, for example, American and other sympathetic audiences became fascinated by the news emerging via the Internet from Iranian citizens themselves, many of whom were unhappy about the election results and were suspicious of fraud. These communications were reminiscent of ones following the Tiananmen Square event in 1989 in China, where activist students managed to get the word, even spectacular videos, out to the world.

What are the various forms and formats in which we will be reading the news of the future – and will the new arrangements be good or bad for the public understanding of science? Naturally, I am rooting for some good news on the ink-and-paper front. Thoughtful people in the news business put favorable odds on the survival of the classic brands in print: *The New York Times*, *The Washington Post*, *The Wall Street Journal*, and a few others. There will probably even continue to be a high-end consumer population that will pay the higher price for the print versions – not merely because those consumers are wealthy or old-fashioned, but because e-news designers have not yet figured out a way to make those sites navigable in the way a physical newspaper is. Those concerned with the science education of the American public hope that better navigation will make good science pieces more easily accessible. In any event, e-versions are likely to have far more readers than their print equivalents, and this gap presumably will grow as boomers are succeeded by their children.

There will also be room for local news and creative editors who have learned to tap into their communities' values. Most really newsworthy events have a strong local sign – and they are trailed by stories. The local university is a prime source for such events involving science and technology. Who did the breakthrough research? Who supported it and why? How will the discovery aid the national interest? Will it resolve a major controversy? Such an event may go national quickly, but the secondary effects are apt to stay local as well as last longer. Furthermore, local papers often develop investigative reports that work well in print but not on the screen.

The new media that have developed to fill the economic and news space left by

the shrinking press are more difficult to characterize and predict. To annoyed critics of the blogosphere, it is an intellectual flea market; to its admirers, it may portend the triumph of citizen journalism in an emerging news democracy. Some smart, creative bloggers have earned loyal cadres of followers, including some reporters from the mainstream media who read and cite them. That's fair enough, since many blogs recycle mainstream news. One blog author who has developed strong stories by good sleuthing is Joshua Marshall, founder of a group of sites that originated from his *Talking Points Memo*. Marshall, who is given credit for breaking the story of the firing of U.S. attorneys that ultimately cost Alberto Gonzales his job, was the first blogger to win a major news award that had previously been restricted to mainstream journalism. He is unlikely to be the last.

But the blog universe has also become a supermarket for the propagation of all kinds of nonsense, including, alas, the organized promotion of some of the political untruths that led to angry shouting at recent "town hall" discussions about health care reform. The "journalism of announcement" also is capable of providing an abundance of scientific nonsense, which can quickly become reified into "information": that vaccination can lead to autism, for example. Will society come to profit more from the thoughtful and informative blogs like Marshall's, or will it instead risk a damaging reconstruction of democratic politics by scientific untruths and conspiracy theories marketed by others?

Will the world of citizen journalism eventually take over the news business? I would venture a guess that the outcome will depend not only on the public's patience with reading news on a screen,

but also on how the controversy over “Internet freedom” is resolved. An abundance of ethical passion now clouds that issue because we exist in a world in which anything that can be said, *will* be said. The Electronic Freedom Foundation vigorously defends the view that any limitation on freedom of Internet speech – by government or private entities – amounts to censorship. The debate has led to serious contests over intellectual property, particularly in terms of the swapping of music files, which the music industry views as theft. One enthusiastic activist on behalf of openness describes the struggle as follows:

The movement to keep the Internet free will be the defining fight in the information age, just as the environmental movement is the defining fight of the industrial age. As our physical make-up is reduced to a string of ones and zeros, and knowledge replaces property and labor as the means of production, democratic access to information becomes a basic civil right.

That is quite an extravagant claim, but it is not an unusual one from the advocates for electronic freedom. The copyright battle may be central in this war, but concerns about Internet freedom may come from quite a different source. In several well-publicized cases, sites such as Facebook have been used by bloggers with personal vendettas who employed Internet power to humiliate victims to the point of suicide, or in another case, to destroy the legal careers of applicants to Yale Law School.⁶ In such cases, no legal remedy has been available to the victims – although had the same damaging assertions made against them been published in a newspaper or by a television station, those news outlets likely would have been vulnerable to a lawsuit based on a claim of slander or libel. No doubt the parties

doing the damage took some comfort from their anonymity online. But my Stanford Law School colleague Mark Lemley, a pro bono attorney for the two Yale women, points out that “such behavior in the future may have to be accompanied by an understanding that you are not as private as you think!”⁷

Can the barrier to legal action in cases like these be breached? It took some time before the freedom of speech issue had to be dealt with directly in the case of incitement. For some time, the canonical exceptions were pretty much limited to crying “fire” in a crowded theater. But the Supreme Court, in *Brandenburg v. Ohio*,⁸ broadened the exemption, fixing on incitement in two ways: first, to include speech that is directed at inciting or producing imminent lawless action, a clause including intent; and second, to include speech likely to incite or produce such action, irrespective of intent.

The perils of citizen journalism, and the capacity of modern search engines like Google to recycle endlessly any assertion about anyone, are coming to be understood by persons anxious about their careers. Many shun the permanent exposure guaranteed by social networking sites, and an ambitious politician would have to be crazy to post his or her latest idea in a place where it would be discoverable later by political enemies. College admissions officers are giving informal advice to new students to set their security settings carefully because much of what they post online can end up publicly accessible.

Of course, it is premature to predict the onset of a regulatory regime for the Internet. But there are serious questions out there, and much about the future of news will depend on the answers society gives. This much is clear: the terrain of news and information is being recon-

figured by new information technologies; but it is also being reconfigured by consumer convictions, loyalties, and preferences that are changing before our eyes.

From my perspective, public understanding of science may well be the most important social value at stake in this transformation. We must count

on the surviving sources of news – those that practice the journalism of verification – to provide science coverage that is careful, cautious, and responsible. So far, the “new news” has given us scant encouragement that reliable science coverage will be as strong after this transition as it was in the past.

ENDNOTES

¹ Historians differ about Kahn’s penchant for substituting fruit names for worrisome economic trends. *Time* magazine said it was about inflation, others say recession. There is a suspicion that the White House required Kahn to make the substitution.

² See, for example, Eric Taub, “New E-Newspaper Reader Echoes Look of the Paper,” *nytimes.com*, September 7, 2008.

³ See also Ethan Zuckerman’s essay in this issue on the future of international reporting.

⁴ Alex Jones’s new book, *Losing the News: The Future of the News that Feeds Democracy* (New York: Oxford University Press, 2009), is a richer source of his argument that we are in danger of eroding our national faith in news that feeds democratic institutions.

⁵ A lively and highly readable exploration of this and other issues discussed here is Eric Alterman, “Out of Print – The Death and Life of the American Newspaper,” *The New Yorker*, March 31, 2008.

⁶ See, for example, Christian Nolan, *The Connecticut Law Tribune*, March 6, 2008.

⁷ A recent op-ed by Maureen Dowd (*The New York Times*, August 25, 2009) calls further attention to the kind of personal mischief that can be caused by these efforts of blog vigilantism.

⁸ <http://laws.findlaw.com/us/395/444.html>.

Ethan Zuckerman

*International reporting in the
age of participatory media*

In the wake of Iran's disputed 2009 presidential election, millions of protesters took to the streets of Tehran, some attempting to start a "green revolution" to oust President Ahmedinejad and other authority figures. The Iranian government attempted to quell the protests by arresting the instigators, and to render them invisible by tightly controlling media coverage of events. On June 16, a day after an estimated three million protesters marched on Azadi Street, Iran's Ministry of Culture issued a partial ban targeting international reporters. Reporters could remain within Iran, but were banned from leaving their offices or hotel rooms and were explicitly prohibited from covering the protests.

With strong audience interest in stories from Iran, news organizations faced a challenge: how do you report a story you have been banned from covering? Protesters in Iran and their supporters abroad quickly proffered one answer: cover Iran via citizen media. CNN relied heavily on its iReport site, which invites amateurs to submit videos of breaking news; the network aired 180 of the roughly 5,200 Iran-related videos they received.¹ Robert Mackey of

The New York Times focused the *Times* news blog, The Lede, on the protests, excerpting at length from Iran-focused blogs. *Newsweek* offered a "Twitter Timeline," with key events in the protests illustrated by 140-character posts ("tweets").

The embrace of citizen media in the Iran coverage by professional journalism organizations represents a small, but dramatic, shift in the structure of international news, a quiet revolution transforming how we understand events in other countries. But as the Tehran street protests were a result not just of a disputed election but of deeper factors, professional journalism's embrace of the amateur reflects a series of shifts beyond a press ban in Iran.

A wealth of analysis has focused on "the crisis in journalism," the sharp decline in revenues for many U.S. newspapers that correlates with layoffs of experienced journalists, and the closure of influential newspapers like Denver's *Rocky Mountain News*. There is no doubt that fiscal pressures on news organizations are affecting international news coverage. Only four U.S. newspapers maintain significant overseas bureaus, while the television network ABC has moved toward covering countries via

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single “digital reporters,” who are less costly than fully staffed bureaus. Alisa Miller, president of Public Radio International, argues that financial pressures are moving television networks away from international stories and toward celebrity journalism because “covering Britney [Spears] is cheaper.”

But fiscal pressures alone are insufficient to explain the embrace of citizen media in reporting on Iran, or related shifts in the structure of international reporting. Technological progress has steadily reduced the cost of overseas news production, a process that began with cost savings through the computerization of wire services in the 1980s and that has been accelerated through the near-global adoption of the Internet. The decrease in price and increase in quality of consumer video cameras, and the integration of cameras into mobile phones, have greatly expanded the set of people who can create audiovisual content, while the rise of publishing platforms like Blogger and YouTube makes it at least theoretically possible that amateur media authors could reach a global audience.

The green revolutionaries in Iran were well positioned to take advantage of these reduced production costs and new distribution channels. A crack-down on independent newspapers – a counter-reaction to the reformist presidency of Mohammed Khatami by hardliners in the Iranian courts – led many independent journalists to look for digital means of distribution. When blogs reached Iran in 2001, they were quickly adopted by independent journalists and political activists. The Open Net Initiative estimates that there are 60,000 actively updated blogs in Iran. This suggests a large population of technically sophisticated users, as it is more difficult to maintain a blog in Iran than in

the United States. Iranian authorities block access to many online publishing platforms, and it requires significant efforts to circumvent these attempts at censorship. When protests broke out in the streets of Tehran, a large population of Iranians was experienced in using the Internet to communicate political information to a global audience.

The decreasing cost of consumer electronics made it possible, to an unprecedented degree, to arm human rights activists in Iran with cameras. Shahram Homayoun, the president of Channel One, a Los Angeles-based satellite television channel that broadcasts to Iran, sent more than ten thousand small video cameras to Iran prior to the 2009 election. He reports that his network has been flooded with thousands of images and videos delivered by email. Faced with a population knowledgeable about the Internet and armed with inexpensive cameras, Iranian authorities followed in the footsteps of Burma and Cambodia and briefly shut off access to the Internet, reconnecting the country at reduced levels of bandwidth, a strategy that may have been designed to discourage the emailing and posting of videos or to make filtering of online content more manageable for censors.

The persistence and creativity shown by Iranian activists in reporting the electoral protests is an illustration of a second trend influencing international news: the demand of people to influence how they are represented in media. Again, this is an old phenomenon whose pace has been accelerating through technological change. As Edward Said noted, part of the postcolonial struggle is the move to control mediated narratives of a people’s experiences.²

The borderlessness engendered by the Internet and satellite television means it is now possible for Chinese citizens to

monitor how their local issues are portrayed in European and American media. Frustrated by Western coverage of the March 2008 Lhasa riots, thousands of young Chinese began talking back to Western media, posting nationalist videos on YouTube asserting Tibet as an eternal part of the Chinese nation. Jin Rao, a twenty-three-year-old Internet entrepreneur, set up *anti-cnn.com* to examine and debunk media coverage of Chinese issues. Participants on the site identified a number of images of police beating protesters that ran in American and German newspapers with captions about China's crackdown; they demonstrated that the photos were taken in Nepal and that the officers in question were Nepali. Chinese students rallied in European and North American cities to protest perceived media bias.

In this context, the response of Iranian activists to the government's swift declaration of victory for Ahmedinejad was predictable. Increasingly accustomed to pushing back against media representations, activists fought their representation in government-controlled domestic media via international media. The skill activists displayed in promoting their message and the receptivity of international media to a narrative of popular uprising may have led to reporting that underrepresented popular support for the reelected government, as BBC Global News Director Richard Sambrook observed, reflecting on the challenges his and other networks faced in interpreting citizen media reports.³

Global Voices, the citizen media aggregator I helped found and run, attempted to balance coverage by translating blog posts from Ahmedinejad supporters as well as from protesters. The conservative bloggers, who wrote in Persian rather than English, wrote of their dismay at international media coverage of the elec-

tion, seeing amplification of the protesters' views as evidence that the United States and the United Kingdom were conspiring to overthrow the government.⁴ While the Internet has made it increasingly possible to influence international narratives, it has done little to bridge linguistic barriers. The limited influence conservative authors were able to exercise may have reflected Western media biases, or may simply have been a by-product of linguistic barriers.

If Western news networks had easy access to Farsi translators, it is possible that they would have covered conservative voices from Iran more closely. However, a third trend shaping international news coverage – the rise of the 24-hour news cycle – suggests that news outlets may not have been willing to wait for careful translations. When street protests erupted in Tehran on June 13, CNN was late to the game, running its first Web story about the elections late that night. Thousands of Twitter users criticized CNN for missing the story, pointing to breaking news coverage on other networks and CNN's history of on-the-scene reporting from the Middle East. Users began marking their posts with “#CNNfail,” a “hashtag” used to make related posts easier to find via search engines.⁵

In an earlier time, CNN's delay in covering news that broke on a Saturday night might have been forgiven. But patterns of news consumption are shifting, led by 24-hour cable news and the Internet. An ethnography of U.S., Indian, and U.K. news consumption commissioned by the Associated Press in 2008 concluded that young adult readers engage in “constant checking,” a relentless process of reloading news pages, looking for developments and resolution to news stories.⁶ As news

outlets attempt to fill these needs, demand is increasing for news that is not just fast-breaking, but continually updated.

While older Internet users expect communication to be episodic, using email as a primary medium, younger Internet users expect continuous communication, using instant messaging tools.⁷ This constant communication became a form of community publishing with Facebook, where frequent “status updates” are communicated to a user’s friends. The trend reached new extremes with Twitter, which encourages users to post pithy updates many times a day. In the wake of the June 13 protests in Tehran, Twitter was filled with commentary on the events in Iran. Some users offered eyewitness reports from the ground, others analyzed and amplified information – and disinformation – they had heard on Twitter and elsewhere. At the peak of interest in the protests, tweets about Iran exceeded 15,000 per hour⁸ representing as much as 3 percent of the total traffic on the service.⁹

CNN, still stinging from criticism that it was missing the Iran story, followed the lead of other networks and began on-air reading of tweets from Iranians both in the country and the diaspora. News anchors found themselves offering awkward disclaimers before reading posts, saying, “We have no way of verifying any of these reports.” Brian Stelter of *The New York Times* noted that the embrace of citizen media signified a willingness to bend rules on verifiability and attribution that have generally been central to news reporting. Stelter observed that we are seeing an inversion of fact-checking models, leading newspapers to “publish first, ask questions later. If you still don’t know the answer, ask your readers.”¹⁰

These factors – the accelerated pace of the news cycle, the ability for ordinary Internet users to create and publish digital media, and the willingness of individuals to challenge media narratives – are combining with the breakdown of financial models that historically financed professional international media to produce seismic shifts in the structure of international news reporting. As Clay Shirky notes in his essay “Newspapers and Thinking the Unthinkable,” “That is what real revolutions are like. The old stuff gets broken faster than the new stuff is put in its place.”¹¹

At this moment of uncertainty and confusion, different groups are experimenting with a wealth of new models designed to produce international news, adapting to one or more of the changes outlined above. Some of the projects discussed below are less than a year old, and the older ones have often changed direction, focus, or method in recent years. It is possible that one of these models will emerge as the new *modus operandi* for international reporting. However, it is much more likely that aspects of each model will succeed while others fail, and that new and old players will chart their paths forward based on these outcomes. I offer a rough taxonomy of some participants in this new ecosystem, clustered by news-gathering methods and underlying financial structures.

The New Professionals. This group promises to deliver high-quality journalistic reporting through new means, operating outside the usual newspaper and television structures but adhering to traditional news-gathering methods, standards, and ethics. ProPublica, an endowment-funded newsroom, employs thirty-two investigative journalists focused on U.S. domestic issues.

ProPublica reporters are generally experienced, often celebrated professionals, and the organization's investigations have run in *The New York Times*, *The Washington Post*, and on CNN and CNBC.

The Pulitzer Center on Crisis Reporting serves a similar function within the international news community: experienced journalists pitch stories and are awarded travel grants to support their work, with the understanding that a finished piece will be distributed through influential media outlets. While the Pulitzer Center's grant program began by sponsoring reporting that appeared in newspapers and television newsmagazines, the grants now favor multimedia reporting, and some participating reporters produce blogs and others process updates on the website while in the field covering stories. The Johns Hopkins International Reporting Project and the Alicia Patterson Foundation support reporting through similar models.

Spot.us, a start-up founded by David Cohn to provide community funding for news stories in the San Francisco Bay Area, may provide a decentralized alternative to Pulitzer funding for some journalists. The Spot.us site accepts pitches from journalists, who propose a story they would like to cover and the costs they expect to incur. Site visitors then can contribute money toward the story. If the story is fully funded, the reporter is obligated to complete and file on the site and in other media. While most pitches have sought funding for Bay Area stories, freelance journalist Lindsey Hoshaw raised \$6,000 of the \$10,000 she needed to cover a story on garbage floating in the Pacific.¹²

Pitch-based approaches like Pulitzer or ProPublica do not promise comprehensive world coverage. Seeking broader coverage, Philip Balboni, founder of

New England Cable News, introduced GlobalPost in early 2009, creating an international news bureau using the "new professional" model. To address the disappearance of foreign correspondents, GlobalPost supports sixty-five correspondents in fifty countries. The correspondents are primarily professional journalists from the United States, writing for a U.S.-centered, English-speaking audience. GlobalPost provides far less fiscal support than a newspaper bureau chief would receive; instead, GlobalPost offers a monthly salary of \$1,000 in exchange for a set of stories and "reporter diaries." The theory is that GlobalPost's support allows a reporter to maintain a presence in Kenya or Korea, but that she will freelance for multiple news organizations to earn a livable salary.

While GlobalPost is heavily committed to a traditional foreign correspondent model – and has opted not to employ local journalists in the countries it covers – it is working with a network of local bloggers to complement its professional reporting. (In this sense, GlobalPost works in part as a citizen media aggregator, a model explored below.) But the core mission of GlobalPost is to provide high-quality journalism that can be syndicated along traditional journalistic platforms, using different production methods and cost structures. The site counts the *New York Daily News*, BBC's *The World*, and *The Huffington Post* among its syndication partners. Unlike Pulitzer or ProPublica, GlobalPost is for-profit and seeks sustainability via advertising and syndication revenue.

Citizen newsrooms. Not everyone is convinced that the future of international news reporting should be in the hands of professional journalists. The past decade has seen the rise of "citizen newsrooms," where amateurs work alone or

together to report breaking news stories. The phenomenon may have started with Indymedia, whose decentralized regional groups began reporting local, national, and international news stories as an alternative to what they saw as a corrupt and unreliable corporate-controlled press. The result is a highly idiosyncratic news service whose coverage varies based on the quality of the local team, their passions, and their interests.¹³

While Indymedia was born out of anti-globalization protests and retains a strong left-wing political stance, it is harder to characterize the political leanings of the Internet's most successful collective reporting project, Wikipedia. While Wikipedia is intended as a free, user-produced encyclopedia, it has emerged as one of the leading sources for breaking news coverage. When news stories break, hundreds of contributors around the world race to contribute to the article on the topic: for example, more than a hundred authors contributed 423 edits to Wikipedia's article on the July 7, 2005, London bombings in the first two hours after the explosions. The desire to shape an article rapidly is understandable because Wikipedia is one of the Internet's most popular websites; a Wikipedia article on a news event often emerges as the most "authoritative" resource on the Internet on a given topic. The passion of Wikipedians for working on breaking news stories has had the ironic effect of crippling the growth of Wikinews, a sister project intended to serve as a global, nonpartisan newswire.

Wikipedians are not reporting from the scene of an event. Indeed, that sort of firsthand reporting – "original research," in Wikipedia parlance – is forbidden on the site. The job of Wikipedia contributors is to synthesize other reports into coherent, authoritative sto-

ries that survive the "neutral point of view" test. Because anyone can edit a story on Wikipedia, highly partisan interpretations of events are likely to be quickly modified by someone with a different political opinion. Adopting a neutral viewpoint encourages authors to agree on a noncontroversial set of facts. This sounds unwieldy, perhaps impossible, but Wikipedia's structural features, notably discussion pages, which are the designated forum for working through disputes about each article, and community norms have allowed the site to become the world's sixth most visited website.

Most citizen newsroom sites do not attempt to blur individual contributions into a neutral whole. Nowpublic, a participatory media site based in Vancouver, invites members to submit stories that include original reporting, commentary on published media reports, or opinion pieces. Members are awarded "points" based on the popularity of the content they have submitted. Demotix, based in London, offers more tangible rewards for contributors: a 50 percent share of the revenue generated from licensing photos and videos submitted by users. Both Demotix and Nowpublic combine a philosophical commitment to user-generated content with for-profit business models.

Aggregators. Realizing that hundreds of millions of people are creating content online, aggregation sites report international news by collecting content already published on citizen media platforms. Aggregation has been common in the blog community from its inception, and hundreds of topic- and geographic-focused aggregators summarize discussions in different blog communities. When stories like the Iran protests break on Twitter, it is common for one or more users to aggregate some or all

topical tweets into a single feed for easy following. The site Breaking Tweets works to make this process of aggregation more readable, accompanying representative tweets with a short summary of the event being discussed and identifying “trusted Twitter users” who editors believe are authoritative.

As Breaking Tweets illustrates, aggregators often provide more value than simply assembling all mentions of a specific topic. Global Voices attempts to make blogs, tweets, and other forms of citizen media more useful to a global audience by filtering, contextualizing, and translating these contributions. A team of professional and volunteer editors takes responsibility for identifying the topics most important to people in a given country and selecting a subset of posts that represents a range of views on those topics. They translate posts from local languages into English and write topical summaries, which quote extensively from these translations and contextualize them, referencing mainstream news stories and online encyclopedias to offer background on the issues discussed.

The process of filtering, translating, and contextualizing is a time-consuming and expensive one. Other aggregators focus on filtering and translation, assuming that interested readers will bring common context to the table. LinkTV produces *Mosaic*, a daily news program that aggregates television news from the Middle East, translating segments from Arabic, Persian, and Hebrew into English to provide an overview of perspectives aired in regional media.

Aggregators do not always need to translate to be useful. In 1995, Palestinian journalist Daoud Kuttab realized that, while many Arab governments censored stories about local politics,

neighboring countries often reported on their neighbors in great detail. The Arabic Media Internet Network (AMIN) simply posted online stories about Jordanian politics from Syrian newspapers or on Egyptian corruption from Jordanian papers, giving readers a pan-Arab view of media coverage. AllAfrica.com publishes stories from national and regional African newspapers online, unlocking content to a diaspora audience and other Africa-watchers.

Ushahidi, a two-year-old project based in Kenya, extends citizen media aggregation into the text messaging space. Created as a way to allow Kenyans to report on violence in the wake of disputed 2007 presidential elections, Ushahidi collects text messages, mobile phone photos, videos, and other reports to provide timelines and maps of ethnic violence, election rigging, or natural disasters. The reports are accessible on Ushahidi’s site and shared with media partners, including Al Jazeera, which used Ushahidi’s software to enable citizens to report on Israel’s incursions into Gaza earlier this year. The model is a form of “crowdsourcing,” a technique that is becoming increasingly popular in U.S. journalism as a way to harness the efforts of hundreds or thousands to report jointly on complex stories.

The projects introduced above vary widely in terms of their scope of coverage, their use of professionals and amateurs, and their operating methods. However, they share a set of common challenges.

Any project that embraces contributions from amateurs is subject to questions about the accuracy and verifiability of news reports. Citizen newsrooms generally do not have the resources to verify stories posted. AllVoices, a California-based citizen newsroom with lo-

cal and global focus, filters out spam but otherwise publishes all submissions, arguing that this process is “democratic” and starts conversations. Systems like NowPublic track the popularity of submitting authors, giving readers a clue as to whether an author has submitted once or has a long track record. Wikipedia’s neutral point of view policy suggests that opposing sides can argue their way toward truth. This is likely more true for popular, highly trafficked articles than for obscure ones.

Aggregators have an easier time with verification issues, as they generally assert that their job is to provide a selection of citizen reporting and opinion, not to validate those reports. However, aggregators select and amplify these voices, suggesting some degree of responsibility for filtering out irresponsible or inaccurate voices. The professional newsrooms can offer the reassurance that their authors are trained journalists following a rigorous ethics code. But the special circumstances of international news seem especially vulnerable to Jayson Blairism. The stories covered by networks like GlobalPost are often exclusives that cannot be corroborated with newswire reports or fact-checked against accounts in competing media outlets. We rely on the professionalism of the reporters and editors, not on systemic checks available on more widely covered stories.

Nearly all projects experimenting with international journalism in the new media age face serious sustainability issues. ProPublica’s newsroom is extremely expensive, made possible by an annual commitment of \$10 million in funding from Herbert and Marion Sadler. It is unclear whether the market for high-quality international news will support the cost of producing content on GlobalPost and other new professional sites

through syndication and advertising revenue. Aggregation and citizen reporting sites face lower costs, as they generally do not pay contributors. But costs for editing, filtering, community management, and translation are substantial, and recouping those costs through syndication or advertising may require revenue sharing with the original content’s authors. Virtually the only model that has had no sustainability issues is Wikipedia, which has had little trouble raising the money needed for server space and staff from its readers and contributors. That said, Wikipedia does not actually report news; it triangulates reports from mainstream media in a way that could be considered derivative or parasitic, in financial terms.

Many of the experiments in international reporting are being launched with substantial foundation support. This financial backing raises the potential for conflicts of interest. While foundations have long supported high-quality journalism through grants, we are beginning to see reporting that is even more closely linked to donors. The Kaiser Family Foundation has founded an “editorially independent” multimedia news network that exclusively covers health policy issues, the Foundation’s chief focus.

While there is no direct parallel in international news, relief and advocacy organizations are already important players in the media ecosystem. Humanitarian and UN groups often control access to stories: it is virtually impossible to report on Central African conflicts without cooperation from the Red Cross or relief agencies, for example. Advocacy organizations often have knowledge of stories that would otherwise elude an intrepid freelancer. A recent GlobalPost story focused on deforestation in Cambodia due to the harvest of safrole oil, used to make the recreational drug Ec-

stasy. All photos for the story were provided by Flora and Fauna International, an advocacy group that coordinated a raid on the harvesting operations and that, apparently, coordinated the journalist's story as well.¹⁴

Many emerging projects hope to generate a subscriber or member base willing to pay for quality coverage independent of undue corporate or foundation influence. Generating this revenue stream, or revenues from online or offline advertising, requires building an audience. This challenge may prove the steepest for this new generation of international news projects.

While the spread of the Internet has made it possible for people to access more international news more directly – whether through the projects explored here or by directly reading and watching nondomestic news sources – it is unclear if people's interests have become more cosmopolitan. The Pew Research Center for the People and the Press surveys U.S. households on a weekly basis to track what news stories they are following most closely. In 2008, twelve of the fifteen stories Americans reported being most interested in were purely domestic. Two of the others were about hurricanes that

impacted the United States, and the remaining story was the Beijing Olympics, in which U.S. athletes broke numerous records.¹⁵ The ability to build interest in important international stories may be waning, as interactive media make it increasingly easy for readers to select the stories they are most interested in. And the rise of participatory media, an Internet where writing is becoming as common as reading, means the battle for attention takes place in an increasingly crowded market.

If building an audience interested in international news is a core challenge for fledgling newsrooms to overcome, the events in Iran may represent another revolutionary change. More than 480,000 users of Twitter commented on events in Iran during the first two weeks of the protests;¹⁶ more than 160,000 have used a popular tool to turn their Twitter icons green in support of protesters.¹⁷ These users were not just interested in the story – they felt they were part of the story, actively helping to amplify reports from the ground rather than passively consuming news. Reporting international news by letting users become part of the reporting and amplification process might represent a chance to bridge interest gaps that otherwise threaten to encourage parochialism.

ENDNOTES

¹ <http://www.nytimes.com/2009/06/29/business/media/29coverage.html>.

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³ <http://sambrook.typepad.com/sacredfacts/2009/06/twittering-the-uprising.html>.

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⁵ http://news.cnet.com/8301-17939_109-10264398-2.html.

⁶ AP and Context-Based Research Group, "A New Model for News."

⁷ Danah Boyd, "Identity Production in a Networked Culture: Why Youth Heart MySpace," (Washington, D.C.: American Association for the Advancement of Science, February 19, 2006).

- ⁸ Web Ecology Project, <http://www.webecologyproject.org/2009/06/iran-election-on-twitter/>.
- ⁹ I developed a simple tool to monitor the popularity of terms on Twitter in real time, measuring the number of total posts on the system that occur during the first and hundredth mention of a term on Twitter's search engine. More information on the tool is available at <http://www.ethanzuckerman.com/blog/2009/06/25/flock-part-two-twitter-and-the-news-cycle-perfect-together/>. Using the tool in the days immediately after the Iranian protests, tweets containing the word "Iran" represented up to 3 percent of total post volume.
- ¹⁰ <http://www.nytimes.com/2009/06/29/business/media/29coverage.html>.
- ¹¹ Clay Shirky, "Newspapers and Thinking the Unthinkable" (2009), published online at <http://www.shirky.com/weblog/2009/03/newspapers-and-thinking-the-unthinkable/>.
- ¹² <http://www.poynter.org/column.asp?id=131&aid=167048>.
- ¹³ At this point, the most active Indymedia community is the one based in Athens, producing content in Greek; <http://www.alex.com/siteinfo/indymedia.org>.
- ¹⁴ <http://www.globalpost.com/dispatch/asia/090812/drugs-ecstasy-cambodia>.
- ¹⁵ <http://people.press.org/report/479/>.
- ¹⁶ Web Ecology Project, <http://www.webecologyproject.org/2009/06/iran-election-on-twitter/>.
- ¹⁷ <http://helpiranelection.com/>.

Mitchell Stephens

The case for wisdom journalism – and for journalists surrendering the pursuit of news

When journalists and those who value them compose their apocalyptic screeds, when they repair to conferences to rend their clothes, wail their wails, and curse the Fates, they are wont to declare news itself to be in crisis.¹ In this, however, they are wrong. News, for the most part, is in fine shape.

The recent arrival of the most powerful information technology in human history has been, on balance, a great blessing for news. The Web remains very young, but already it gathers accounts of an extraordinarily wide variety of events from an extraordinarily wide variety of sources. It disseminates these accounts in a wide variety of formats, fast and far. Never before have we seen a news medium like it.

This does not mean news on the Web is always edifying, constructive, or reliable. News in print or on TV, after all, has often enough failed to display those qualities. And the Web's manifold strengths as a news medium do not mean all news will be equally well served by it. We have to be alert, as we must be with any medium, for blind spots. Once, it should be remembered, journalism reviews devoted themselves

to cataloging the many egregious blind spots of newspapers and newscasts – with their sometimes narrow-minded “gatekeepers.” The Web's weak points, at first glance, appear to be in coverage of news that grew up together with newspaper beat systems: varieties of local news in particular.

However, the growing numbers of us fortunate enough to have an Internet connection now have access to a remarkably generous supply of news. The gates have flung open. And the flow of news on the Web seems, if anything, likely to continue to broaden, deepen, and accelerate. Entrepreneurs and nonprofits are even beginning to address some of those blind spots. The future of news, in other words, appears reasonably secure.

It is the future of journalism that is looking grim. Journalists have made their living for approximately the last century-and-a-half either by selling news or by selling ads next to news. However, the flood of information on current events that is sloshing around the Internet right now can be had, mostly, for free, and the supply of news-rich pages on the Internet is now so large that it is hard to charge much for ads on those pages. Understandably, this new reality has strained profit margins and flummoxed business models. There

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is not much of a living in hawking that which is given away free.

The end of the era when it was possible to make a good business out of the gathering and dissemination of news is causing large numbers of talented, hard-working journalists to lose their jobs. This is a tragedy. This is the crisis. It is a crisis not for news but for journalism.

But, without making light of this human tragedy and this professional crisis, an opportunity can be discerned here – for journalism. The Web allows our best journalists to surrender the prosaic task of telling everyone what just happened. It allows them to leave some coverage of speeches and press conferences to the cable networks and YouTube; to leave some interviews with investigators and survivors to diligent wire-service reporters; to fob off some surveillance of various backwaters on the gadflies and obsessives who replenish their blogs every couple of hours. The Web allows our best journalists – it requires them, I will argue – to return to an older and higher view of their calling: not as reporters of what’s going on but as individuals capable of providing a wise take on what’s going on.

Most Americans today think of journalists as most journalists think of themselves: as reporters of news. An understanding like this can become deeply entrenched over the course of a century-and-a-half. Indeed, it would be difficult to find many American journalists today who would disagree with the definition of quality in their field supplied (in an online discussion with readers) by Bill Keller, executive editor of *The New York Times*: “By quality journalism I mean the kind that involves experienced reporters going places, bearing witness, digging into records, developing sources, checking and double-checking.”² But under-

standings of a field, as reasonable as they may sound, sometimes must change. Consider – to jump fields and centuries for a moment – the case of Ernest Meissonier.³

Meissonier, who died in 1891, was long the most respected painter in Paris and, therefore, the world. His painstakingly accurate re-creations of great events dominated the most important expositions and commanded the highest prices. But in the late nineteenth and early twentieth centuries this notion that quality in art was dependent upon precision and verisimilitude faded. Meissonier’s reputation tumbled after his death to the point where one major two-volume history of French art in the nineteenth century did not mention his name. The Louvre eventually exiled a marble statue of Meissonier from its halls.

This change in understandings of what painting should be can be attributed in part to a new technology: photography. It made producing painstakingly accurate re-creations of just about anything easy and, thus, cheap. Have technologies today, particularly technologies introduced in the past couple of decades, done the same with the painstaking gathering of information on current events? Have they outdated the view of quality in journalism championed by Bill Keller and most other traditional journalists: this veneration of witnessing, digging, finding sources, and checking? Keller moans that “there is a diminishing supply” of his version of “quality journalism.” Given the ability the Web grants us all to witness, dig, find sources, and check – to search – is it possible the supply of this kind of journalism *should* diminish?

Journalists will, of course, still have to go places, interview, uncover, and check facts. But doing that will no longer be

enough. Exclusives and investigations will still have value. But my argument is that, for the most part, journalists must learn to conceive of quality in journalism as *wisdom* – expertise, judgment, insight – in interpreting the news. This may sound like a new idea. It is actually an old one.

Bill Keller insists that his version of “quality journalism” provides “the information you need to be an engaged citizen.” The founders of this country certainly did agree that the citizenry requires a free press. Writing in the *National Gazette* a couple of years after he helped draft the First Amendment, James Madison stated how important “a circulation of newspapers through the entire body of the people” is “to liberty.”⁴ However, Keller’s understanding of the function of newspapers would have been unintelligible to the founders. For not only were there no reporters witnessing or digging in America in 1791, there were no reporters.

Newspapers then were the products of individual printers, who culled out-of-town papers for interesting or important items; reprinted letters, speeches, and transcripts; and then added disquisitions of their own or of their acquaintances. They rarely undertook excursions beyond their print shops. Why did Madison consider “a circulation of newspapers” so crucial? Because, he wrote, it “facilitates a general intercourse of sentiments” – not news of politics, in other words, but opinions on politics.

This does not mean that people in Madison’s time, or any other, lacked an interest in news. We humans were born, as I have argued elsewhere,⁵ with a basic thirst for news, undoubtedly because knowledge of potential threats and opportunities improved the likeli-

hood that our ancestors’ genes might make it to the next generation. The news for which we most thirst has usually been news of what is going on near us. But local news still was monopolized in the first years of the United States by the oldest news medium: word of mouth. It was exchanged in taverns and coffee houses, on front porches and on the streets of towns like Boston, New York, and Philadelphia – for free. No printer and no weekly could scoop neighborhood busybodies on an intriguing local political development or crime.

Opinions – in newspapers and pamphlets – rallied the American colonies against the British. Opinions then helped shape the new democracy. It is hard to imagine anyone at the time having anything glorious to say about the mere dissemination of news.

The word *news*, in its current usage, is very old. However, in Madison’s day, *journalism* referred only to the keeping of a private journal. Its meaning morphed somewhat earlier in French, but, according to the *Oxford English Dictionary*, *journalism* was first applied in English to work on newspapers in 1833.⁶ It was defined that year in the *Westminster Review* as “the intercommunication of opinion and intelligence.”⁷ *Intelligence* is an interesting term for news here, but a term for news nonetheless. So, by 1833, newspapers were beginning to be seen in part as organs for the dissemination of news.

In London at that time (more than in France or anywhere else), increased energy was being applied to the gathering of “intelligence.” Many papers had begun employing *reporters*, a word that was itself making a transition: from teller or transcriber of an event (perhaps using shorthand⁸) to gatherer of news. London newspapers, which had long been

publishing daily, had become a place to look not just for clippings and opinion but for the information, the news, those reporters gathered. Newspapers on the outskirts of the English-speaking world, in North America, eventually followed suit.

And it was at about this time that two inventions arrived that would begin to tip the balance in “journalism” – this “intercommunication of opinion and intelligence” – further toward the latter. First came the steam press, which enabled “journalists” to distribute their newspapers quickly and widely. Then the telegraph was invented, giving “journalists” quick access to news from afar. Amateurs on the street began to have difficulty competing with these daily, steam-powered, wired, news behemoths. If you could obtain it quickly enough, if you could distribute it fast and far enough, you could make a business out of selling what humans had always exchanged for free.

It took the better part of the nineteenth century in the United States; it took the desperate hunger for “intelligence” occasioned by an unbelievably bloody war; it took the spread, in many endeavors, of a mindset that emphasized unvarnished facts, but journalism increasingly became synonymous with the gathering and dissemination of news.

It wasn't necessarily the most distinguished of undertakings. An 1869 magazine article on journalism by the American essayist Richard Grant White gives an idea of the status of the mere reporter of news: “Of the two branches of journalism, which are the gathering and the publication of news and the discussion and explanation of the events thus made public, the former is the more essential, the latter the more important.” White ends up dismissing the former occupa-

tion, “essential” as it may be, as “almost purely mercantile and clerical.”⁹ In 1881, the English essayist Leslie Stephen (Virginia Woolf's father) characterized the “reporter of ordinary events and speeches” as “a bit of mechanism instead of a man.”¹⁰

Only in the second half of the twentieth century did reporting news – not just “the discussion and explanation” of it – begin to gain real cachet.¹¹ Ivy leaguers (enamored with the excitement and Hemingway) replaced high school graduates (enamored with the excitement and the regular paycheck) on the White House beat, at city hall, and, soon, even on the police beat. By “bearing witness, digging into records, developing sources” they brought down a president, exposed a massacre in Vietnam, and shined a light on a wide variety of miseries and corruptions. Fact-obsessed reporters became heroes in a fact-obsessed age. (Indeed, “naive realism,” as the postmodernists call it, preserved its hold on journalism long after art and literature had moved on.¹²) Journalism had *become* the painstaking gathering of information on current events.

Journalists in Europe often maintained a more pointed perspective on events – the *Telegraph* and *Le Figaro* from the right, for instance, the *Guardian* and *Le Monde* from the left. But in the United States, “intelligence” was generally revered to the point where it was considered sinful to sully it by any “intercommunication” with opinion. The standard of “quality journalism” before which Bill Keller and his cohort genuflect had been raised. All hailed the reporter.

But then that period during which it was possible to make a business out of selling news ended. It feels as if it has been sudden. It has not been that sudden.

Radio began disseminating news before the papers, even with their extras, could hit the streets. And radio arrived free. Per capita newspaper circulation began its descent in the United States. Television news, too, was fast and free and awfully pleasing to the eye. Cable made it available around the clock. That descent accelerated. Extras and afternoon papers disappeared. Newspapers achieved their greatest respectability in the last third of the twentieth century as – and isn't this the way it goes – they were beginning to lose their audiences.¹³

Then something rather sudden did happen: with the Web the whole world rapidly started becoming one big tavern, coffee house, front porch, or street through which news races – mostly for free. Soon it seemed anything newspapers could do with news, websites, some of them subsidized by newspapers, could do better – for free. Websites are currently beginning to demonstrate the ability to outdo radio and television newscasts, too.

Now when a major event happens – a well-known person dies, votes are cast, bullets fly, bombs explode – that event first happens for most of us on the Internet. Maybe some of us initially learn the news on [washingtonpost.com](http://www.washingtonpost.com) or [cnn.com](http://www.cnn.com), but we also might first encounter it on *The Huffington Post*, the *Drudge Report*, the remarkably comprehensive Google News, or any of ten thousand other news sites – professional or amateur, general or specialized. Or maybe we come upon the news under the count of how many unread messages we have in our Yahoo mailbox.

Therefore, by the time Brian Williams comes on at six thirty, most of us with any facility with a computer already *know*. As we lie in bed and fiddle with the remote, much of what Anderson Cooper

has to tell us is familiar. As we spread cream cheese on a fresh bagel, much of what we are reading on the front page of *The New York Times* is stale. As we drive to work, even much of what some solemn-voiced reporter is recounting on NPR's *Morning Edition* is no longer news to us. In the news game the race is to the swiftest.

News habits are strong. Those currently over fifty may continue to peruse with pleasure yesterday's headlines with their morning coffee. But for their younger siblings and their children it is probably game over. Newspapers and even many newscasts cannot regularly compete with the Internet for news.

Ah, you say, but the front page of *The New York Times* can do a better job with a story than did an Associated Press account on Yahoo. Yes, but do those quotes from a couple of sagacious sources neglected by the AP, those three extra paragraphs putting the event in context, make up for the fact that you've already known this "news" for twenty hours? Hold on, you say, a version of this story was up on the *Times* website not long after *Drudge*, *Huffington*, and the others had it, and it was more measured and thorough. Yes, but is that all *The New York Times* is to be: *The Huffington Post* or the Associated Press but a little slower and somewhat better?

Our best journalists need to find a new game to play. Instead of remaining also-rans in the race for increasingly hard-to-peddle news, they have to find something else with which to compete. They have to begin selling something less common, less cheap than news.

Exclusives are one possibility. Upon occasion a reporter manages to secure a vantage point webcams and other reporters have not achieved – at the scene of some atrocity somewhere, perhaps. In such circumstances "going places,

bearing witness” certainly has journalistic value, even moral value. Upon occasion a source passes on something eye-opening to just one trusted reporter. Or an exclusive may, in fact, be the result of “digging into records, developing sources” and exposing some wrong or injustice. Such investigative reporting, too, has nobility. This is news that truly qualifies as “intelligence.” It certainly offers our journalists a way to compete.

News organizations cannot, however, depend solely on such exclusives. There aren’t enough of them. Even with their battalions of veteran reporters, even with their reputations as destinations of choice for leaks, *The New York Times* and *The Washington Post* can’t come close to filling their front pages each day with major scoops. But interpretative articles, if they’re smart and interesting enough, are also exclusive; wire-service reporters are unlikely to be peddling the same perspective all over the Web. Our best journalists should be contributing something of significant civic and commercial value: new understandings.

Writing before American journalists had entirely given themselves over to the pursuit of news,¹⁴ Richard Grant White insisted that a journalist who “has any other purpose in life than to make money” should aspire to the role of “teacher and guide.”¹⁵ It is in this role, White stated, that the journalist “deserves respect.” White assumed that this judgment was shared. It is not widely shared by mainstream American journalists today. Teachers and guides marshal accumulated learning and good sense in order to help us better comprehend something. We have come to expect less than that today from our most respected journalists.

Contemporary American journalists instead are disposed, by instinct and

training, to leave the teaching and guiding to expert sources. So we get a Harvard professor here, someone from the Brookings Institution there, Norman Ornstein everywhere. Smart commentators, no doubt, but they are presumably being asked – as is usually the case in interviews for newspapers – to expatiate on complex subjects extemporaneously. And their unpolished comments, often part of extended arguments, are then sliced by the reporter into short quotations. These standard and accepted journalistic practices hardly encourage coherent and thorough interpretations. Why shouldn’t the journalists writing the stories themselves be smart commentators?

“When my young friends consult me as to the conditions of successful journalism,” Leslie Stephen wrote in 1881, “my first bit of advice comes to this: know something really; at any rate, try to know something; be the slaves of some genuine idea, or you will be the slaves of a newspaper.”¹⁶ Is there not need for journalists who themselves “really” know a lot? Might readers searching for some extra value not appreciate the more frequent flickering of a “genuine idea”? Aren’t journalists who fail to pursue ideas enslaving themselves to an increasingly unremunerative, unrewarding view of what journalism might be?

One reason mainstream reporters hide behind sources is to protect themselves against the accusations of bias that pepper American news organizations. As long as journalists are seen primarily as collectors of news, as mere witnesses, they will be judged by the evenhandedness with which they collect, by the faithfulness and dispassion of their witness. Opinion will have to be suppressed, and journalists will end up putting considerable energy into dis-

guising whatever point of view they may have achieved. However, if the goal of journalism is seen, instead, as imparting understanding of events, then accuracy and fairness still, of course, are crucial, but they are not all. Doesn't insightfulness often benefit from a point of view – from a fair, well founded but pointed perspective?

An opinion, if it is held without reflection, can interfere with learning. But an opinion can also provide an impetus and a framework for learning. If we use opinions to sort out to whom we will deign to listen, they can narrow our perspectives. But turning to someone with a like mind can be useful in adapting old principles to new situations.¹⁷ Why must most mainstream journalists work so hard to disguise the fact that they have weighed the arguments and reached a conclusion?

And it is not just a question of opinion. Ideas about current events, insights into current events, interpretations of current events don't have to array themselves on the political spectrum to be stimulating. Indeed, the less they fit traditional notions of partisanship the more thought provoking they often are. All that is required is that they be important and interesting.

Provocative, insightful interpretations are beginning to sprout here and there in our new, vaster, wilder journalistic ecology. But they remain rare on what are still the most valuable parcels of journalistic real estate: tradition continues to dictate that newspaper front pages or network evening newscasts be devoted primarily not to teaching or guiding but to retelling by-now old news.

What happened one day when there was an exception to this rule is instructive. On March 6, 2009, *The Washington Post* displayed a front page upon which none of the six stories opened with a

traditional just-the-facts, “five Ws” lead paragraph. All were important stories: about a then sinking economy and plans to improve it (four of them), about Rush Limbaugh and Republican politics, about hunger in North Korea. But instead of just reporting what happened yesterday – though there was a fair amount of that, too – they considered; they characterized; they investigated; they measured effects and looked behind scenes. They were doing quite a bit, that day, of what this essay argues they should do a whole lot, every day.

The first lesson of this front page is that the route out of journalism's crisis being promoted here is not as radical (or, alas, as revelatory) as it may sound. More and more interpretation is already appearing in newspapers and on newscasts: not just in editorials – remnants of the pre-reporting era; not just in columns and op-ed pieces – carefully walled off from the news stories that contemporary journalists consider their main business; interpretation is appearing on the news pages themselves.

Analysis is the journalist's preferred word for such efforts to go beyond mere reportage – probably because it sounds clinical and, therefore, objective. Some stories in some papers are given a special designation: “news analysis.” One, by Sheryl Gay Stolberg, even turned up in the lead position on the front page of *The New York Times* during the health care debate.¹⁸ But the “news analysis” slug is not required. For reporters have been granted increased leeway to characterize, not just transcribe, in standard-issue stories themselves.

One quick, limited historical survey may help demonstrate that shift: an analysis of the main *New York Times* story reporting on the first speech given before a joint session of Congress by each of our last twelve presidents.

For Presidents Truman through Carter, at least 18 percent, and sometimes more than twice that, of the words in the story were quoted directly from the speech.¹⁹ In those same stories on Presidents Reagan through Obama, fewer than 18 percent, and sometimes less than half that, of the words were taken by the *Times* reporter directly from the speech. This rough measure confirms what careful newspaper readers may already have noticed: news stories are somewhat less stenographic than they used to be. Wordings that imply some sort of reportorial judgment, such as “thinly veiled swipe,” are now used more; direct verbs of attribution – *declared*, for example – used less.

What is called “analysis” has also burgeoned on television news. On the evening newscasts of the three traditional networks, presumably nonpartisan commentators are regularly asked to step back for larger meanings or step up with inside dope; the late Tim Russert established the type. But the big change has come on cable. After a major news story has been introduced on CNN, it does not take long before an anchor turns to “our panel” for some perspective upon it – often partisan perspective. And on FOX, now MSNBC, and a CNN show or two, as on talk radio, the anchors themselves are often quite prepared to supply the partisan perspective.

Analysis may not, in fact, be the best term for this phenomenon, since the word’s primary meaning is to break down into component parts in search of understanding. Our “analysts” may have a weakness for tearing things apart, but they hardly limit themselves to that. Sometimes they synthesize. Sometimes they offer context, background, or a peek behind scenes. Sometimes, unembarrassed by the ad hominem, they con-

nect policy to style. Sometimes they explain, predict, or conclude. The most partisan celebrate or, more commonly, bemoan.

Interpretation – coming up with a “meaning,” an “explanation,” or a “significance” – seems better able to encompass the broad repertoire of tunes such commentators sing. But *interpretation* apparently sounds more subjective. It makes some traditional journalists uncomfortable. Indeed, this whole business of moving beyond the mere telling of news makes traditional journalists uncomfortable – even if they are indubitably, if half-heartedly, doing more of it.

And that is the second lesson of *The Washington Post*’s front page on March 6, 2009. A blog sponsored by *Washingtonian* magazine quickly attacked the paper for carrying “no news.”²⁰ “Welcome to the new age of daily newspapering,” writer Harry Jaffe protested on that blog, “where the actual news of the day has migrated to the Internet or TV or radio or the inside pages of the paper. Bye-bye to the old ‘who-what-when-where-why.’”

The *Post*’s relatively new executive editor, Marcus Brauchli, felt called upon to respond to the charge that he lacked proper devotion to news. Brauchli did profess a commitment to “tell our readers . . . why it’s happening, how it might affect them and what’s likely to happen next.” He acknowledged – in other words, mine not his – that interpretation should be part of the paper’s mission, its front-page mission. But before he said that, Brauchli had to establish his bona fides as a “newsman.” He had to pay obeisance to the mission that had dominated the old, and romanticized, “age of daily newspapering.” “We tell our readers what’s happening,” Brauchli insisted – just as his predecessors would have insisted. No matter, apparently, that

most of those readers often already know what is happening.

The discomfort traditional journalists continue to feel with providing interpretations also helps explain why they don't always do such a good job of it. "Analyses" in newspapers and on network newscasts can seem a little hesitant, predictable, or flat. That "news analysis" by Sheryl Gay Stolberg, which led *The New York Times*, had a real point to make: that a health care plan along the lines President Obama favored had a better likelihood of passage than "conventional wisdom," as reported in recent news accounts, made it seem. Often, however, these news analyses don't seem all that much more analytic than the news stories that run next to them.²¹

In part that's because such pieces are limited by the traditional journalist's almost inescapable reluctance to express a strong point of view. Stolberg, well versed on health care politics, was willing to make an assertion on her own authority: "The conventional wisdom might be wrong," she wrote. Even muted by the "might," that statement qualifies as an unusually powerful assertion for a *New York Times* reporter. A source was not quoted in her story until the eighth paragraph. Frequently, however, "news analysis" pieces lean, like most mainstream journalism, on the quotes of experts, with the point of view of those questioning conventional wisdom dutifully offset by the point of view of those supporting it. Too often these articles emit, consequently, the squishy, methodical sound of toothless rumination.

The "analysis" on cable TV has its own problems. The talking heads²² can seem, shall we say, a bit shrill. The word *wisdom* does not always come to mind when considering current efforts to chew over the news – with or without fangs.

And the appearance in newspapers of these more interpretive articles remains sporadic and unpredictable – even, so far, at Brauchli's *Washington Post*. Sometimes a more "analytic" piece illuminates the major news event of the day (actually, in print, the major news event of yesterday), sometimes readers must make do with only the traditional account. There's no guarantee in a newspaper that a columnist, an op-ed contributor, or an editorial will bother to take up the subject on that day; these personages and pages operate by their own more leisurely schedules, their own whims.

The efforts of mainstream American journalism to explore the territory beyond plain reporting of news have, in other words, been tentative, spotty, and unreliable. So bloggers have stepped into the gap. Indeed, that is surely among the explanations for the sudden success of bloggers – opinionated, snarky, smart – like Andrew Sullivan, Markos Moulitsas, Josh Marshall, Mickey Kaus, Ana Marie Cox, and others. They are not restricted by "walls" between news and opinion, and other vestigial remnants of an earlier journalism. They have a relatively clear view of where quality in journalism now lies: in exclusives, when available; but more often in intelligent, well-reasoned interpretation – in attempts at wisdom.

Many American journalists, it should be noted, believe that a move from "shoe-leather" reporting to what they dismiss as "thumb sucking" would be a disaster. They have a point. We don't want "intelligence" overwhelmed by "opinion" – as it can be on some of our more impassioned radio talk shows, cable news programs, and websites. We do not gain from unsupported interpretations or distortions in service of a cause. Much con-

tinues to depend, therefore, on the marshaling of what might (naively) be called cold, hard facts, the raw materials out of which persuasive interpretations might be constructed.

In many ways the raw materials on current events are more easily obtained now than ever before, thanks to the expansive, information-rich Web. Still, for unpublicized facts on uncomfortable subjects; for an outsider's perspective and an outsider's follow-up questions; for accounts that extract the newsworthy from the run-of-the-mill, a certain amount of shoe-leather reporting remains, as Richard Grant White put it, "essential." Journalism's teachers and guides will continue to rely upon it. Who will supply this reporting?

Some newspaper journalists and their cheerleaders have been chanting, "If we don't do it, nobody can."²³ I suspect they are wrong. Various wire services, or their online equivalents, can continue to provide accounts of the day's events. And the fact that Web journalism, in the initial decades of its existence, may not yet have come up with a way to uncover much of what is now uncovered by the accomplished fact chasers of the *Times* and the *Post* doesn't mean that it won't. It took the purveyors of newspapers a couple of centuries to develop reporting systems. Bloggers are already pretty skilled at noting, kibitzing, questioning, dissecting, deconstructing, and kvetching. They work the Web. We can allow them a few more years before we conclude that it will never occur to them to put on a pair of pants and also work the hallways.

Until Internet journalism matures, or if it remains in part in the hands of amateurs, we will have to remain alert for lapses in accuracy, accountability, fairness, or ethical standards. (Although,

to be fair, its hair-trigger feedback mechanisms have made this medium extraordinarily responsive to criticism and correction.) And if reporting of events ends up in part in the hands of the sponsors of those events, then we will have to work hard to correct for lacunae, tilts, and excesses of cheeriness.

But many aspects of society are already being *better* reported today. And not all forms of reporting seem likely to retain their value tomorrow. With the volume of available information ever increasing, digesting, indexing, ordering, and highlighting newsworthiness are gaining importance; transcribing, collecting, and witnessing – the painstaking gathering of information on current events – are losing importance. The greatest value, as I have been arguing, will lie in bringing wisdom to that huge pile of information – which brings us back to the role of our best journalists and to a consideration of who might qualify as our best journalists.

At most American news organizations the career ladder is as encrusted with tradition as are the stories. You work your way up through a series of beats – from covering a suburban town, say, to city politics to Washington. Such a résumé, or a stint at a wire service, might still be appropriate for the portion of wisdom journalists who specialize in exclusives or investigations. However, it is not clear that the talents nurtured allotting the "allegedly"s on the police beat or developing sources at city hall necessarily translate into an ability to pen front-page news analyses or a column. Indeed, it is a demonstration of sorts of the "Peter Principle" that a position in which a point of view is of use should be the reward for a career of suppressing evidence of such a point of view.

If you were to construct from scratch an organization capable of discussing the major events of the day, wouldn't you want to hire individuals who, to use Leslie Stephen's wording, "know something really" – who have earned the right to interpret? Yes, of course, they would have to be able to write – to write fast, to write well. (The value of engaging prose, or engaging video, has not been well enough exploited by newsrooms consumed by a fever for facts.) And, of course, they would have to be attuned to the contemporary world – ready to go out and observe, ask, listen, and test their ideas; ready to talk to sources (though not to depend entirely on sources). Nothing said here is meant to imply that these new wisdom journalists have leave to retreat to ivory towers while producing their deeper understandings. News is still best understood in the places where it is made and where its impact is felt.

But wouldn't it be useful if, instead of a background sparring with mayors and police chiefs, four or five of these hires brought an expertise on macroeconomics, for instance, and another four or five were well versed on the Middle East?

I don't pretend such individuals would be easy to find. I do believe they could be found. Academics who can write – some of whom are already maintaining respected blogs – certainly might be recruited for these distinguished and influential positions. If journalism programs insist, as some are now doing,²⁴ that their students master a subject matter and not just techniques, they could supply candidates. But the requisite expertise would not have to be certified by a degree. It might come instead from private study or life experiences. Some years having reported on business or in the Mideast certainly wouldn't hurt. However, instead of fact-oriented gen-

eralists who are dependent upon expert sources, the idea would be to hire idea-oriented specialists who know as much as the expert sources.

Then you would make sure one of these commentators was assigned each day to shed some light on each of the major stories of the day. Editors and producers now go to great trouble to include accounts of those stories – although much of their audience no longer depends on them for such accounts. The argument here is that our top journalistic organizations should instead be working, with similar diligence, to make sure they include an interesting interpretation of each of those stories – perhaps with a brief recap of the news a few paragraphs down in the article, for those who haven't been keeping up.

It is almost impossible to speak of journalism today without using the word *news*. Our journalists work in "newsrooms," for "newspapers," "newscasts," or other "news organizations." We lack alternative terms for these locales or enterprises. A "journalism room"? A "journalism-cast"? A "journalism organization"? Maybe we need some new terms. The day when journalists could support themselves by reporting the news is ending. They must aim higher. They must be wiser.

ENDNOTES

- ¹ This article is based on work completed at the Joan Shorenstein Center on the Press, Politics and Public Policy at Harvard University.
- ² “Talk to the Newsroom: Executive Editor,” *nytimes.com*, January 30, 2009.
- ³ This account is based on that in Ross King, *The Judgment of Paris: The Revolutionary Decade that Gave the World Impressionism* (New York: Holtzbrinck, 2006).
- ⁴ James Madison, “Public Opinion,” *National Gazette*, December 19, 1791, in *The Writings of James Madison*, vol. VI, ed. Gaillard Hunt (New York: G. P. Putnam’s Sons, 1906).
- ⁵ See Mitchell Stephens, *A History of News*, 3rd ed. (New York: Oxford University Press, 2007).
- ⁶ The word *journalist*, according to the *Oxford English Dictionary*, made the transition earlier. Voltaire, for example, used *journalist* in 1737 to mean “contemporary historian.” Voltaire, “On History: Advice to a Journalist,” in *The Varieties of History: From Voltaire to the Present*, ed. Fritz Stern (New York: Meridian, 1956).
- ⁷ This article itself was translated from the French; *Westminster Review* XVIII (January – April 1833). “Du Journalism,” *Revue Encyclopédique* (September 1832).
- ⁸ Isaac Pitman’s book is entitled *The Reporter: Or, Phonography Adapted to Verbatim Reporting* (Bath, U.K.: n.p., 1846).
- ⁹ Thanks to Brooke Kroeger for bringing this article to my attention. Richard Grant White, “The Morals and Manners of Journalism,” *The Galaxy* VIII (December 1869): 6; American Periodicals Series, 840.
- ¹⁰ Leslie Stephen, “The Duties of Authors,” in Leslie Stephen, *Social Rights and Duties*, vol. II (London: n.p., 1896), 154 – 156.
- ¹¹ War reporting gained cachet earlier, with dashing reporters like William Howard Russell, Richard Harding Davis, and Stephen Crane. However, they were known for their literary and interpretive abilities, and their courage, more than for their adeptness with facts.
- ¹² See Mitchell Stephens, “Deconstruction and the Get-Real Press,” *Columbia Journalism Review*, September/October 1991.
- ¹³ Newspapers’ increased respectability came, in part, because the audiences they were left to serve – after television – tended to be better educated audiences.
- ¹⁴ See David Mindich, *Just the Facts: How “Objectivity” Came to Define American Journalism* (New York: New York University Press, 2000).
- ¹⁵ White, “The Morals and Manners of Journalism.”
- ¹⁶ Stephen, “The Duties of Authors.”
- ¹⁷ I owe this point to Thomas Patterson.
- ¹⁸ Sheryl Gay Stolberg, “After Recess, Health Talk Steps Lively,” *The New York Times*, September 9, 2009. The jaunty headline on this piece is not reflective of its content.
- ¹⁹ For a different reading of historical coverage of presidential messages to Congress, see Michael Schudson, “The Politics of Narrative Form: The Emergence of News Conventions in Print and Television,” *Dædalus* 111 (4) (Fall 1982): 97 – 112.
- ²⁰ Thanks to Maralee Schwartz for directing me to this story. Harry Jaffe, “Flash: Front Page of Washington Newspaper Contains No News,” *Capital Comment Blog*, *Washingtonian.com*, March 6, 2009. Jaffe, to be fair, has interesting, nuanced views of the *Post*’s situation.
- ²¹ For an example, see Helene Cooper, “On the World Stage, Obama Issues an Overture,” *The New York Times*, April 3, 2009.

- ²² It is also unfortunate that edited video and the other visual tools that can elevate television over radio tend to disappear when the “analysts” come on. We are left, instead, with shots of the moving mouth of a Bill O’Reilly, Rachel Maddow, or George Stephanopoulos.
- ²³ Here’s John S. Carroll, a former editor of the *Los Angeles Times*, from a speech to the American Society of Newspaper Editors on April 26, 2006: “Newspapers dig up the news. Others repackage it.”
- ²⁴ To pick my own program as an example, New York University’s Carter Institute of Journalism now offers specialized master’s programs in, among other subjects, science, health, and environmental journalism; cultural reporting; and business and economic journalism. All undergraduate journalism majors are also required to complete another major in the liberal arts.

Jane B. Singer

Journalism ethics amid structural change

Journalism – as a practice, a product, and a profession – is undergoing rapid and dramatic structural change. There are four key aspects of this change, each with its own ethical implications.

- *Economic structure* is changing. For many practitioners, the collapse of previously reliable business models is the most pressing, and distressing, of the changes. Tactics to develop alternative revenue streams and to shore up old ones create new or newly intensified ethical pressure points.
- *Organizational structure* is changing. Newsrooms are being dramatically resized and reconfigured, and roles within them rethought. New responsibilities and working conditions generate ethical issues for journalists.
- *Narrative structure* is changing. As journalists have adapted to the Internet, their stories have taken on a more postmodern form. The construction of meaning is more fluid than in the past, and the process of that construction is more open and transparent. In addition, new formats have encouraged and facilitated a more personal

narrative style. Traditional ethical guidelines for “making news” are being reconsidered.

- *Relationship structure* is changing. Relationships between journalists and “the people formerly known as the audience”¹ are evolving to accommodate the increasingly open and fluid construction of meaning just described. Practitioners are revisiting ethical principles predicated on maintaining professional distance and difference.

These four aspects of occupational change are interconnected, and so are the ways in which they affect the ethical beliefs and behaviors of journalists. However, by first exploring each on its own, we can then attempt to weave the strands together and look to the future.

As the first decade of the twenty-first century ended, media organizations faced a double economic whammy. One aspect is cyclical. The widespread economic downturn has been very bad news for the industry. Among other effects, virtually none of them positive, stock prices have plummeted, advertising revenue has evaporated, and many readers have decided that the pennies spent on a newspa-

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per are among the easiest to pinch. The combination means less – much less – money available to do journalism.

But recessions come and go. Digital media seem here to stay, making their economic impact more significant. For a decade and more, news outlets gambled that an advertising model that had paid most of the bills for 150 years – a model in which the cost to an advertiser was based largely on how many people were likely to see the ad – would migrate more or less intact to the Internet. While they waited for that to happen, publishers concentrated on building the readership of their affiliated websites, mainly by offering most or all of their content online for free.

Particularly among the print media, these efforts have been successful. Most newspaper and magazine websites have far more visitors than their corresponding hard copies have readers. Nearly an entire generation of news consumers has grown up with readily available information at their fingertips – and the expectation that all of it is, and always will be, free.

Many publishers are now thinking they should have been more careful what they wished for. Although online advertising revenue has seen significant growth over the past fifteen years, it has not grown nearly enough to make up for the deep revenue losses of traditional media products. Internet advertising is ubiquitous, but it is also very, very cheap. Moreover, both classified and display advertisers have many more ways to reach audiences than before; they need not, and increasingly do not, rely on a media outlet to deliver their message to potential customers (or, if you prefer, to bring potential customers to their message). With something like horror, publishers have belatedly realized that they are giving

away what is extremely expensive to produce – call it journalism – and getting next to nothing in return. In the process, they also are building audience expectations that this is the way the world of information should work.

The ethical implications are of the sort that financial pressures typically create, many of them relating to issues of editorial independence. *The Washington Post's* aborted plan to sell seats at the table to sponsors of “salons” – bringing together journalists, lawmakers, administration officials, business leaders, and others for off-the-record discussion of public policy issues, at a cost of up to \$25,000 per sponsor – is only one of the more egregious examples.² In fact, it was one of the easier ones to deal with, and the *Post* abandoned the idea well before the first cocktail was poured.

The proper ethical response to other issues of journalistic independence that are emerging as revenues sink can be more open to debate:

- To what extent should user interest in a particular story or type of story (which, of course, can be precisely identified and tracked through website “hit logs”) affect journalists’ news decisions? Does more coverage or better play of high-interest items constitute serving the public, or is it merely what some in the newsroom deride as “traffic whoring”?
- One attractive and potentially lucrative alternative to traditional advertising is commercial sponsorship of parts of a website. Sponsors want to be associated with content targeted to the people likely to be interested in their goods or services. But what message do readers get when a travel agency sponsors a newspaper’s online travel section, a local medical center its health section, or an investment company its financial section?

- Niche blogs, such as the “mommy blogs” offered by Gannett newspaper websites, have become very popular – with local mothers *and* with people eager to sell them niche products. Site guidelines typically forbid posting commercial messages, but it can be tough to tell the difference between a blog post that is actually an unpaid ad and one that expresses the honest enthusiasm of a young mother for a new brand of baby formula.

Those are just examples of the sorts of problems stemming from difficulties with traditional economic approaches. In addition, news enterprises are taking tentative steps toward wholly different models, as Robert Giles explores elsewhere in this issue. New ventures include ongoing experiments with non-profit journalism such as the ProPublica investigative journalism enterprise, backed primarily by foundation funding, or the local Voice of San Diego, backed largely by individual donors. Traditional media organizations also are exploring new ownership models; an example is the partial Employee Stock Ownership Plan (ESOP) that accompanied the 2009 sale of a group of Maine newspapers to a new publisher.

But new models also raise ethical issues, including questions about where loyalties lie. For example, MinnPost.com, a nonprofit journalism enterprise covering issues in Minnesota, is funded largely by “member-donors” who contribute from \$10 to \$10,000 to the site. Some, as site reporter and blogger David Blauer admits, are people he covers. And what happens to his journalistic credibility if a public relations firm decides to steer dozens of sponsors his way?³ Moreover, dependence on donors generally means there is not enough money for a large staff; that in turn means reliance on

freelancers for much of the website’s information, a riskier proposition. The viability of the whole enterprise could easily be destroyed by a single lawsuit.⁴

The growth of journalistic “work for hire,” with its accompanying risks, is one of a host of issues raised by ongoing changes to newsroom organizational structures. These changes stem in large part from the economic pressures described above; they are also an adaptation to the need to maintain a journalistic website along with a traditional news product.

Throughout the 1990s and well into the 2000s, most media organizations maintained separate and unequal Web operations. Typically staffed by relatively few, relatively inexperienced journalists, these staffs often were segregated from reporters and editors in the main newsroom, many of whom regarded their online colleagues with disdain, if they regarded them at all. Online journalists spent much of their time “repurposing” material created for the legacy product, for instance by adding links or visual enhancements.

Changes began in the mid-2000s. “Convergence” became an industry mantra, with managers pushing newsroom staffs to develop a version of their stories for the website or at least to work more closely with those who could. Some journalists did incorporate the Internet in their thinking, though mostly in the context of special projects rather than routine news-gathering and news-writing. Many others continued to ignore the Web as long and as thoroughly as possible.

That is less and less likely to be an option. By the late 2000s, growing numbers of newsrooms were moving toward true multiplatform news production. The trend has been driven

both by the burgeoning online audience and its expectation that the media website will offer timely (and free) news, and by the brutal reality that staff cutbacks mean fewer – perhaps far fewer, with some newspapers losing half their journalists – people available to handle all the tasks necessary to sustain multiple news products.

Stories are increasingly likely to appear online as soon as viable information is available, sometimes direct from a reporter's laptop, mobile phone, or other transmission device; many newspapers, for instance, are developing "early teams" of journalists who begin work at dawn and work through the early afternoon to prepare content for the website,⁵ which gets most of its traffic during the business day. Because the Internet is a visual and auditory medium, the same reporters may be expected to upload sound bites from interviews and to capture still and/or video images; these rarely are formats with which they have much expertise. Back in the newsroom, editors prepare content for both the website and the legacy product – if they see it at all before a reporter publishes it directly online. Both reporters and editors also may double as bloggers or contribute to various social media offerings, as discussed below. The news organization may or may not maintain a distinct online staff, but if it does, those journalists are likely to work much more closely with the rest of the newsroom than was the case a decade, or even a few years, ago.

At the 2009 meeting of the Association for Education in Journalism and Mass Communication, newspaper copy editors discussed the ethical implications of these changes on the accuracy of what is published. Mike Richard of *The New York Times* said the "desire for

perfection" must be balanced with the reality of having to let things go, especially when editing for the Web. *The Boston Globe's* Jim Franklin said material may be published unedited online, then checked for problems later; in addition, he noted that "everyone does everything," editing content across a range of topics whether or not they know anything about them. The same is true at *The Dallas Morning News*, where staff reductions have left a single editor with just three hours at the end of the night dedicated to the Web, according to business desk editor Chris Weinandt.

In short, newsroom staff sizes have shrunk at precisely the same time as the website has become a more integral part of the news product, and the skills of remaining journalists have been stretched in unfamiliar directions to meet the expanding content requirements. The result is that online journalism is no longer separate, but it is, perhaps ironically, increasingly unequal. When the website contained primarily content repurposed from the traditional medium, whatever ethical standards went into the latter were replicated online. The shift to multiplatform production is leading to different standards for different media: With fewer people but more work, the care taken with the online product – which generally has the larger audience – is likely to be inferior to the care taken with the legacy one, still seen as the "news of record" as well as the larger revenue generator. One copy editor describes the newspaper as the broadsheet, while the website is the tabloid.

Organizational restructuring also may give the journalist a greater role in marketing and promotion. Jill Van Wyke of Drake University points out that with the advent of social media,

editors have become instrumental not just in disseminating the news itself but also in getting out news about the news. They are providing Twitter feeds, publicizing stories through sites such as Facebook, and serving as online pitchmen in other ways as well. In addition, newsroom blogs have made editors and reporters more visible commentators both on the news itself and on what goes into producing it, raising other ethical issues in relation to changing narrative structures.

Writing a news story is, traditionally, a somewhat formulaic process. Particularly in American journalism, the “inverted pyramid” structure, in which the facts a journalist deems most crucial are clustered at the top followed by details of decreasing importance the further down one reads, is the most common. Alternative narrative structures may be used, particularly in feature or other “soft news” stories, but they tend to be relatively underutilized and nearly as narrowly proscribed in form.

Moreover, with the exception of some columnists, most journalists are expected to write in a style that implicitly distances the writer from both subject and audience. Journalists are trained to make themselves as nearly invisible as possible to the reader. The reporter is idealized as an observer of events but not a participant in or a commentator on them. This detached professional stance is a core aspect of the journalistic ethic of objectivity, which combines ideas of independence, neutrality, and a rough sort of evenhandedness among the diverse views of those involved in or affected by something the journalist deems newsworthy.

There are other structural constraints on the traditional journalistic narrative as well. Some stem from the limitations of the medium in which the story is told.

A newspaper reporter can use only words on paper, maybe accompanied by a photograph or two; a television journalist relies on pictures and sounds. Other constraints are created by space limitations. A newspaper has so many pages and no more; a radio newscast is over when its minutes are up. Still others derive from the nature of publication or broadcast deadlines. A story is finished when the presses run or the cameras roll, whatever the ongoing reality that any story can only partially describe.

All these narrative strictures are jettisoned when journalism moves online, with ethical implications for journalists.

Along with the pressures created by a move to a multimedia environment, we already have seen how changes in organizational structure affect the process of checking the accuracy of information before it is published. Accuracy is a component of, or more properly a route to, the paramount journalistic norm of truth-telling. The Internet, a medium whose core narrative attributes involve interactivity and speed, accommodates an understanding of truth that is far more open and more fluid than the one enclosed by traditional journalistic structures.

It is more open because there is unlimited space to tell the story, because the story can be connected with any other bit of information through hyperlinks, and, most important, because an unlimited number of people are available to help with the telling. As stories are linked up to other websites, opened to comments, replicated on blogs, and passed along viral information chains, the journalist no longer controls either the content that is included or the sources of that content; anyone who sees the story can add to it, challenge it, comment on it. Not all of those comments are cogent, and not all of the challenges

stand up to scrutiny. But some are and do, and the end result likely will be a different, more multifaceted version of the “truth” of a story than the one the lone journalist started with. In short, the journalist no longer is alone in carrying out the process of determining what is true and meaningful – or in disseminating the results of that process. The construction of meaning is more widely shared in a network that encompasses many seekers of truth and incorporates many voices in reporting and relaying it.

In addition to being more open, the Internet is a more fluid news environment because there also is unlimited time for a story to be told. Especially for “breaking news,” or news of an event as it is happening, online audiences seem to understand that details will be revised as events unfold and more or different information becomes available. If journalism has always offered a snapshot of history, the camera now clicks off frames at near-instantaneous speeds. A newspaper story must wait a whole day to be updated or amended; an online one can change many times an hour. Although news organizations continue to fret about how to signal corrections, both journalists and audiences are increasingly seeing stories as works in progress, covering news as it unfolds rather than declaring it over because a deadline is approaching. “The web,” says *The New York Times*’ Mike Richard, “is a canvas that never dries.”

Which brings us back to objectivity. If news is being turned into stories online as it happens, and as people outside the newsroom are shaping those stories in myriad ways, what is left for the traditional media outlet to contribute? The answer seems to be: interpretation. Across the television landscape, commentary formats have filled many of the hours formerly devoted to formal

newscasts not only because they are so much less expensive to produce but also because any actual news has appeared online hours before the scheduled news show. Quality print newspapers are foregrounding “news analysis” and other narrative structures that offer context to help readers understand what they already know took place. Both of these narrative forms are giant steps away from a detached, neutral, facts-centered approach to reporting and writing.

But neither does the Internet necessarily encourage the detachment inherent in the ethic of objectivity. On the contrary, a network is about connections; it bridges distances and erases boundaries of all kinds, including those between journalists and readers. Before turning to the changes in relationship structures that result, there is one more important change in narrative structure to touch on: the rise of the “j-blog.”

As journalist blogs have gained popularity, journalists warned all their working lives to keep their personal view and voice out of their writing are now being urged to showcase both. Indeed, j-blogs are nearly the complete opposite in narrative structure from the traditional “objective” news story. In tone, the best are conversational, candid, even cheeky. They talk about “I” and “you,” not that other, more distant “third person” who fills the paragraphs of most newspaper stories. They convey what the journalist thinks – both reflection on the world and self-reflection on the process of turning parts of that world into a news product. They invite responses from outside the newsroom, and j-bloggers then respond to the responses.

While some journalists say they feel liberated, j-blogs make other reporters and editors ethically uncomfortable. The issue, as we’ll see below, comes down to an understanding of what constitutes

journalistic credibility and trustworthiness. For some, it rests on open communication with the public, for which a blog offers a splendid new vehicle. For others, credibility stems precisely from the preservation of a neutral stance, which can be jeopardized by posting to a blog.

The structural change in the relationships between practitioners and the public is having a profound effect on newsroom culture. In the past, virtually all of a journalist's working relationships were with sources and colleagues; the newsroom walls (and at larger papers, the security guard in the lobby) meant control over who entered the physical workspace, and ownership of the printing press or broadcast transmitter ensured even firmer control over who or what entered the news space. Aside from the occasional phone call to the news desk or letter to the editor, which might or might not be edited and then published, actual readers or viewers rarely touched the working lives of most journalists, particularly at larger news organizations.

In a networked environment, interaction with audience members has become integral to the journalistic process. Consider again that notion of objectivity. One of the most hotly debated issues in the industry today is whether objectivity remains valuable (or even plausible) or whether it is being superseded by an ethical zeitgeist better suited to the rise of a relativistic medium. An emerging consensus seems to suggest that journalistic credibility in an unfettered information environment remains crucial and rests to a significant extent on independence from partisan or factional interests.⁶ The ethical value in both objectivity and independence lies in underscoring the need for journalists

to remain free from outside pressures to shape information toward ends that serve vested, rather than public, interests. That said, journalists are either naive or just plain wrong to think that protestations of independence and high-minded impartiality will suffice when every word they write (or fail to write) is open to scrutiny and speculation in the rowdiest, most rapid-fire, and least restricted marketplace of ideas ever created.

Instead, the ethical buzzword of the Internet is "transparency," and it addresses a wide range of real and imagined journalistic sins. It is most closely connected with the traditional journalistic norm of accountability. Aside from a few dictatorships, most nations around the world have at least one code of press ethics that delineates the nature of accountability to peers, sources, subjects, and audience members; the U.S. Society of Professional Journalists' Code of Ethics, for example, urges journalists to "clarify and explain news coverage and invite dialogue with the public over journalistic conduct."⁷ The Internet, with its unlimited space and inherently interactive structure, offers the ideal platform for both explanation and conversation.

In a traditional environment, journalists tend simply to ask audiences to trust them: to trust that they are being truthful, that they have been diligent and open-minded in gathering information, that they have captured the most important details of a story in the ten inches or two minutes allocated to it. It is a lot to ask. Perhaps, as the declining reputation of the news media suggests, it is too much.⁸ The online environment, though, offers the opportunity to actively foster trust, not just demand it.

Transparency can take various forms. Using links to back up story references,

for example, is essentially an aspect of the new narrative structure already described; a story is no longer self-contained but can be extended outward to connect to other material anywhere on the Internet. Although linking decisions require judgment about the appropriateness of what's at the other end of a click, most raise few ethical alarms for journalists, who see them as offering readers relatively straightforward options to obtain more information about a story topic.

Offering more information about oneself, another crucial aspect of transparency, is a thornier issue for journalists steeped in a culture that prizes the maintenance of professional distance. Many harbor a not-irrational fear that such information could provide ammunition for those looking for bias behind every byline. However, other members of the vast Internet community, including many bloggers, have given precisely this element of transparency a central place in their idea of how life in a network should function. As discussed above, journalists themselves are finding blogs an optimal format for this sort of disclosure.

More broadly, the Internet encourages the construction of closer relationships with news audiences than in the past. For journalists, serving the public becomes about more than telling people what information exists; it is also about sharing in its discovery, verification, and interpretation, as well as providing help with its synthesis into meaningful knowledge – the interpretive function described above. As journalists' control over the flow of information is significantly loosened, and as the process of "making news" becomes more openly iterative, the enterprise becomes necessarily collaborative.

Sometimes the closeness is uncomfortable. Sociologists have long recognized that one of the hallmarks of a pro-

fession – and most journalists either believe themselves to be professionals or aspire to be, depending on whom you ask – is the right to devise and enforce their own ethical standards.⁹ But online, oversight of journalists' behavior has become a team sport, and here, too, the newsroom no longer controls who gets to play.

Many have been startled by the intensity of the scrutiny – and by the fact that so few seem to think journalists are as ethical as they believe (or hope) themselves to be. The criticism is valuable for a variety of reasons, not least because it provides an impetus for attention to ethical issues and efforts to make changes where they are needed. Perhaps less predictably, new relationship structures also are encouraging journalists to think about what, exactly, it is that they do and why (or if) it retains any value in a world in which anyone can be a publisher.

A couple of my recent studies in Britain suggest that new relationships with audiences are prompting journalists to see their own ethical standards as a more definitive distinguishing characteristic and a greater source of ongoing value than, say, the ability to write well (an ability many outside the newsroom share) or to gain access to sources (who can be found readily enough online). I asked journalists working for local newspapers in Britain what they thought about "user-generated content" – all the things that people outside the newsroom now contribute to a website, from comments on stories to their own news items and photos. One of the most striking findings was that journalists saw their own ethics as setting them apart from outside contributors, too many of whom they viewed as abusive, partisan, or ill-informed (or all three).¹⁰ Their colleagues at a national

newspaper similarly tended to see user contributions as less credible, less civil, and just generally less cogent than their own. “With citizen journalists, it’s all rights and no responsibilities,” as one journalist put it.¹¹

Media ethicists have been arguing for a long time that ethical journalism rests on finding the right balance between freedom and responsibility,¹² independence and accountability,¹³ liberty and justice for all. The closer proximity between those who work in a newsroom and those who do not is throwing new light on why achieving that balance matters. They also demonstrate that each group has much to teach the other, and much to learn. Journalists are being told, in no uncertain terms, to curb their arrogance; to open up their practices to observation and, yes, critique; and to loosen their control over information in order to provide a fuller, fairer version of the truth. Audiences are, as an entity, more amorphous and heterogeneous, but they also are learning that relationships work best when they abide by some restraints, when they try to get things right, and when they treat each other civilly. As websites increasingly adapt and adopt recommendation systems enabling users to highlight useful contributions and downgrade the less so, we may begin to see a definable structure of “audience ethics” emerge. It will be interesting to see how closely it resembles the ethics of journalism.

Journalists are pulled in conflicting ethical directions by the new structures described here. They cannot continue to do their job without economic resources, yet some attractive options for bolstering those resources jeopardize their independence. They retain a fundamental ethical commitment to truth-telling, but

changes in organizational structure foster processes that make it difficult, if not impossible, to establish the accuracy or veracity of what is published online. The glut of digital information increases the value of information that is credible and trustworthy, but the Internet’s narrative structures undermine the detached neutrality that journalists have relied on as both a badge and a safeguard of trustworthiness. And journalists who are tempted to use ethical guidelines to distance and differentiate themselves from readers are at the same time drawn into relationships that are more personal, more open, and more collaborative.

The future of journalism ethics may rest on finding optimal ways to retain the underlying principles – the professional commitments to truth-telling, to freedom from faction, to public service and accountability – while affording journalists and media organizations the flexibility to remain relevant in rapidly and radically changing circumstances. A focus on the increasingly prominent ethic of transparency would be a good place to start.

Many of the criticisms of journalism can be traced to a failure of those holding power over information to explain their decisions in wielding it – and to admit when they have failed to do so wisely. That power is now mitigated by the fact that journalists have much less control over the flow of information than in the past. The change creates an economic as well as an ethical opportunity to bolster the value of what journalists do and how they do it. Engaging with people outside the newsroom both reactively – that is, by responding substantively to criticism and concerns – and proactively – by taking advantage of the new narrative structures described above to open a window on what happens inside the newsroom – can go a

long way toward enhancing understanding, strengthening relationships, and fostering opportunities for greater trust in the news media. Without that public trust, and the loyalty it commands, it is hard to see a way to reverse the downward spiral of an enterprise that risks losing its social as well as its economic value.

I believe that journalism has enormous social value. You probably do, too. We

need not only the integrity of individual journalists but also the power of strong media institutions to hold in check those in society who would abandon their own integrity and abuse their own power. No democracy exists without a viable free press; it is hard to see how one could. But democracy is an inherently collaborative public undertaking. So, too, should be the journalism that serves it.¹⁴

ENDNOTES

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*Journalism
ethics amid
structural
change*

Michael Schudson

Political observatories, databases & news in the emerging ecology of public information

The database is to the digital age what the narrative was to the modern era of the novel and the cinema, according to the oversimplified but brilliant and provocative formulation of Lev Manovich.¹ This idea implies quite a lot, I believe, about the future of news.

But the implications of the database for news do not begin with the Internet or with Google, but with the proliferation of data-gathering and data-assembling institutions in the 1970s. Even earlier, the role that data could, and should, play in journalism was considered by Walter Lippmann, a journalist and freelance intellectual. In 1920, in *Liberty and the News*, Lippmann complained (as he would do with even greater fervor in *Public Opinion* two years later) that American journalism was failing to serve the needs of modern democracy – and that it would continue to fail without help from forces beyond itself.

Why? Lippmann cited two reasons. First, journalism was in the hands of “untrained amateurs,” and though the amateur “may mean well . . . he knows not how to do well.”² Lippmann expressed some hope for expanding “a professional training in journalism in

which the ideal of objective testimony is cardinal.”³ By deepening the curricular riches of journalism schools (the few that then existed) and making them intellectually more ambitious, each crop of new recruits to journalism could, over time, raise the standards of the news.

Second, the world had simply become far too complex to be adequately reported by the conventional tools of journalism. The news from which the reporter “must pick and choose has long since become too complicated even for the most highly trained reporter,” Lippmann wrote. The problem was not simply the inadequacies of individual reporters or newspapers, but “the intricacy and unwieldiness of the subject-matter.”⁴ Lippmann, thinking only of government and not of the rest of society, observed that administration had become more important than legislation but much harder to follow. The work of administration spreads out across time, and its impact is not visible in a way that reporters are able to measure. Journalism could report the complexity of the modern world only by making use of other agencies where “a more or less expert political intelligence” provides the journalist reliable maps of the world.⁵ Lippmann referred to these agencies as “political observatories” to imply that

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they examine human affairs with scientific instruments, methods, and outlooks.⁶ He called for independent, non-partisan, scientific organizations that would be committed to an agenda of research about the political and social world and that would be able to produce it in a form accessible to the competent journalist.

In *Public Opinion*, Lippmann suggested, along the same lines, that journalism provides the services democracy requires only when an adequate “machinery of record” already exists by which the social world can be accurately described. He cited the stock market report and baseball scores as two machineries of record of the sort that made journalism a reliable representation of the world.⁷ In *Liberty and the News*, he held that growth in the number and quality of political observatories both in and out of the government (one might find observatories within government bureaus, on university campuses, and in independent nonprofit institutions) could provide the material that would allow newspapers to offer a more thorough, complete, objective, and reliable portrait of relevant public life for the citizen to digest.

In 1920, when the media industries were far less concentrated than today and when all major American cities supported multiple daily newspapers – sometimes four, five, or more – the journalistic sum was nonetheless inadequate to the needs of informed opinion in a self-governing society. And Lippmann believed that the situation was not about to improve without outside help. Lippmann’s complaint was mild and polite compared to some others. H. L. Mencken, just a few years later, recalled that when he began writing for the press in Baltimore, four of the city’s five dailies were cheap, trashy,

stupid, and corrupt (presumably excepting his own *Baltimore Sun*). “They all played politics for what there was in it, and leaped obscenely every time an advertiser blew his nose,” Mencken wrote. “Every other American city of that era was full of such papers – dreadful little rags, venal, vulnerable and vile.”⁸

Lippmann was perhaps demanding too intellectually astringent a model of journalism, and Mencken, not for the first time, was indulging in exaggeration for its shock value. But it still seems clear that U.S. journalism was far from serving self-government in the way theorists of an informed public opinion wished. Today, in contemplating the restructuring of American journalism in the digital era, Lippmann’s writings caution us not to be misled by a nostalgic belief in past glories: they were ever the exception.

A second lesson from dipping back into Lippmann is that we can see that the main solution he offered to the problem of journalism is a solution that in fact has come to pass. And much as he imagined, it has made journalism better. There are political observatories aplenty now. They began in Lippmann’s day: the Brookings Institution, founded in 1921, was among the first, and the General Accounting Office (today the Government Accountability Office) was also created in 1921. Both provided the sort of accounting and accountability that Lippmann had in mind, from viewpoints inside and outside government. Since the 1970s, the proliferation of information-generating agencies that are outside journalism has been spectacular. And while this poses a challenge to journalists – how does the reporter know which of the many agencies can be relied upon? – the political observatories have greatly enriched our best journalism.

The reliance of the media on political observatories is visible every day. For example, *The New York Times* from December 16, 2008, the day I first began taking notes for this essay, contains the story “Colonoscopies Miss Many Cancers, Study Finds,” by science reporter Gina Kolata and based on a study published that same day in *Annals of Internal Medicine*. (Obviously, Kolata was provided an advance copy of the journal.) On the same page as Kolata’s story is Charlie Savage’s “Report Finds Interference In Interior Dept. Actions,” an article based entirely on the report of Interior Department Inspector General Earl E. Devaney that found serious flaws in government decision-making on policies affecting endangered species. Also in the December 16 issue is Campbell Robertson’s story “Report Says Due Process Is Ill Served In Iraq Court,” which relays to readers a new analysis from Human Rights Watch, an independent nonprofit organization. So in one day’s newspaper are stories prompted by – stories that would not have existed without – three very different kinds of expert sources: academic research, an internal government audit, and a nonprofit advocacy group. Journalists cannot replace or substitute for these; they can and do rely on them. At the same time, these other sources – political observatories, if you will – to a large degree need journalists, to bring their specialized work into the public domain and onto the public agenda.

The future of news begins here – not so much with the Internet, although it would be foolish to deny the central role of technology in the transformation of news today. But the Internet itself, and the ways in which its possibilities have been engaged, has developed as it has in part thanks to the democratic, participatory, and rights-oriented ethos

of the 1960s. Long after “the sixties” seemed to have spent itself, it returns as aftermath, or aftershock, in the digital age. And, boring as this might seem, that aftershock also has something to do with databases, just as Manovich suggests.

There is reason to be suspicious of the notion of technological revolutions. The printing press did not usher in democracy – or, if it did, it took its good-natured time! There was no such thing as a democracy anywhere in the world for three centuries after Gutenberg. And printing, as Elizabeth Eisenstein has shown very well, assisted but did not in itself produce a scientific revolution.⁹ Most early books produced on the printing press were about religion and not a few were handbooks of magic. The printing press was largely indifferent to whether it produced works of wisdom or of folly.

Later, the telegraph was said to have been the center of a communications revolution. But at first the telegraph – that is, the electronic telegraph as we know it – was a relatively minor advance on the “optical telegraph,” versions of which had existed for two thousand years. A much-improved optical telegraph was developed in France in the 1790s and greatly impressed a young American artist visiting there, Samuel F.B. Morse, who conceived the idea of developing it further when he returned to the United States.¹⁰ After that, you know what God wrought. Even when Morse’s telegraph became technically feasible, it took a government subsidy to establish the first telegraph line. And it required the spirit of entrepreneurship at the new penny papers – cheap, news-centered, profit-oriented urban papers that in the 1830s began to change the face of American journalism – to take advantage of the telegraph for news

transmission. The older, established newspapers had as much access to the telegraph as anyone, but they did not get the point, and they let the initiative slip entirely into the hands of the penny papers. One needs not only technologies for a revolution, but also people who can recognize their worth.¹¹

The news business is in the throes of such a moment, and it is happening very fast. *The New York Times* first published on the Web in 1996, but this was basically newspaper text available online rather than a form of news-writing with demands and possibilities of its own. The *Times* did not update its website round-the-clock until 2000.

Wikipedia began in 2000. Craigslist was a San Francisco website already in existence, but not until 2000 did it become a site for placing ads beyond San Francisco, cutting into classified advertising revenue that had long been a reliable resource for daily newspapers.

Blogging began in the mid-1990s, but bloggers had little public presence. They were not a recognized force in the political world until 2002, when several bloggers led the informational campaign that ultimately forced Senator Trent Lott to resign as majority leader in the U.S. Senate. Most of these bloggers had worked for the conventional press; soon bloggers with nothing but competence to recommend them were making names for themselves and coming into their own as sources for conventional journalists.

There was no YouTube until 2005. There was no such thing as a social networking site until Friendster in 2002, MySpace in 2003, and Facebook in 2004.

The Huffington Post began in 2005 and brought on board scores of “citizen journalists” for the 2008 campaign, one of whom (Mayhill Fowler) broke the story of Senator Obama’s remarks on “bitter”

rural and small-town citizens. Politico.com began in 2007, both online and as a thrice-weekly print publication; it broke the story about the Republican National Committee’s \$150,000 in expenditures for Governor Sarah Palin’s clothes.

At the 2008 Democratic National Convention, Google sponsored a “Big Tent” for some five hundred bloggers and other nontraditional media. *The Huffington Post* had twenty people in Denver; *Talking Points Memo*, nine; *Daily Kos*, ten; *Slate*, seven; and *Salon*, nine. At a *Huffington Post*-sponsored panel during the Convention, Illinois Representative Rahm Emanuel said that the big media fish still count, but that media coverage overall will be a “collective, intuitive consciousness” – something like a school of fish. “You won’t hear anything; you’ll just see the air bubbles and then the whole group will suddenly decide to turn at the same time.” Josh Marshall of *Talking Points Memo* also reached for a metaphor, seeing an emerging distributed consciousness as a kind of ecosystem “with lots of different sorts of news orgs playing different and sometimes complementary roles.”¹²

Did new technologies produce all of this? Not by themselves. It is hard to imagine this history without the civil rights movement, the women’s movement, Students for a Democratic Society and the ideology of participatory democracy, the emergence of hundreds of new nonprofits and advocacy organizations in Washington, aggregations of countercultural enthusiasts around the Whole Earth Catalog, and early experiments with electronic networking in the San Francisco Bay Area and what would soon be known as Silicon Valley.¹³ It is not only that the techies see themselves as part of a movement; it is that they see the technology they love as essentially

and almost by nature democratic (but in this I think they are mistaken).

In the world of public information that is emerging, journalism can no longer take for granted its lofty preeminence. There is no Walter Cronkite at the national hearth. Indeed, there is no national hearth (and it is an exaggeration to imagine that there ever truly was); there is only a set of national portals and a set of mysterious algorithms based on some kind of a democratic calculus of the popularity of different websites that generates a list of sites to examine when you type a set of words in a search engine.

Today, professional journalists have a lot of company on the stage of public information. The ensemble includes bloggers and citizen journalists and much more. Prominent, but relatively unheralded, in the new cast are the institutions Walter Lippmann longed for in 1920 – the political observatories both inside and outside government. In 1920, political observatories were few; they did not begin to mushroom until the 1970s with the rise of many Washington-based nonprofits. These organizations sponsor research, monitor governmental activity, and, as nonpartisan or as advocacy organizations, make information about the political world available to journalists and directly to citizens. Human Rights Watch, mentioned above, is just one such product of the 1970s. Founded in 1978, its researchers are quoted and its reports are cited dozens of times in leading newspapers every year.

Inside the government, too, reform legislation of the 1970s and 1980s has provided large new capacities for monitoring government through government agencies themselves, and even some public monitoring of private cor-

porations. Think of the importance of environmental impact statements and the public airing of them required by law – a law (the National Environmental Policy Act) that went into effect in 1970. Think of the public disclosure of campaign finance contributions and expenditures mandated by laws passed in 1971 and 1974. Think of the important government reports critical of the actions of federal agencies, from the FBI to the Corporation for Public Broadcasting, including the one mentioned above from the Interior Department Inspector General that criticized the Department's decision-making process on endangered species. These reports are normally all available for journalists, advocacy organizations, and any member of the general public motivated enough to download them from government websites. None of them was available before the Inspector General Act of 1978.

All cabinet-level agencies and most other major government agencies have an Inspector General (IG) who is responsible for submitting semiannual reports to Congress that cannot be altered by the agencies. In the fiscal year 2008, the IGs collectively made audit recommendations to save \$14.2 billion and conducted investigations that identified \$4.4 billion in savings from recoveries and receivables. Actions by the IGs led to more than 6,600 indictments, nearly 6,900 successful prosecutions, and close to 5,000 suspensions and debarments.¹⁴

In September 2008, the Justice Department IG issued “a blistering critique” of the political motives in the firing of U.S. attorneys but “stopped short” of urging criminal indictments of former Attorney General Alberto Gonzales or his aides.¹⁵

Also in September, the IG at the Department of Health and Human Services reported that more than 90 percent of

nursing homes had been cited for violation of federal health and safety standards in 2007, and 17 percent of them had deficiencies that caused “actual harm or immediate jeopardy.” The problems were greater in for-profit homes than in not-for-profit homes.¹⁶

Interior Department IG Devaney’s December 2008 report found that agency officials often interfered with scientific work in order to limit protections for endangered species. Devaney found “serious flaws” in decision-making on fifteen decisions. In most of them, Julie MacDonald, deputy assistant secretary for fish and wildlife and parks, had played a role. MacDonald resigned in 2007 in the wake of an earlier IG report that concluded she had run roughshod over agency scientists and violated federal rules by providing internal documents to industry lobbyists.

Also in December, the special IG for the Reconstruction of Iraq, a Bush appointee, made available a 513-page history of the reconstruction that *The New York Times*, in its top story of December 13, reported “depicts an effort crippled before the invasion by Pentagon planners who were hostile to the idea of rebuilding a foreign country, and then molded into a \$100 billion failure by bureaucratic turf wars, spiraling violence and ignorance of the basic elements of Iraqi society and infrastructure.”¹⁷

The IGs serve a function we might call self-surveillance; they work within the executive branch of government and report on the executive branch. This sounds like the dumbest mode of accountability conceivable – a foxes guarding the hen house model. It is possible, but not easy, to so pervert the job; however, the integrity of the IGs is supported by the legislative requirement that they report not only to the agency, but also to Congress. In other words,

self-surveillance as constituted in 1978 provides an automatic trigger to Congress to keep its eyes trained on executive accountability, too. The IG reports are public and thereby invite media attention and the attention of various non-profit, advocacy, and political groups as well.

Such developments scarcely make the professional journalist obsolete. The matters of professional training, experience, and judgment are as or more important than ever. But the organizations at the institutional heart of providing that training and honing that judgment – metropolitan daily newspapers and the wire services – are in serious trouble with no general solutions in sight. The very survival of the best of the “mainstream media,” especially print, is in question.

Why? This is not the place to explore the question in depth, but a basic answer looks like this: first, young people do not read print newspapers as much as older people – or as much as younger people in times past. Even older people do not read newspapers as much as they used to. Among those over 65, the decline has been from 72 percent to 65 percent in the period 1999 – 2008. For those between 55 and 64, print readership is down from 69 percent to 57 percent. It is drifting down in every age category, but most severely in the 18 – 24 and 24 – 34 groups: down from 42 percent to 31 percent and 44 percent to 32 percent, respectively, during the 1999 – 2008 period.¹⁸ Some of this is surely a drift away from news altogether. Some of it is a shift to news online. Some of it is the greater availability of news through quasi-news outlets – *The Daily Show with Jon Stewart*, Jay Leno’s monologue, and so forth. Whatever the cause, the trend is unmistakable and unforgiving.

Second, newspaper companies took on a lot of debt in the past decade at exactly the wrong time. Newspapers were still a lucrative enterprise five years ago. Newspaper ad income hit a record high of \$49.4 billion in 2005.¹⁹ By 2008, ad revenue was down to \$38 billion, a 25 percent decline. Newspapers had been maintaining a hefty 25 percent operating profit – exactly what they counted on to deal with their debt – but profit was in rapid decline, too. This has to do with a third factor: the Internet was stealing both readership and advertising. Why pay for a classified ad to sell your vintage LPs, your baseball cards, or your grandparents' china when you can just go straight to eBay? Why sell your bike or rent your apartment in the newspaper when you can turn to Craigslist for free? And why pay the now rapidly increasing cost of a newspaper at the newsstand when you can access it from the comfort of your home or office for free; follow whatever links you wish; enhance your understanding of a story in which you have special interest with audio and visual sidebars; and quickly respond to the writer and perhaps have your response posted on the website? More and more newspaper readers now go online for their news in addition to or instead of attending to print editions, but so far online advertising has provided only a small increment for news organizations, a small fraction of their print-based advertising income.²⁰

Fourth, to complete the perfect storm, the 2008 – 2009 economic recession brought things for newspapers from very bad to much worse.

One need not idealize the newspaper press of yore to recognize that, to this day, television, radio, and online news feeds off of the basic reporting that to an overwhelming extent comes from organizations whose economic surviv-

al no one knows how to guarantee. Alex Jones, director of the Harvard Kennedy School's Shorenstein Center on the Press, Politics and Public Policy, judges that 85 percent of all of our news originates in the work of newspapers (whether they produce it in print or online).²¹ If those newspapers go under, or even if they continue cutting editorial staff and reporting budgets to the bone to reduce costs, where will news come from – especially, where will local “accountability” news come from? There would seem to be a marketplace among various elites for national news (and a certain amount of foreign news) so that those areas of news coverage may well survive without heroic measures. That online technology makes it possible to start and maintain a small news organization without the heavy investment in paper, ink, printing press, and delivery trucks is very encouraging. New news organizations staffed by professional journalists and quickly making a name for themselves with substantial, hard-hitting news stories have already emerged.²² Whether they can survive and maintain themselves in local news markets in the long run is yet to be seen.

The population of news organizations in 2012 or 2020 will likely have many newspapers, but with smaller, leaner staffs than today. It will have many new, online-only organizations run by a handful or a couple dozen journalists, perhaps with a significantly larger set of loyal readers who also serve as scouts, correspondents, or citizen journalists. It may have enhanced reporting capacity in public radio and television. It will surely be assisted by the large number of political observatories that we can think of as institutions of adjunct journalism. And without abandoning narrative in the least,

they will make growing use of databases. Databases have become part of the lives of anyone who searches for information online. Our own transactions online make us part of databases ourselves; databases 'r' us. We even write the narratives of our own lives through databases. Think of the thirty-three-year-old medical intern, a healthy woman profiled in a Pulitzer Prize-winning *New York Times* series in 2007 who made the painful choice to have a "preventive" mastectomy. She did not have cancer. She had never had cancer. But because her mother had had breast cancer, she chose to do DNA testing and learned that she carried a gene that raised her risk of breast cancer from 60 percent to 90 percent. About a third of the women in a similar situation opt, as she did, for the mastectomy. It is not just the DNA testing that changed her life; it is the database that gave the testing its predictive meaning.²³

Some databases are resisted. Although members of Congress often praise transparency in government – especially executive transparency – they are not so quick to make their own records available. Neither of the two houses of Congress nor any city council of the twenty-five largest American cities nor eighty-nine of the ninety-nine state legislative houses make legislators' roll-call votes available in simple, downloadable form by legislator. This information is now available for a fee from three different Congress-watching news organizations and available free from OpenCongress.org (begun in 2004), GovTrack.us (also started in 2004), and WashingtonPost.org.

This is just the beginning. Data on "ear-marking" in Congress has been painstakingly gathered by an NGO, Taxpayers for Common Sense (founded in 1995), and these data are the basic starting point for Washington reporters who cover the top-

ic.²⁴ The Sunlight Foundation, an open government nonprofit, and ProPublica, an investigative journalism nonprofit that partners with traditional news organizations in many of its investigations, have created a downloadable database comprised of federal filings for 2007 – 2008 from three hundred foreign agents. The website www.foreignlobbying.org allows citizens to explore which countries' representatives have spent how much money lobbying in Washington and which members of Congress they have contacted how many times over which legislative issues. Meanwhile, Princeton's Center for Information Technology Policy is going online with RECAP, a database of the records of the federal courts. (RECAP is PACER spelled backward, PACER being the database the courts themselves maintain that, thus far, is not keyword searchable.) A database is not journalism, but, increasingly, sophisticated journalism depends on quality downloadable, searchable databases.

The growth of political observatories, the advancement of monitors of government (and monitors of other key power centers in the United States and around the world) both outside ("civil society") and inside government itself, and the new availability of databases for public-interest research: together, these developments represent just one feature of the future for news. Yet it is a vital feature, and so far it has received little general notice. Political observatories do not replace journalists, nor do databases shove narratives aside. But the observatories are increasingly valuable partners for journalists, and databases lay new foundations for narrative. Both offer promise for developing the kind of public information that makes democracy possible. In the midst of the present

news crisis, devastating as it is, are the birth pangs of the kind of public information that Walter Lippmann sought

for journalism – and for democracy – nearly a century ago.

ENDNOTES

- ¹ Lev Manovich, *The Language of New Media* (Cambridge, Mass.: MIT Press, 2001). On page 218, Manovich holds: “After the novel, and subsequently cinema, privileged narrative as the key form of cultural expression of the modern age, the computer age introduces its correlate – the database. Many new media objects do not tell stories; they do not have a beginning or end; in fact, they do not have any development, thematically, formally, or otherwise that would organize their elements into a sequence. Instead, they are collections of individual items, with every item possessing the same significance as any other.” Manovich argues also, on page 225, that “database and narrative are natural enemies. Competing for the same territory of human culture, each claims an exclusive right” to make meaning. I do not know what sort of evidence supports this hyperbole. Nevertheless, if Manovich’s self-assurance gets the better of him here, his boldness in articulating the narrative/database contrast is stunning.
- ² Walter Lippmann, *Liberty and the News* (1920; Princeton, N.J.: Princeton University Press, 2008), 45.
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- ⁴ *Ibid.*, 53.
- ⁵ *Ibid.*, 55.
- ⁶ *Ibid.*, 56.
- ⁷ Walter Lippmann, *Public Opinion* (New York: Macmillan, 1922), 216.
- ⁸ H. L. Mencken, *Prejudices: Sixth Series* (New York: Alfred A. Knopf, 1927), 27.
- ⁹ Elizabeth Eisenstein, *The Printing Press as an Agent of Change* (Cambridge: Cambridge University Press, 1979).
- ¹⁰ Daniel Headrick, *When Information Came of Age: Technologies of Knowledge in the Age of Reason and Revolution, 1700 – 1850* (New York: Oxford University Press, 2000).
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Jack Fuller

What is happening to news?

In 1929, when he published *A Preface to Morals*, Walter Lippmann was well on his way to becoming the most influential journalist of his era. He had been editor of the editorial page of the *New York World* since 1922. Two of his books – *Liberty and the News* and *Public Opinion* – had outlined most of the key elements of the twentieth century’s concept of journalistic professionalism. *Public Opinion* had also suggested some of the concept’s limitations, foreshadowing the philosophical skepticism that much later in the century helped to undermine it. In fact, by 1929 deep doubt darkened Lippmann’s thought; he was losing his belief in the capacity of the democratic public to guide policy. He yearned for a better way but could not quite find it. *A Preface to Morals* recorded his intellectual struggle with how to live in a world without the hope of certainty. Though he believed in the power of science to repair some of the weaknesses of democracy, it was in resignation that he wrote:

Scientific method and historical scholarship have enormously increased our competence in the whole field of physics and history. But for an understanding of hu-

man nature we are still largely dependent . . . upon introspection, general observation, and intuition. There has been no revolutionary advance here since the Hellenic philosophers.¹

Today, professional journalism is in a crisis Lippmann could not have imagined. The late-twentieth-century revolution in information technology and data transmission has threatened the viability of the businesses – primarily newspapers – that gathered, sorted, verified, and prioritized information about the important events of the day. While it perfected people’s ability to communicate whatever they pleased, the revolution made it very difficult for anyone to get attention. It brought liberty and plenty to the system of free expression, and yet at the same time it subverted journalistic discipline and the fragile sense of order offered by the mosaic of the newspaper page.

Meanwhile, the news audience has changed its habits in fundamental ways. This transformation is not just a matter of switching from print to the Internet. The audience has been shrinking for decades, but today, even among the heaviest news consumers – such as those who watch cable news – an increasing proportion is drawn to the latest and most

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lurid rather than the most significant. At least as disturbing to serious journalists and others who still believe in the traditional news values, more and more people are turning to shrill commentators, bloggers with no particular concern for accuracy, even comedians, all at the expense of those who try to adhere to the disinterestedness, neutrality, and strict epistemology espoused by Lippmann and other founders of journalism's professional ideals.

These trends have significant implications for the way communities inform themselves about important matters. The news that people take in affects the way they exercise their sovereign choice through elections and exert their continuous influence on policy through everything from opinion polls to protest demonstrations. Many people inside and outside of journalism are worried what will become of the political system under an onslaught of instantaneous, often unverified flashes of information. How will we be able to put events in historical context? Where will we find adequate explanation of complex and often technical issues of great public importance (whether they be matters of international monetary policy or the best ways world health institutions can respond to a new infectious disease)?

Though it is tempting to try to find a way back to a news environment and the journalistic values that worked passably well throughout the second half of the twentieth century, this is an exercise in nostalgia. Nor is there reason to believe the grandiose claims of digital visionaries that unmediated democracy of expression will produce good societal results as if by an invisible hand. Paul Ricoeur could have been describing our current situation when he wrote, "The present is wholly a crisis when expectation takes refuge in utopia and

when tradition becomes only a dead deposit of the past."²

For journalists the situation is extremely disconcerting. They believe deeply that what they do serves the public interest, but they know that the way they are doing it doesn't seem to be working the way it used to. Worst, they do not know what to do about it. I am reminded of the Matthew Arnold poem of a pilgrim stripped by science of religious faith, "Stanzas from the Grande Chartreuse," written as the Industrial Revolution took hold. Journalists find themselves "Wandering between two worlds, one dead, / The other powerless to be born."³

At the moment most attention in journalistic circles has gone to finding an economic model that can sustain the institutions that do the basic work of discovering and verifying what happened. (For the most part these institutions are newspapers and news agencies like the Associated Press.) This focus is natural since the precipitous decline of newspapers' financial fortunes has forced them to reduce their output dramatically. Some have gone out of business already, and others will follow. But the problem is bigger than the future of newspapers; it is the future of news itself. This is what matters to the commonweal. And to get a grip on this dimension of the crisis, attention needs to be paid to the deep change in the way people are taking in news, through whatever medium. This is not just economics. It is about the increasing difficulty of getting important things through to people. In other words, even if we could come up with the money to save news organizations, journalism would still be in crisis.

The social mission of journalism is intensely practical: to educate people about matters that are important to the community's well-being. It cannot com-

plete this mission unless people actually assimilate the information. Journalists are teachers without the power to give their students grades. In fact, the class is in charge; the teacher is the one who has to pass the test.

In considering the challenge of reaching people, it simplifies things to think of the audience as being divided into two segments. One is served by a few very sophisticated news organizations, which are national in scope. This audience comprises only a very small fraction of the population, but it is a very influential part. The other segment includes everyone else. It has been served by metropolitan and smaller-city daily newspapers, along with cable, network, and local broadcast news, though it has been using these sources less and going to digital interactive media more. The average individual in this audience is considerably less influential than the average reader of one of the great national newspapers. But in the aggregate, the larger audience is very powerful. The elite may set the agenda, but it doesn't have the votes.

Whether *The New York Times* or *The Wall Street Journal* or *The Washington Post* prospers matters a lot to the quality of the national debate. And it probably matters personally to a lot of the readers of *Dædalus*. But if journalism is to fulfill its social mission, it must reach beyond the small, highly educated, usually well-to-do audience of political and social elites. It must engage large numbers of people. Today that means winning a battle for attention more fiercely competitive than any that our species has ever known.

To figure out how to win the attention of the larger audience, we are going to have to understand rather precisely what has happened to news during the past decade. We are going to have to get be-

yond observing that news and entertainment have gotten mixed together or that advertising has moved to the Internet and that Internet aggregators for the most part have not been paying for the news they distribute. We must not only look askance at what some news organizations are doing to get attention, but also figure out why it is working so well. There is a reason that "why" is one of the traditional five Ws of journalistic reporting (along with "who, what, when, and where"). It is almost impossible to know what to do about a fact or situation unless you understand why it is the way it is.

To get to the why, we have to reach beyond traditional ways of thinking about journalism. Simply asking people what they want – through opinion research, no matter how sophisticated – does not get down to the fundamental sources of change in the audience's relationship to news. Most people, quite simply, do not know the most basic reasons they are responding to news the way they are, though the enormous capacity of the human mind for rationalization leads them to give a reason, and probably even believe it.

Fortunately, the revolutionary advance in thinking about human nature scientifically that Lippmann could not find in 1929 is now well under way. The rapid growth in knowledge assembled in the past several decades by the sciences of the mind has had a significant impact on many fields – including political science, political theory, and moral philosophy, upon which discussion of professional standards in journalism has commonly been based. But so far neuroscience has not played any important role in the debate about what is happening to news and how journalists should respond. This is shocking, given how much it has to offer.⁴

The contemporary sciences of the mind – from research at the most basic, cellular level to the increasingly important and more global study of the brain’s affective functions – shed light on the way we are reacting to our unprecedented, message-immersed environment. Evolutionary psychology suggests how the early development of the human brain shapes its contemporary behavior. The study of cognitive heuristics and biases offers a way of thinking about the systematic ways in which the minds of both journalists and their audience can err. Modern philosophers of the mind can also contribute to journalists’ understanding. The work of Maurice Merleau-Ponty, for example, helped lead the way to breakthroughs in psychological theory; his work reminds us that there is more to the human mind than electrochemistry (more, for that matter, than the brain and central nervous system). Daniel Dennett and researchers in artificial intelligence have offered creative models of how our information processors of flesh and blood make decisions and even become conscious of themselves. A number of influential philosophers have concluded that the brain’s affective systems play a central function in the moral life of human beings. As Martha Nussbaum has written, given what we know today about how the brain works, we “have to consider emotions as part and parcel of the system of ethical reasoning.”⁵

A great deal of what is happening to the news audience reflects the way natural selection structured human brains to deal with the challenge of survival and procreation in prehistoric environments such as the African savannah and Ice Age Europe. Though the human brain has an enormous capacity to learn – plasticity is the somewhat unpleasant word often applied to this – its basic structure and

functions have not changed much in the past ten thousand years. But the information environment has changed radically. For most humans in the developed world at least, the principal prehistoric threats to survival – predators, starvation, and so forth – have given way to new ones: vehicular accidents, obesity, a sedentary lifestyle, social isolation. The oral culture of early humans yielded to writing, printing, broadcasting, and now digital interactive media. This last development poses particular challenges to the information processor we carry within our skulls because today we are immersed in messages, many of them calling us by name. We can hardly get away from them. They pursue us wherever we go via our cellular devices. Just as one message gets through to us, another cries out for attention. We live, in the words of one computer company executive, in an era of “continuous, partial attention.”⁶

The problem of attention did not begin with digital media. In fact, it did not even begin with humans. Our brains inherited from vertebrate ancestors the basic mechanisms for mustering information processing resources in the direction of matters of great and immediate importance. Of course, natural selection shaped these mechanisms to fit the particular circumstances of the human species. But most of this happened a very long time ago, and the ancient mechanisms still operate within us. As competition for our attention explodes, they become increasingly important. Neuroscience can help explain how these mechanisms drive such audience behavior as attraction to the latest at the expense of the most important and the apparent appetite for emotionally hot presentation of information – through infotainment and shrill commentary, for example.

Evolutionary psychology even offers insight into the appeal and function of gossip and celebrity. For example, take the work of Robin Dunbar. He argues that gossip evolved to meet our ancestors' need to live in larger and larger social groups in order to survive. Grooming – picking nits from one another – was our primate ancestors' way of forming and sustaining social bonds. But the number of individuals who could groom one another was quite limited. With the development of language, humans were able to live in larger groups, with greater success at survival and procreation, because they held themselves together through gossip. Celebrity, a much more modern phenomenon, probably developed to provide the much larger and less intimate social groups in increasingly urban settings something in common to gossip about.

In a quite different vein, the study of cognitive heuristics and biases is enormously important for journalists. The Nobel Prize-winning work of Daniel Kahneman (with Amos Tversky) demonstrated the way humans systematically err in assessing the probability of uncertain events. This happens through mental heuristics (automatically applied, shortcut rules of thumb) that evolved over millennia. These mental shortcuts survive in us because they have worked most of the time, but in a contemporary environment they can lead to disastrous mistakes.

It is very important that journalists and journalism scholars work through the implications of how these heuristics operate within the news audience – and within journalists themselves. In 1941 journalism professor Curtis MacDougall published an important book on how the press had been gulled time and again by hoaxes and how it could in the future avoid being taken in. It

had a lasting, salutary effect on public discourse. The examination of heuristics and biases is as important today as the examination of hoaxes was in the 1940s; they are the hoaxes our brains play on themselves.

There are numerous reasons why journalism has been immune to the power of the sciences and philosophy of the mind. For one, these are arcane fields. Simply trying to understand the basics of brain anatomy can take a journalist into an alien geography full of bewildering place names like the corpus callosum, the aqueduct of Sylvius, the hippocampus, and the anterior cingulate gyrus where substances like GABA and glucocorticoids ebb and flow like weather.

The very rate of discovery in neuroscience has also made it daunting as a source of practical journalistic insight. In rapidly developing fields it is often difficult to separate out what is durable from the theory of the moment. The emergence of popularized accounts, such as Malcolm Gladwell's *Blink* or Maggie Jackson's *Distraction*, can make it all seem like a fad.

In some ways it is. Week after week we read breathless accounts of research that seems to show that some character trait (cheerfulness, addiction, infidelity) has been located in a specific place in the brain, or that medicine manipulating some neurochemical or another will make us smarter or happier or allow us to remember the value of pi to twenty decimal places. More than three decades ago William Barrett warned about this sort of thing:

The light of a new scientific theory blinds us for a while, and sometimes a long while, toward other things in our world. The greater and more spectacular the theory,

the more likely it is to foster our indolent disposition to oversimplify, to twist all the ordinary matters of experience to fit into the new framework, and if they do not, to lop them off.⁷

At one time it was Freudian categories that seized the popular imagination, giving rise to silly pseudo-explanations of nearly everything human. Today the rule of Oedipal complex and the super-ego has given way to the rule of the amygdala and the dopamine reward system. Our brains are capable of being just as silly about those.

It is no wonder, then, that some years ago when I told a friend of mine who edited a significant American newspaper that I was reading neuroscience to try to understand what has been happening to journalism, he suggested that when my book came out it might make a good subject for his science page. I do not believe the thought crossed his mind that it would help him guide his newspaper, and I can't say that I blame him. Nobody had showed him how.

Despite Lippmann's early hope that journalism itself – along with the formation of public policy – could become as rigorous as physics, scientific discovery has never been very important in shaping journalism's thinking about itself. Even Lippmann did not look to the content of science but to its method as a model for journalism.

Of course, for a long time every serious journalist understood that one could not adequately reflect the contemporary world without reporting on the scientific discoveries that are constantly altering it – hence the fact that my friend's paper had a science page. And the more reflective reporters and editors recognized that it was not enough simply to put the latest research papers in laymen's terms; a serious journalist had to be able to make

judgments about what is important and what is misleading and to put discoveries in a larger context that gives them real meaning. Yet there are still two cultures: science is in one, and journalism is firmly rooted in the other.

The impact of technology on journalists' work, once simply an annoying source of change in journalistic routines and now a threat to survival, has surely increased journalists' reluctance to look to science for solutions to their problems. Moreover, quantitative disciplines have often been used in news organizations in foolish and often threatening ways.

I remember one day when I was editor of the *Chicago Tribune*, a bright, young man from corporate finance came down to my office from the tower to seek my help in creating a system for measuring the productivity of our reporters by the numbers – number of stories, number of words, that sort of thing. Later he became a truly great publisher and now remembers the episode with more than a twinge of embarrassment.

Marketing, with its techniques for measuring audience attitudes and responses, was often seen as hostile to journalism's social mission. After all, wasn't the journalist's job to tell the audience what it needed to know, not what it wanted to know? Now, in the midst of crisis, more and more journalists are looking to marketing to show the way to survival. Unfortunately, traditional marketing techniques are inadequate to the task.

The intense, almost religious conflict between traditional news institutions and the interactive legions who hissing-ly sneer at “mainstream media” also makes journalists less open to looking to the sciences of the mind. Traditional journalism believes in the importance of professional standards, training, and expertise. The digital interactive world

leans heavily toward anti-elitism, rejection of expertise, and the “wisdom of the hive,” as embodied in wildly creative and successful inventions such as Wikipedia. Each has an implicit view of human nature. The traditionalists’ sense is that people need instruction in order to make sound decisions. The digitalists’ belief is that out of the hum of multitudes something like truth and perhaps even wisdom will inevitably emerge. Neuroscience’s vision of human nature does not entirely support either position. To the digitalists it points out the systematic flaws in human reasoning that continuous summation through the new technology actually magnifies. And to the traditionalists it undermines one of the central tenets of professional thinking since Lippmann: the primacy in effective human decision-making of the rational and disinterested over the emotional and engaged.

Journalism inherited from ages of Western thought a model of the mind in which reason and emotion are neatly separated, with reason needing to dominate emotion in pursuit of truth and wise judgments. The pedigree of this model could not be better. It dates back at least to Plato, Aristotle, and the Stoics, and continues fairly directly right down to Freud. There have been only a few dissenters, David Hume notable among them.

We now know that this model is wrong. Neuroscientists such as Antonio Damasio have demonstrated that the parts of the brain generally thought of as emotional and those thought of as rational are so thoroughly interconnected and interactive that thinking of them as separate produces more confusion than clarity. Emotions are, in fact, themselves cognitive. As Nussbaum puts it, they bring us “news of the world.”⁸ More importantly, emotions are essential to the suc-

cess of many types of decision-making. For example, experimental subjects with intact emotional systems who play a game of cards involving several separate decks are able to detect which decks are advantageous to winning. Subjects with severe impairment of the emotional systems are not. The successful players do not know why they are successful. They cannot describe their strategy in rational terms. But scientists can document that their emotional systems have had the hot hand.

Working with people with brain damage that makes it impossible for them to feel emotion, Damasio has observed how difficult they find making decisions that are quite easy and ordinary for other people. People who cannot feel emotion may not show general cognitive impairment. They may perform well on standardized intelligence tests. But give them a problem with a lot of uncertainty or one that requires them to understand other people, and they become paralyzed. Though a surfeit of emotion can, of course, lead to irrationality, Damasio wrote, “reduction in emotion may constitute an equally important source of irrational behavior.”⁹

While this assessment conflicts with the professional journalistic ideal of disinterestedness and its inherent distrust of emotion, if journalists can get past the resistance that this dissonance provokes, they will find that the neuroscience of emotion offers powerful insights into what is happening to news today. There is a crisis in getting attention for important news, and emotions are attention’s gatekeepers.

Journalists have good reason, of course, for being wary of making pointedly emotional appeals. Playing on emotion has been part of the arsenal of hucksters and propagandists from time immemorial. Whipping up fear has been a favorite of

warmongers. Sexual messages and images did not begin nor will they end with the “page three girls” of the British tabloids. American journalism in the nineteenth and early twentieth centuries had a phrase for women reporters who specialized in heart-wrenchingly sad stories: “sob sisters.”

In reaction to the danger of falling into manipulateness, journalists in the second half of the twentieth century increasingly drew back from emotional presentation of news. They never completely abandoned touching the audience’s heart, of course. But they worried about it constantly and consequently inhibited themselves. As competition in the information environment intensified, they left the field to those who had no such reservations. And now they are losing the audience.

There is reason to believe that in our message-immersed environment emotional appeals are more successful with more people more of the time. There is also reason to believe that this tendency in the news audience is durable and in fact will only increase. Thus, a reluctance to think about how journalists might use emotion in an ethical manner can make it impossible over time for journalists to fulfill their social mission.

We should be wary about emotional presentation of information, but not afraid of it. After all, hucksters and propagandists have not been the only ones who have regularly played upon the emotions of the audience. Great artists and great leaders also have. The challenge to effective large-public journalism today is how to distinguish between communication in the interest of public enlightenment on the one hand and manipulation for socially useless or even deleterious purposes on the other. Using the knowledge unlocked by neuroscientists and other students of the mind in this pro-

cess has never been more important to journalism than it is today.

Journalism is not scholarship. It is not art. It is relentlessly practical. Reporting that penetrates an important subject but does not penetrate the minds of the audience may be noble, but it is a journalistic failure. The barriers to success have never been higher, even as the barriers to distributing information quickly and broadly have fallen. Here are some of the challenges:

- Today and for the foreseeable future, individual reports – news stories, for want of a better term – increasingly compete one-on-one with all other reports. The days are over for comprehensive packages of reports that used to be able to tempt people to learn a little about something they hadn’t thought might interest them. We cannot count on serendipity as an educational strategy anymore.
- Brevity confers an enormous advantage in the competition for attention today. Nonetheless, many important messages cannot be communicated in thirty words or a six-second sound bite – let alone in the 140 characters of a Twitter post (“tweet”).
- Technological change continues to bring down the wall between the written, the visual, and the audible; effective communications increasingly will require the use of all three, seamlessly integrated.
- Attention spans will not spontaneously lengthen. Moreover, there appear to be severe limits on how much information a person can process in a given period of time, limits that are only susceptible to slight expansion through practice. People may get used to multitasking, but they aren’t likely to get

dramatically better at it. Nor will the brain evolve quickly to adapt to the new demands. Even under severe selection pressures, complex organs of complex organisms do not change in a generation.

Understanding how the brain works helps us think through all of these challenges. It also provides guidance about

the ethical dimensions of journalists' response to them. In the end, it should be part of the intellectual arsenal that creative journalists committed to serving the public interest use to create the bold new ways of telling stories that will get the job done in our distracted, message-immersed world.

ENDNOTES

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Paul Sagan & Tom Leighton

The Internet & the future of news

By any measure, the growth of the Internet over the last decade has been astounding. It took the telephone seventy-five years to reach fifty million users; it took television thirteen years. It took the Web just five.¹ In a few short decades, the Internet has gone from an obscure technological novelty to something as basic and essential to our lives as electricity. It now connects nearly a quarter of the total world population, having succeeded in reaching the farthest stretches of the globe where simpler necessities, such as clean running water, have not. By 2013, there will be 2.2 billion Internet users worldwide, and the technological trends we are seeing today – rapid-fire growth in broadband, wireless, and video on the Internet – foreshadow an accelerated pace of innovation and breadth of impact that will be felt for generations to come.²

Over the past decade, we have begun to see how the Internet is transforming nearly every industry and aspect of society – from news to entertainment, politics to business, and communications to commerce. The impact of the Internet on journalism is simply a microcosm of the larger phenomenon of dramatic

change brought about by the online digital revolution.

The Internet's ubiquity and easy accessibility offer an immediacy of information that no other news medium can match. This has irrevocably accelerated the pace of the news, as journalists race to stay ahead of each other as well as their audiences' demands. Similarly, the way people consume the news has changed. People are no longer restricted to their morning papers and the evening news broadcasts. They listen to podcasts on their way to work; check for news updates on their cell phones; watch, pause, and rewind live video newsfeeds on the Internet; and read and comment on blogs at the office, the gym, or the corner coffee shop.

Even more significantly, the Internet has endangered the concept of one-way news, be it in print or broadcast. News is now personalized and interactive; the audience is taking charge. Viewers choose from more sources of news than ever before. They share news stories with their social networks, helping to dictate a story's distribution. They shape the discourse and coverage of the news. And more and more, they are helping to capture, write, and share the news themselves over the Internet.

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While the Internet has already created massive dislocation in other forms of media – recorded music, most significantly – its full impact on news media remains to be seen. A key distinguishing factor in the future evolution of news media driven by the Internet will be the coming growth in high-quality video available over the Internet to personal computers, mobile devices, and, ultimately, large-screen TVs in nearly every household. TV and Internet usage are rising together, and viewers who watch news on both TV and the Internet watch more news than viewers who use only TV or the Internet.³ This trend reveals the true power of the coming convergence of TV-quality video and the Internet. Integrated experiences that weave together news video accessed over the Internet into more and more of our lives will help to drive dramatic changes in journalism and the news media.

The Internet is not simply reaching more people each day; it is reaching them at faster speeds – so quickly, in fact, that the definition of “broadband” itself is changing. The Federal Communications Commission (FCC) currently defines broadband connections as those that enable data transfer speeds of more than 200 kilobits per second (Kbps), about four times faster than the fastest dial-up modems. However, what not long ago was considered “high speed” is now merely sluggish: TV-quality video streams require connection speeds about *ten times faster* than the FCC’s definition of broadband.

Today, more than half of all users worldwide have Internet connections that can support TV-quality video, and roughly one-fifth have connections capable of supporting DVD-quality video, which requires more than twice the

speed of TV-quality streams.⁴ Moreover, both broadband penetration and speed are expected to continue growing rapidly even in the current economic climate, as many governments around the world have prioritized investing in Internet infrastructure as critical to economic development.

As key news audiences now regularly blend online with traditional news sources, broadband adoption has been instrumental in fueling a new era of news consumption. Multiple news sites, videos, archived stories, and searchable terms are all at one’s disposal with an immediacy never experienced before in history. Broadband infrastructure is enabling fast access to content, and has created a world where news is no longer a finite product that arrives at your doorstep once a day, or is broadcast into your home each evening. Rather, news has become an infinite, continual source that can be accessed on demand.

The Akamai Net Usage Index for News,⁵ which monitors aggregate Web traffic generated at more than a hundred global breaking-news websites, shows that when news occurs, the Internet serves as a primary means for seeking information because of its accessibility, convenience, breadth of data, and ability for the end user to control the specificity and customization of the news. Since consuming news is such a big part of people’s daily lives, tracking where news is consumed and which news stories attract the most online attention are critical measurements in determining a variety of geographic and sociological trends. Some examples include:

- The Internet is much more likely to be the main source of news during working hours on a weekday versus news

breaking on a weekend. This is a direct result of a workforce highly dependent on the PC.

- Sporting events continue to be galvanizing news stories, generating some of the highest peaks in online news traffic as eager fans follow competitions in real time.
- Anticipatory news events, such as verdicts, election returns, or other rapidly changing outcomes cause a “refresh phenomenon,” and thus high levels of Web traffic. Online news audiences continue to refresh their Web browsers or visit multiple news sites to get minute-by-minute coverage.

As quickly as wired broadband is advancing, wireless broadband is growing even faster. Today’s news audience is used to the idea of accessing the Internet, untethered, from anywhere and everywhere – in coffee shops, on airplanes, on their iPhones, or via personal hotspots (powered by cellular modem). In the United States, the number of subscribers with broadband access on their smartphones jumped by a multiple of twenty-four, from three million in 2006 to seventy-three million in 2008, driven by the explosive popularity of the iPhone and other smartphones.⁶ With 250 million broadband mobile subscribers worldwide, mobile data traffic is expected to continue its exponential growth, doubling every year through 2013.⁷ Meanwhile, new fourth-generation (4G) network technologies offer the potential to combine faster-than-WiFi speeds with cell-network breadth of coverage.

These faster access speeds won’t simply mean greater data consumption; they offer the possibility of entirely new types of interactions and innovative applications, as users connect meaning-

fully to the Web with highly personal devices that are always with them. Many of today’s most popular Web properties, from social networks to commerce to video and news sites, would never have flourished without high levels of (wired) broadband accessibility. The widespread adoption of wireless broadband on today’s smartphones changes the game yet again, with implications that we are just beginning to understand.

Consider the remarkable water landing of U.S. Airways Flight 1549 on the Hudson River. Mobile devices connecting to the Web were among the first tools to publish photographs as well as upload accounts to micro-blogging site Twitter about the heroic efforts of the crew and rescuers.⁸ These digital assets from non-journalists were used by mainstream media, demonstrating the potential role of every individual with a mobile device when news breaks.

Perhaps the biggest trend in Internet growth today is the juggernaut of online video and its potential to impact journalism. Ten years ago, the biggest application on the Internet was email. Today it is video, an application that is set to become the primary media platform of the future.

The growth in Web traffic associated with news coverage of the last three U.S. presidential elections sheds some light on just how far both the Internet and online video have grown in less than a decade. One of the world’s leading online news sites delivered more than one hundred million page views during a twenty-four-hour period on Election Day 2000. That same site delivered more than 670 million page views on Election Day 2004. Live, online video coverage of the respective inaugurations from each of those elections was nonexistent, as news sites

were still adopting live streaming solutions and broadband infrastructure was just beginning to grow.

Fast-forward to November 2008, when President Obama's election-night victory drove record-breaking traffic across news sites measured by the Akamai Net Usage Index for News. Traffic to these sites peaked at a record of more than 8.5 million visitors *per minute* worldwide. The number of television watchers also reached historic heights, at 71.5 million, compared to roughly 60 million in 2000 and 2004. President Obama's inauguration in January 2009 broke more records, as the Akamai global content delivery network served more than seven million simultaneous streams at approximately 12:15 p.m. ET during the inauguration, a number that rivals the audience for many televised cable channels.

By the end of 2008, nearly three-fourths of Internet users watched videos online at least monthly. But even more telling is the dramatic rise in the number of videos watched, a large part being news videos. Tracking firm comScore reports an 81 percent jump in the number of videos per viewer between June 2008 and 2009, with 19.5 billion clips watched by more than 157 million people in the United States in June 2009 alone. Notably, comScore attributes a surge in video viewership that month primarily to interest in the death of Michael Jackson.

Several technological innovations over the last few years have brought about this rapid-fire growth in online video. First, online video became cheaper and easier to *consume*. Today, watching a video is a simple, one-click process, using video players seamlessly embedded within Web pages. Moreover, it no longer takes an expensive piece of hardware to do so: not only have PCs and laptops dropped in price, but

netbooks and cell phones now make it possible to watch Internet video with a \$300 device. This new affordability, combined with the near-ubiquity of wired and wireless broadband, has made it easy to consume video, anytime, anywhere.

At the same time, videos have become far cheaper to *produce*, no longer an expensive proposition restricted to the dominion of big studios. Today, anyone with a webcam or cell phone not only can record videos and make them accessible to the world, but also can stream video live via sites like ustream.tv and qik.com. It is the era of the citizen journalist, the citizen filmmaker. Indeed, with cell phones often present where larger video cameras are not, amateur cell phone footage has made its way into many mainstream news stories: the 2005 London train bombings, Saddam Hussein's execution, and the recent protests in Iran, for example.

The Internet has also made videos cheaper and easier to *distribute*, with paradigm-shifting economics that enable a viable distribution platform not only for blockbuster hits, but also for a long tail of media targeted to niche interests. The Web's social platforms and communities also play a key role by making it easier for media to find its audiences and vice versa, multiplying the power of word-of-mouth by hundreds, thousands, even millions.

Finally, the Internet has made video much easier to *share*, as the Web's wide reach, combined with its highly interconnected, highly social nature, enables online media to reach an unprecedented number of viewers within a very short time. The most viral video to date, Susan Boyle's performance on *Britain's Got Talent*, surpassed 170 million views within a few short weeks. In comparison, note that all three major TV net-

works *combined* reach just under twenty-three million viewers each night for the evening news.

The current momentum in online video is toward longer, higher quality content, evidenced by the enormous growth in the last year of long-form sites such as Hulu.com and the sites of major network TV channels. The fast-growing success of Hulu and other long-form sites points clearly to the convergence of TV and PC – and, more generally, to the convergence of all types of media and communications devices. We can now watch TV shows from our phone, make video calls from our computers, and surf the Web from our gaming consoles.

This convergence, in turn, drives continual demand for higher video quality. More than half of all U.S. households currently own at least one HD (high-definition) television, and the number of HDTV households worldwide is forecast to grow anywhere from 20 percent to 30 percent each year over the next several years.⁹ Web-enabled media devices – including televisions, gaming consoles, Blu-ray disc players, and set-top boxes such as Netflix Roku and Apple TV – now bring Internet video direct to the living room. As these screens continue to grow in size and connect ever more effortlessly to the PC and the Web, the Internet becomes the imminent platform of choice, and HD video the medium of choice for all forms of media, including news.

The year 2008 saw a significant jump from 24 percent to 40 percent of Americans using the Internet as their primary source of national and international news. Notably, for those in the 18 – 29 age group, the Internet saw an even bigger jump of 25 percentage points, rivaling television for the first time as a primary source of news.¹⁰ This trend will

continue to accelerate as high-quality video becomes more readily available for a growing number of devices.

The resulting explosion in online data is not without its challenges, particularly in terms of infrastructure. The scale is almost unfathomable: the Internet Innovation Alliance estimates that by 2010, the amount of bandwidth consumed by twenty U.S. households will be greater than that of the entire Internet in 1995. And the numbers will continue to grow exponentially. For example, in the near future, we can imagine the capability to deliver video events over the Internet to audiences comparable in size to television's Super Bowl audience. However, the bandwidth requirements to deliver a TV-quality event to such an audience are a couple of orders of magnitude greater than that of current Internet video traffic. Realization of the numbers involved has led to several high-profile reports and commentary in recent years indicating that the Internet's infrastructure will not be able to handle video's onslaught.

To understand the challenges inherent in supporting this level of traffic, we need to understand how the Internet works. Although it is commonly referred to as a single entity, the Internet is composed of more than thirteen thousand smaller, competing networks. Each network provides Internet access for a set of users and possibly a set of websites. It also provides the ability to transfer data across its own network as well as connection points to exchange data with a number of other networks.

Because the Internet is made up of so many different networks, a user visiting a website or watching an online video is almost always accessing content that lives on a different network than his own. That content typically must travel across multiple networks in order to reach the end user.

Unfortunately, the connection points between these networks tend to be underprovisioned and extremely congested – a reality dictated by the long-standing economics of the industry. Networks get revenue by providing Internet access to users and to websites, not by exchanging data with each other. This sharply limits the effective bandwidth between any single network and the Internet audience at large. A network has no control over the many thousands of other networks and connection points it relies on to deliver its data to Internet users around the world. As a result, calculations show that no video hosted on one, two, or even a dozen networks can come anywhere close to supporting a Super Bowl-sized online audience.¹¹

This does not mean that the scale we are looking for is unachievable, however. The capacity is there, but only at the edges of the Internet, where users connect to their networks. Over the years of Internet growth, the Internet “edge” has seen continued capacity build out, as networks like Verizon FiOS and Comcast Cable have aggressively continued upgrading and offering faster connection speeds in order to expand their user base and revenues. A highly distributed video delivery infrastructure that leverages the capacity of these last-mile networks is the way – the only way – to achieve the scale that video demands. This type of infrastructure, in which video servers are deployed within thousands of different networks, allows popular content to be delivered to users directly from within their own network, avoiding the Internet’s many chokepoints.

Similarly, such an architecture is the only viable way to handle the highly variable and unpredictable levels of traffic that news events in particular can generate. Michael Jackson’s death, for exam-

ple, brought down some of the Web’s most popular properties, including Google, Twitter, and Wikipedia, due to the unprecedented surge in interest in the hours and days after the news broke. A massive, highly distributed infrastructure is far more resilient to these instantaneous surges in demand.

Achieving desirable video quality online presents another challenge. As connection speeds go up, more and more users are demanding higher quality DVD or HD video. However, it turns out that because of the way Internet protocols work, the streaming speeds necessary for high-quality video are not achievable unless the server is *geographically close* to the end user. Once again, this points to the critical importance of a highly distributed infrastructure in realizing online video’s potential.

Other new technologies will also play an important role. *Adaptive streaming*, for example, seamlessly adjusts a video stream based on changing, real-time Internet conditions, minimizing wait time while delivering the best possible stream quality given current conditions. Another innovation is *stream transcoding*, which transforms a video stream on-the-fly to display optimally depending on the device used to watch it – whether it be a cell phone, PC, or large-screen HDTV. Last, but not least, industry adoption of open standards and platforms will be critical to accelerate user adoption and technological innovation, as well as to enable the massive scale in infrastructure that video portends.

Fortunately, all of these key technological advances have recently fallen into place, allowing us to carry forward the momentum online video has gathered and push it past its tipping point into a revolutionary new era. As current trends in broadband, wireless, and

online video growth continue to fuel the Internet's progress, the pace of innovation will continue to accelerate. Ultimately, the seamless integration of real-time, interactive, TV-quality video into every aspect of our daily

lives will have an impact on news – and on society as a whole – that is far broader and more transformative than we can even begin to imagine today.

The Internet & the future of news

ENDNOTES

- ¹ Irving Fang and Ann Norris, *The Story of Communication*, vol. 11, *Internet* (St. Paul, Minn.: Rada Press, 2005).
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- ⁴ Based on data collected by the Akamai network, which is responsible for delivering approximately 20 percent of all Web traffic. See Akamai's *State of the Internet, 1st Quarter 2009*.
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- ¹¹ This complex problem is explored in greater depth in the white paper "How Will the Internet Scale?" available at www.akamai.com/whytheedge.

Susan King

The Carnegie-Knight Initiative on the Future of Journalism Education: improving how journalists are educated & how their audiences are informed

I'm reminded of an old newsroom saying – “Better to be lucky than good” – when I look back at the almost seven years of the Carnegie Corporation of New York Journalism Initiative. It began as a somewhat unfocused reaction to the wholesale worry about the state of journalism at the end of the 1990s. The Board of the Corporation and the then newly appointed president of the foundation, Vartan Gregorian, wanted to respond to what was seen as an increasingly entertainment-focused news business shedding its values and foreign news bureaus faster than it could stop the red ink.

The need for a democracy to be strengthened by a vital news business was the impetus for the Corporation's initiative. After all, positive change cannot happen in school reform, the immigration system, in international affairs, nuclear nonproliferation, or the understanding of Islam – indeed, in almost any area of our national life or international relationships that lies within or beyond the scope of the Corporation's work – unless vibrant news media engage the American public about the issues of this still-emerging century.

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Since education is a foundational value and tradition at Carnegie Corporation, we decided to focus our initiative not on what was happening in U.S. newsrooms, but instead on what was happening within journalism schools at some of America's most prestigious research universities. That was the lucky part of our decision-making: our focus on a “pipeline” strategy that would affect the next generation of journalists. By 2009, the upcoming generation of newsmen and newswomen was clearly more critical to the debate about the news business than the middle-aged “leaders.” The revolution in news via the Web was challenging the financial model of even America's most secure newspapers, as well as transforming the entire way that the news is delivered, consumed, and produced.

There is an irony for me in the fact that Carnegie Corporation's journalism work began in Silicon Valley, where the Internet transformation was born, and that it took place at the home of Walter Shorenstein, who, already close to ninety at that time, represented the world of news as it was practiced in the last century. A successful businessman, Shorenstein has always been predisposed to the need for change. As a tribute to his daughter,

a well-respected CBS newswoman who died prematurely, he began the Joan Shorenstein Center on the Press, Politics and Public Policy at Harvard University. It is both a teaching and research center and a think tank, and is led by Alex Jones, a Pulitzer Prize-winning reporter. The Shorenstein Center could be described as an institution at the pivot point of assessing the changing landscape of news.

In 2002, at Shorenstein's California home, Alex Jones and Orville Schell, dean of the Graduate School of Journalism at the University of California, Berkeley, assembled a few dozen deans to assess the state of the news business and to consider where it was heading as the digital challenge emerged. The deans felt they were attracting some of the smartest and most experienced students ever. But they feared that the "dumbing down" of the news business – particularly in local television news, but also network television – and the abandonment of basic beats by newspapers threatened their students' careers. They saw a crisis brewing in the opportunities available for their students and toyed with the idea of creating some university-based news business that could fill this serious-news lacuna with student-produced news and analysis.

Many times during the three years after the Shorenstein gathering, a handful of deans strategized with Gregorian and me to think about the future of news and the role that a journalism dean at a great university might play in the national conversation about changes in the news business. Gregorian, a former university president, believes that deans and other members of the academy must take on leadership roles in society. He challenged five of America's top journal-

ism deans to become the nucleus for change in journalism education. This is the story of how a lucky strategy for changing journalism education has helped transform America's journalism schools and create an incubator for new forms of serious journalism.

Our conversations with deans began to frame a view of a journalism degree that demanded a higher quotient of intellectual pursuit along with the practical experience of producing news. In 2002, a dust-up at Columbia University, precipitated by Lee Bollinger, the University's new president, over selecting a new journalism dean, helped spotlight the need for subject depth in a journalism curriculum in addition to traditional skill-building. Too many schools of journalism continued to attract undergraduates who primarily wanted to take how-to classes to develop newspaper clips as well as radio and TV reels they could use to get a job. The emphasis on producing graduates ready to go out and get first jobs, rather than developing industry leadership, prevailed.

When Bollinger, a noted First Amendment scholar and lawyer, closed down the search for a new dean at the fabled Columbia Graduate School of Journalism, demanding that a dean must have the intellectual stature to lead a graduate program at one of America's most prestigious universities, he created headlines. There were guffaws and snickers that the academy was being pretentious about a business that had been built on the image of the hard-driving, hard-drinking, smart-but-maybe-not-schooled, "get me rewrite" reporter.

Carnegie Corporation did not want to enter into the age-old debate about whether journalism education demands intellectual rigor or is basically a skill-building experience. So Gregorian con-

vinced McKinsey & Company to undertake a pro bono study of journalism industry leaders to assess their need for journalism school graduates. The industry was in the early throes of a changing business model. Journalism jobs in the twenty-first century were bound to be different than in the last century – *how much* different was not yet clear. But the survey emphasized three clear needs in the industry:

1. A need for analytical thinkers with a strong ethical sense, as well as journalism skills;
2. A need for specialized expertise: insights into medicine, economics, and other complex topics, and firsthand knowledge of societies, languages, religions, and cultures; and
3. A need for the best writers, the most curious reporters.

If executives still harped on the same old saw that journalism education was not critical to the business, there was also a growing realization that the majority of the recruits entering newsrooms were graduates of journalism schools. Also, the dismantling of newsrooms, which had gained steam by 2005, meant that new recruits were not getting shaped by the culture of major news organizations, but had to arrive with a sophisticated view of their profession and their work.

Training of new recruits and editorial redundancy were two items that did not survive tough economic times. Bill Keller, executive editor of *The New York Times*, had been skeptical that journalism education was the cure-all for producing better-educated journalists. However, during a panel discussion in New York in January 2008, and before an audience of two hundred journalism faculty and students, he described himself as

a “convert to the cause of journalism schools.” Keller confessed that if asked if he believed journalism schools were necessary a dozen years ago:

I would have said, “Journalism schools – eh.” I didn’t go to a journalism school and we at the *Times* don’t hire people straight out of journalism school. We hire them from major newspapers where they’ve already had experience. [My advice would have been] . . . follow the traditional route: go find a decent local or regional newspaper, apprentice yourself to that mythical grizzled editor who will teach you the skills and the values of journalism, build a body of work and learn by doing. . . . [B]ut a lot of those local and regional newspapers no longer exist. Many of those grizzled editors have been bought out. . . . Nobody has the time to take you under their wing and teach you basic stuff.

Keller admitted he now realizes that since so many people at his paper and others do spend time in journalism schools, “it matters that that time be useful.”

The report that McKinsey produced for the Corporation in 2005, *Improving the Education of Tomorrow’s Journalists*, supported Gregorian’s view that journalism as a profession is too important to leave to the vagaries of experiential learning. The report also surfaced the belief of editors and news leaders that students need an array of skills as well as intellectual opportunities to investigate the world. It reinforced the vision emerging from the Corporation that university-based journalism programs need to offer students multidisciplinary opportunities such as those that integrate the role of religion in geopolitics, examine the place of medical advances in influencing policy options, and look to history for context in international

coverage. The world is changing at break-neck speed, and students need to know more.

Indeed, with every change in the news business, experienced, focused, specialized reporters are increasingly becoming the coin of the realm. Emerging as the news powerhouses are websites with deep coverage of specific topics like politics, health policy, business, arts, and international issues rather than “everyman” publications focused on broad topics. Along with innovation that requires Web skills, journalism schools have to be innovative in the kinds of subject courses they offer.

By the time the McKinsey study was complete, the Carnegie Corporation-sponsored conversations featured five prestigious universities and five leading journalism educators: Geoff Cowan, dean of the Annenberg School for Communication and Journalism at the University of Southern California (USC); Orville Schell, dean of the Graduate School of Journalism at the University of California, Berkeley; Loren Ghiglione, dean of the Medill School of Journalism at Northwestern University; Nick Lemann, dean of the Graduate School of Journalism at Columbia University (Lemann was the dean chosen by Lee Bollinger following a task force report the University created to examine what was needed in a leader of a major research university’s journalism school); and Alex Jones, director of the Shorenstein Center on the Press, Politics and Public Policy at the Harvard Kennedy School. These five crafted the three-pronged initiative that would win the backing of Carnegie Corporation and, just as importantly, the Knight Foundation.¹ Eric Newton, vice president for the journalism program at the Knight Founda-

tion, participated in the intense meetings during which the initiative was shaped. The deans put together a proposal for grant funding that emphasized:

1. The Corporation’s priority of curriculum enrichment;
2. An experimental learning lab – the News21 Incubators – that would, under the leadership of professors, dig deep into content learning while producing new forms of storytelling; this focus on innovation is a Knight Foundation priority;
3. Creation of the Carnegie-Knight Task Force, which would give the deans a leadership platform for research and for making policy-focused recommendations and statements about the news media.

Knight’s president, Hodding Carter, joined Vartan Gregorian in New York for the launch of the multimillion-dollar program in 2005. By 2008, with the involvement of Carter’s successor, Alberto Ibarguen, the initiative grew from the five original deans² who helped create it to include representatives of twelve universities. Along with USC, Berkeley, Northwestern, Columbia, and Harvard’s Shorenstein Center, the other institutions that joined the initiative as full players are the College of Communication, University of Texas at Austin; the School of Journalism and Mass Communication, University of North Carolina at Chapel Hill; the College of Journalism and Mass Communications, University of Nebraska-Lincoln; the Philip Merrill College of Journalism, University of Maryland; the Missouri School of Journalism, University of Missouri; the S.I. Newhouse School of Public Communications, Syracuse University; and the Walter Cronkite School of Journalism and Mass Communication, Arizona State University.

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A strategy, initially conceived by the Corporation to change journalism education with a few select, well-respected schools, became a strategy encompassing geographic diversity, private and public universities, and the strong, collaborative voices of top journalism school deans.

When the Carnegie Corporation challenge to journalism deans began, it was not envisioned as a long-term grant-making strategy. It was a call to action by prominent deans to take leadership in this moment of change in journalism and to make a difference. Once the discussions became serious and the deans outlined an action plan, Gregorian promised two years of funding but insisted that the president of each university underwrite the third year of the proposal from their own discretionary funds.

This grant condition was not intended to be a simple “matching funds” component, but rather a way to involve the university presidents – and involve them deeply, since it demanded a financial commitment on their part. Gregorian made trips to each of the first five campuses and won the presidents’ endorsements, which were followed up by a commitment in writing from each president. Gregorian believed strongly that university presidents often saw the journalism schools – no matter how excellent their reputations – as cash cows that did not need their attention and support. Gregorian wanted to change that perception, and when the next seven schools were invited into the Carnegie-Knight Initiative on the Future of Journalism Education, the presidents eagerly agreed to participate and cover the entire costs of the third year. By then the initiative had become prestigious and the presidents wanted their

journalism schools to be members of this major change effort. That the dozen deans now involved in the initiative continue to meet twice a year on one another’s campuses, and that the president of the university serving as the venue for the gathering always speaks to the assembled group at a dinner, is clear indication that these presidents are involved in the success of the venture.

But assessing other elements of the initiative is not so easy. The fall of 2009 marked the fifth year that journalism students were able to benefit from the change their deans have nurtured. However, it must be noted that some schools have benefited more than others. Some interdisciplinary, integrative courses have made a major impact on campuses, others not. News21, a summer powerhouse for students and professors alike, has yet to change the culture of experimentation across the entire curriculum. The revolving door of deans – the turnover is more rapid than we expected when we began – has meant many restarts and the need to get new leaders invested in a strategy they did not create or a grant for which they cannot take credit.

The University of Texas won a renewal for its curriculum work around covering the Latino community, an effort enriched by a strong partnership with three well-respected centers at the University: the Center for Mexican American Studies, the Brazil Center, and the Lozano Long Institute of Latin American Studies. The additional funding led to expansion of this work. Seeing the power of these “bridges” across the campus, Roderick Hart, dean of the College of Communication, and Tracy Dahlby, the new director of the School of Journalism, decided to create deeper relationships and new courses with other leading centers at the

University. They call their renewal strategy The 21st Century Journalism Challenge: Bridging Campus, Community, and the Digital Media Divide.

The University added courses that take advantage of the resources of many of its most significant campus centers and departments. One new course, Practicing Investigative Reporting in a Globalizing World, involves the faculty of the Lyndon B. Johnson School of Public Affairs, with its emphasis on both state politics and geopolitics. All new courses will involve challenging, rigorous curricular changes and will encourage students to produce reporting projects that will feature the University's newly upgraded news service, CapTex, a service offered to news organizations across the state.

With a new head of the University's journalism school, there was new energy and a willingness to lay out markers for metrics that could try to measure the power of these curricular changes – not an easy thing to evaluate and not a well-defined goal when we began in 2004 – 2005. Nonetheless, Dahlby outlined metrics that included measuring student demand, campus-wide involvement of UT Austin faculty and departments, industry involvement, and reader/viewer/listener comments on the CapTex website.

Those metrics were welcomed, but further tweaked by Lorraine Branham, the new dean at Syracuse's S.I. Newhouse School. Branham was well versed in the opportunities presented by curriculum enrichment grants; she had joined Syracuse University after leading the first phase of UT Austin's curriculum enrichment work as director of the School of Journalism. Reviewing the curricular experiments at the Newhouse School, Branham put her leadership behind one of the two experiments. Although legal reporting is a staple in many schools and such a program, with Carnegie Corpora-

tion funding, had been initiated as a new minor in 2006, it had not attracted enough students. Branham therefore decided to replace that minor with a science partnership that emphasized climate change and the environmental sciences. A second minor, also instituted with Carnegie Corporation support, focused on journalism and religion, featuring challenging courses in the geopolitical dimensions of religious thought; it, too, did not attract as many students as hoped. Nevertheless, Syracuse continued to develop the minor, believing it was a strong offering that could set the school apart.

The University of Missouri also received a renewal of its curriculum enrichment grant in June 2009 and decided to continue its emphasis on arts reporting, one strand of specialization that the journalism school had not been able to offer students before the Corporation provided support. Student involvement and faculty participation throughout the campus fine arts and performing arts schools were high, and Missouri was already certain that this incubated curriculum specialization would continue after Corporation funding ended.

When Ernie Wilson joined USC's Annenberg School as dean in 2007, he found that the initiative's support offered him the opportunity to encourage deans at other USC schools to collaborate. Following the University of Missouri's lead, Wilson wanted to strengthen USC's arts offerings since the University is known for its creative schools, like the USC School for Cinematic Arts. A new master's program was already under way as a result of the first round of funding, but Wilson wanted a sweeping campus-wide relationship with other schools. With the ability to offer Carnegie professorships to collaborating professors and formal

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cross-school courses, Wilson was able to negotiate an important interdisciplinary strategy early in his deanship.

The master's degree program in specialized journalism (the arts) is a partnership with the five art schools at USC: the Roski School of Fine Arts, Thornton School of Music, and the Schools of Theatre, Architecture, and Cinematic Arts. Tim Page, a Pulitzer Prize-winning music critic, was recruited to teach two courses in the new program: Arts Writing Practicum and Arts Criticism and Commentary. After the first year, the number of students who enrolled in the M.A. program has almost quadrupled. As Sasha Anawalt, director of arts journalism programs at the USC Annenberg School, puts it: "[Students] are learning to write well from Tim Page.... Good writing that contains original thinking and is inspired by exciting, solid ideas is – and will mostly remain – the program's bedrock."

Two schools turned to a less integrated strategy for offering their students exposure to the great minds at the university. At Berkeley, a course called Key Issues focused on a series of three big ideas each semester and was taught by major professors on campus who each lecture for a month. Each semester, the subject matter was chosen in light of major news events in the political or policy world. It was deemed so successful a way to expose their students to big ideas that Key Issues is now a required course at Berkeley's two-year graduate program.

Neil Henry, the new dean at Berkeley, was a professor who taught a course the first year of the Carnegie-Knight Initiative on African reporting that emphasized interdisciplinary collaboration. His interests allowed him to recruit a professor from the Center for African Studies at Berkeley. He became a total convert to

the idea of team teaching and what it offered students and journalism professors in terms of depth and insight. Henry's leadership as dean reflects that commitment to deeper content learning.

The Merrill College of Journalism at Maryland created a similar course, called the Carnegie Seminar, that also changes topics each semester. The students have taken on serious material, from Islam to nuclear proliferation. Some students, though they speak highly of the quality of the lectures, complained that the complexity of the subject matter made the course tough going. The professors confessed that they learned much about the need to communicate difficult ideas more clearly, especially because it is journalists who frame these issues for policy discussions.

Deb Nelson, who runs the seminar and the one-credit journalistic practicum connected with it at Maryland, has continued to choose topics that resonate with major news events. The course for 2009 focused on economics, and was so popular it was oversubscribed. Nelson, determined to keep the seminar culture of the course, and in order to offer the journalism students an intimate opportunity to interact with some of the University's star professors, found a "very large table" to maintain the seminar format.

Jean Folkerts, a new dean at the University of North Carolina, Chapel Hill, came to her position predisposed toward interdisciplinary curriculum. She believes journalism schools sometimes create rigid boundaries around the forms of journalism: documentaries, dailies, magazine writing, and multimedia, among others. She wants to keep the skill-building as a critical component in assignments students produce while also promoting deeper

learning in specialized subjects. She plans to do so by exposing students to the richness and culture of other schools and other departments, including business, public health, and law.

Within a relatively short time, Folkerts feels the University has already broken down walls in this respect. Professors in the department of energy frontier research who saw this past summer's News21 student reporting projects – which had emerged from the new interdisciplinary coursework – asked to partner with the journalism school on solar power experiments not only on campus, but also within the Research Triangle area. “This is a connection to an important initiative on the UNC campus and in the region and I think fulfills expectations of introducing a higher level of intellectual capacity into the journalism curriculum,” Folkerts reports.

Two interdisciplinary courses developed in the last year with the Kenan-Flagler Business School at North Carolina drew strong student attention in both the journalism and business school. Both courses focused on “of the moment” issues, Digital Media Economics and Behavior and Leadership in a Time of Change. The linking of business majors with journalism majors created unintended outcomes beyond the dynamic discussion from different perspectives. Extracurricular collaboration meant that when the Kenan-Flagler Business School mounted its annual Leadership Day, which features successful entrepreneurs and senior Fortune 500 executives, the journalism students were invited as well. The emphasis on entrepreneurship was also recognized by the University's vice chancellor for research and economic development, who committed supplementary funding to support a research study of the media's

handling of entrepreneurship over the past ten years.

Convinced that the intellectual capacity of journalism education will make the difference in the future, Folkerts has partnered with Nick Lemann, dean at Columbia, to produce a strategy for change in graduate journalism education. It will create clear standards for what is taught and what is learned by a student earning a master's degree in journalism, building on the boldest experiment under way in journalism education. At Columbia, a new M.A. in journalism requiring a mastery of politics, business, science, or culture and the arts is being offered along with the usual M.S. in journalism, which focuses on journalistic techniques.

This attempt to define graduate journalism education echoes the work a century ago of Abraham Flexner, who, with support from another Andrew Carnegie-founded institution (The Carnegie Foundation for the Advancement of Teaching) investigated medical schools in the United States and Canada. He called for an overhaul that set medical education in a new direction. As a result, many medical schools that did not have the intellectual capacity closed, but the standards developed during that time, and the focus on clinical practice, led to the superior reputation of American medical training. Flexner's success presents itself as a challenge to this current journalism reform movement, although it is not a perfect analogy. Unlike doctors, journalists do not need a certificate to practice their craft; but like doctors, they need theory and practice.

Folkerts and Lemann know that the marketplace will determine the real success of the change that is under way. Lemann tracks his new M.A. journalism students each year to document

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the opportunities they are finding in journalism. The results have been encouraging, with more than 80 percent of each new graduating class securing important, rather than simply entry-level jobs. Many have entered the brave new world of the Web, where their focus on deeper learning gives them an edge. Both Folkerts and Lemann also believe that a clear declaration of what it means to obtain a master's degree in journalism will signal to students and the industry that not all degrees are equal.

Since 2005, when this \$16 million experiment in journalism education reform began, the criticism has been that it is an elite strategy, housed more at centers of graduate work and not where most new journalists emerge. If the strategy of change works, the ideas that emerge from the dozen members will spread wider and influence how journalism is taught across the country, particularly to undergraduates.

Tom Fiedler, the new dean of the College of Communication at Boston University, knows intimately the curricular experiments that are under way across the country. After a thirty-year career at *The Miami Herald*, from reporter to executive editor, with a Pulitzer Prize on his résumé, Fiedler spent a year at the Shorenstein Center. While there, he, along with Wolfgang Donsbach of Dresden University, produced a mid-term report on curricular change under way since 2005 at the Carnegie-Knight universities.

As a new dean, Fiedler brought a determination to create a department that was an incubator for change and that echoed what he learned in his report for the Shorenstein Center. Fiedler was so influenced by learning about Flexner's strategy in changing medical schools that he borrowed the idea of that "clini-

cal practitioner," who had transformed medical education from one of theory to one that was both theory and practice. Fiedler established a position of clinical professor of journalism and hired a former Boston investigative reporter who could take advantage of the assets of the University and produce serious news for the Massachusetts community with the help of student research and know-how.

Fiedler, recently out of the news business himself, believes that it is crucial for universities to experiment with both interdisciplinary learning and new journalistic forms. It is this experimentation that he thinks will sow the seeds of success for both journalism education and the news industry.

Rich Gordon, associate professor at the Medill School of Journalism, has been experimenting since 2005 with the idea of interdisciplinary education at Northwestern University. Although he found the News21 incubators to be exciting opportunities for students, he does not believe the real innovation in journalism education resides there. He believes the innovation can be found in the way professors think and teach ideas to a new generation of students.

Gordon may be an apt spokesperson for what it means to change the way journalism is taught at a respected research university, having been involved in three different educational experiments at Northwestern. As a result, he has a good sense of what works and what does not. He acknowledges that all three experiments "jump-started" the kind of curricular changes needed to get students ready for a different profession.

His first foray into curricular change came in 2005, when he created an interdisciplinary, team-taught course that was a prelude to the summer News21

incubator. The seminar focused on the idea of “privacy, liberty, and homeland security – not a simple narrative thread that the mainstream media would naturally cover, or do well, and therefore a topic that needed experimentation,” says Gordon. By crossing disciplines, students learned the issues from different perspectives, paying attention to the areas where they intersected.

Gordon argues that this combination led students to ask better questions and follow story lines that were not clearly evident in the post-9/11 world – in other words, story lines that were innovative. That summer, one Northwestern student’s discovery that the Department of Education in the Bush administration was mining student loan databases for terrorist suspects made national headlines. The seminar also morphed into something broader. Northwestern has won a grant to create an entire track focused on national security issues. A minor is now being offered to graduate and undergraduate students around the issue of national security and liberty, and scholars are examining how audiences respond to this important but sometimes difficult-to-understand news subject.

Next, Gordon co-taught a course on statistics that he wanted to be “relevant, not watered down” for journalists, and that attempted to give them a foundation in the quantitative method. “It wasn’t successful,” Gordon says flatly. He gave up on the course, although Medill is still trying to craft one that will ground students in the important questions around statistics.

This past spring, Gordon created a new course on network theory with Northwestern professor Noshir Contractor, who holds a joint position in the Schools of Engineering, Business, and Communication. “It’s a hot area

of academic research in almost every discipline but not in communication and journalism,” says Gordon. But it is a course, he insists, that makes “a strong case for curricular innovation.” He believes this kind of interdisciplinary thinking offers students windows into the new world they will navigate, and therefore is even more valuable than the hands-on experience of the News21 incubators.

For Gordon, these three curricular experiments show the power of interdisciplinarity as well as its shortcomings. As he put it, the initial seminar on privacy, liberty, and homeland security “is living on”; the statistics course taught us “what not to do”; and the network theory course, in its first iteration, “will have an impact on our curriculum beyond the grant.”

What all these experiments in curriculum across campuses have in common is that they stretched the faculty, borrowed talent outside the journalism school, and, in an interdisciplinary fashion, approached subjects in new and experimental ways.

From the very beginning, Carnegie Corporation’s call for journalism education reform has been focused on a vision: a vision of journalism that exists to serve the public, a vision that is about deep thinking, and a vision dedicated to telling the unfolding drama of today’s history in a context that will keep the nation’s electorate informed and prevent it from being manipulated. That vision is also based squarely on the idea that the university should serve as the centerpiece in the process of developing reporters, editors, and producers who want to tell the stories of their times; who want to help ensure the freedom of the American public; and who expect to become mem-

bers of a profession worthy of its First Amendment privileges. It demands leadership from two university players: the president and the journalism dean.

That vision has driven our initiative, and it will be the key factor for judging the initiative in the future. We do not expect each and every grant to reveal a picture of a renewed world of journalism education. We *do* expect that the twelve deans, and the twelve university journalism institutions that have accepted the mantle of leadership in the Carnegie-Knight Initiative, will rise to the challenge by demanding more of their students, more of their faculty, and more of the industry. We ask ourselves each year, and we continuously ask the deans: a dozen years from now, what difference will this initiative mean to those who follow?

Over the next few years, we will not be supporting the deans with further grant funding. To continue its push for change, the Corporation has instead decided that it will use the convening power a foundation possesses to bring deans and their faculty together to examine the experiments under way on their campuses, to evaluate the News21 incubators to see if they are producing new ideas for storytelling that can serve the business, and to assess changes in the industry. Recently, the Corporation supported a few targeted research projects that are looking into the critical changes under way in the business models of news. Foundations do not make things happen, the people and institutions that they support do.

The Corporation will also rely on a few of the deans to take leadership roles in thinking about the future. Christopher Callahan, the dean of the Walter Cronkite School at Arizona State, has agreed to lead the three-year expansion of News21. (At the time of the renewal of the Corpo-

ration grant, in order to better serve all twelve members of the initiative, eight campus incubators were created that drew students from all twelve campuses, and Callahan assumed leadership of the experiment now involving more than ninety students each year.) Callahan has also begun searching for a sustainable model to cover costs after 2011.

As mentioned above, Columbia's Lemann is leading a small group with North Carolina's Folkerts to set standards for what a graduate degree in journalism should mean. Alex Jones has already stated that the work on journalism education is important enough that it will become a permanent part of the Shorenstein Center's work, which, until this point, has focused more on professional journalists than the "pipeline": a Web-based journalistic resource focused on issues will be open to all journalism professors and students.

We believe that the dozen deans now in the leadership seat at the twelve universities participating in the journalism initiative have an opportunity that few before them have had. They have a spotlight, they have standing, they have a community of like-minded deans who are not sleepwalking through accreditations and boring debates over how to teach on the "new" digital platforms. These deans have the chance to respond to the findings of the McKinsey report that began our initiative and to justify their role in building the news business of the future. They know that new journalists have to be smarter, better educated, more nimble and entrepreneurial than their predecessors if they are going to make it in a business in which the future is just being written.

We believe deans at journalism schools should have the same clout with the industry as deans from business schools

and medical schools have with their professions. Clearly, articles like this that focus on the changes under way erase what was perhaps an unfair reputation about most journalism programs: that they are bastions of old-timers who tell stories about the way it used to be in the golden age of journalism. I have found an energy in these twelve schools that are led by men and women who care deeply about the business and who, unlike many of their colleagues working today in the news business, have the luxury of being able to take risks. They are preparing their students for a new world of news, and although no one can say what that world will look like, most of the faculty are anxious to experiment with new forms as long as the journalistic values of information, evidence, analysis, and ethics are not compromised.

Market forces are eroding, reshaping, and changing the news business at a frantic pace, and the thoughtful, long-term thinking that exists in foundations often does not match the heartbeat of change under way in the com-

mercial media. But degree-granting institutions like journalism schools do not turn on a dime to embrace change, and for that reason, they are good partners with foundations. By definition, universities must constantly renew themselves, and although they are in constant motion preparing for the next semester, they also always have their eye on the next decade.

The real results of the Corporation's work in journalism will be seen a decade from now, when the graduates of these institutions (and graduates of other institutions challenged by our vision) are making the decisions about news. I do not know if these graduates will be making the decisions in great newspaper newsrooms, at small international documentary start-ups, in daily, city-focused Internet websites, or at their personal laptops connected to some virtual news "way station." But I do expect them to be defining the news that I read, watch, and hear. And I expect that news to be more informative, more multilayered, and more interactive than it is today.

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ENDNOTES

¹ Three reports have been produced by the Corporation to capture the evolution of the industry at a time of change: *The Business of News: A Challenge for Journalism's Next Generation* (2002), *Journalism's Crisis of Confidence: A Challenge for the Next Generation* (2006), and *Journalism in the Service of Democracy: A Summit of Deans, Faculty, Students and Journalists* (2008).

² Throughout this article, in referring to the five deans who helped to create the Carnegie-Knight Initiative on the Future of Journalism Education, I am including Alex Jones, whose title, as noted earlier in the text, is actually director of the Joan Shorenstein Center at Harvard. Jones's pivotal role in the early conversations about journalism education and his leadership of an important journalism-focused Center made him a valuable addition to this leadership team of deans.

Loren Ghiglione

Does science fiction – yes, science fiction – suggest futures for news?

If at first an idea does not sound absurd, then there is no hope for it.

– Albert Einstein

I long dismissed science fiction as fairytale foolishness banged out by hacks for barely literate adolescents. Such fiction was aimed at pimply teenage boys who purchased or purloined their sci-fi paperbacks from the bus-station racks next to displays of romance novels and the hardcore men's magazines in brown wrappers.

My doubts about speculative fiction echoed the reservations of philosophers, poets, and scholars, ancient and contemporary. Aristotle warned that no one can narrate what has yet to happen. John Donne dismissed as perverse those who undertake “to write a chronicle of things before they are done.”¹

A more contemporary commentator, the English literature professor Tom Shippey, described the revulsion by otherwise open-minded, sophisticated academic colleagues toward science fiction: “They ‘never read science fiction, just can’t read science fiction, don’t see how anyone gets anything out of science fiction.’”²

The presence in science fiction of many bits of hard-to-digest information that Shippey calls “not-true, but also . . . not-unlike-true, not-flatly- (and in the current state of knowledge) impossible” annoys those academic readers.³ They are troubled by technological gimmicks and fanciful otherworldliness. They are perplexed by intentionally confusing narrative and references to an unfamiliar, futuristic device, concept, or circumstance that the author has not fully explained.

They also may be bothered, I suspect, by science fiction’s subversiveness – its attack on reality and fact. Science fiction suggests illogical, counterfactual possibilities. A future based on those possibilities may threaten logical people who have thought of the future as something that can be rationally determined.

But, as I will try to make clear, science fiction, like a giant July 4th fireworks pinwheel, throws off flashes of potential futures for news that readers are not likely to encounter by reading the predictions and prefigurements of scientists and other scholars. However rational, however commonsensical, the scientists and scholars may fail precisely because they are rational and commonsensical. The writers of speculative fiction choose instead to explore ideas that, while not demon-

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strably possible, are “not-flatly-impossible.”

Can speculative fiction really offer anything important and fresh? Speculative fiction, I confess, rarely ranks as great literature. It does not dazzle with its character development. Its dialogue is often stilted.

Speculative fiction – really more about today than tomorrow – also cannot be counted on to offer consistently accurate forecasts.⁴ The science fiction writer Frederik Pohl compares the forecasting ability of speculative fiction writers to the accuracy of a broken clock. Assuming the dial of the clock contains the usual numbers, we can rely on the broken clock to be accurate twice a day. “If you put together enough science fiction stories,” the science fiction writer Ben Bova says, “some of the events described in the stories will come true, eventually.”⁵

But speculative fiction should not be judged by its ability to predict the future, which may be impossible to predict. Speculative fiction plays with trends and assumptions to describe what could happen. It provides “an arena for the exploration of ideas unavailable elsewhere,” writes Thomas Hine in *Facing Tomorrow: What the Future Has Been, What the Future Can Be*.⁶ This “subjunctive reality,” as the science fiction writer Samuel R. Delany calls it, is a way of examining what is neither impossible nor verifiably possible – a way of considering present possibilities by working out their consequences.⁷

The subjunctive reality of science fiction – the boundary enclosing the arena for the exploration of ideas – is difficult to define or describe. Do we understand the barriers, symbolic or otherwise, that separate the impossi-

ble from the possible?⁸ Do we know our limitations in trying to determine the order in apparent disorder, the regularities in apparent irregularities? Not until the 1970s, the science writer James Gleick suggests, did mathematicians, physicists, and other scientists begin seeking to understand different kinds of irregularities. Those irregularities would be lumped together under the shorthand name of *chaos*.

Scientists found chaos everywhere, Gleick writes – in the random, rising swirls of smoke from a cigarette, in the unpredictable flow of blood, and in the unanticipated behavior of turbulent weather.⁹ The physicist Paul Halpern argues that “incompleteness of knowledge is the rule rather than the exception.” He adds, quoting James Doyne Farmer, cofounder of the Prediction Company, that “science has come to realize that ‘there are always going to be inherently unpredictable aspects of the future.’”¹⁰ But even before the formal study and appreciation of chaos theory, visionaries questioned whether inventions and scientific and technological changes ever permitted what Herman Kahn called surprise-free futures – that is, futures based on current trends and foreseeable inventions.¹¹

For speculative fiction writers contemplating the future of news, the past is not prologue, the present is not a key to the future. In 1984, *Spring: A Choice of Futures* (1984), Arthur C. Clarke described how he would have responded to a magazine editor who asked him in 1842 to forecast the major changes of the next century-and-a-half. He guessed that he would have imagined the invention of photography and the increased importance of the steam-driven iron ship, the railroad, and the electric telegraph. But he doubted that he would have anticipated automobiles and heavier-than-air planes, the

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existence of electromagnetic waves, or the discovery of X-rays. “Any extrapolation based on existing technology – or even reasonable extrapolations of it – will always be hopelessly short of reality,” Clarke concluded.¹² Less than fifteen years later he could have added to his list of unforeseeables the Internet and other news-related inventions.

Speculative fiction often imagines futures based on scientific and technological advances that are not extrapolations from the present – that are, instead, advances of speed and scale that appear to confirm one of Clarke’s laws: “Any sufficiently advanced technology is indistinguishable from magic.”¹³ Bova says:

No futurist is going to predict that a semi-accidental discovery will transform the entire world. Yet the invention of the transistor did just that. . . . A futurist’s forecast of improvements in electronics technology, made around 1950, would have concentrated on bigger and more complicated vacuum tubes and missed entirely the microminiaturization that transistors have made possible. Science fiction writers, circa 1950, “predicted” marvels such as wrist-radios and pocket-sized computers, not because they foresaw the invention of the transistor, but because they intuitively felt that some kind of improvement would come along to shrink the bulky computers and radios of that day.¹⁴

Michio Kaku begins his *Physics of the Impossible*, which explores the world of phasers, force fields, teleportation, and time travel, with a simple, short warning that may be relevant to those who choose to write off speculative fiction: “We ignore the impossible at our peril.”¹⁵ Kaku, a physicist, recounts the attacks in the 1920s and 1930s on Robert Goddard, founder of modern rocketry. Critics insisted rockets could not fly in outer space because outer space provided

no air to push against. They dismissed Goddard’s rockets as impossible, as Goddard’s Folly. *The New York Times* sniffed condescendingly: “Professor Goddard does not know the relation between action and reaction. . . . He seems to lack the basic knowledge ladled out daily in high schools.”¹⁶

Scientists also widely believed in the 1930s that an atomic bomb was impossible. Physicists understood that, according to Einstein’s equation $E = mc^2$, the atom’s nucleus contains a tremendous quantity of energy. But the physicists did not focus on the significance of the energy released by a single nucleus. The exception was Leo Szilard. He recalled reading the 1914 H. G. Wells novel *The World Set Free*, in which Wells forecast the development of an atomic bomb for a war that would devastate the world.¹⁷

P. D. Smith, who chronicled discoveries that led to the development of the atomic bomb, suggests that Szilard’s love of speculative fiction explains his creative advantage over Albert Einstein, Enrico Fermi, and other peers who were slower to see the humanity-threatening applications of atomic energy. Looking back at the atomic bomb dropped on Hiroshima, Smith writes: “It was no idle boast when, in 1949, science fiction writer Theodore Sturgeon said: ‘There is good reason to believe that, outside of the top men in the Manhattan [Project] and in the Armed Forces, the only people in the world who fully understood what had happened on 6 August 1945 were the aficionados of science fiction.’”¹⁸

Writers of science fiction are, says Donna Haraway, “anthropologists of possible selves . . . technicians of realizable futures.”¹⁹ They are prepared to sacrifice the rational and commonsensical to the irrational and barely possible. Ironically, throughout history the

irrational and barely possible sometimes have turned out to be more than just possible.

In the nineteenth century, French writers of speculative fiction playfully envisioned new news media. Some were little more than extrapolations from the present. The novelist Emile Souvestre's *The World as It Shall Be* (1846) describes *Le Grand Pan*, "the paper that never sleeps," as a print version of 24/7 CNN, reporting the news in the year 3000 as it happens.²⁰ An immense roll of newsprint on large spools flows from the newspaper's building, endlessly snaking along waist high in front of cafés, shops, and reading rooms, then climbing to a third-floor subscriber's apartment and returning to street level, "hotly pursued by non-subscribers who hoped to snatch a little information as it went by."²¹ The behavior of the non-subscribers suggests the behavior of Internet users today who choose to read newspapers for free online rather than pay for subscriptions.

The French novelist Albert Robida's *The Twentieth Century* (1887) went further in updating the newspaper.²² Robida's novel imagines all-electric homes outfitted with telephonographs (news bulletins are delivered automatically through telephones) and wall-sized telephonoscopes (televisions) that are interactive. Subscribers at home can receive news and entertainment. They also can react to a televised opera performance along with the audience at the theater, applauding, booing, and even talking from home with friends in the theater audience.

The website TechNovelgy.com – "where science meets fiction" – highlights a story written about 120 years ago by Jules Verne and Michel Verne. "In the Year 2889" seems to be describing a modern news broadcast. Verne

writes about the *Earth Chronicle*'s being spoken, not printed, every morning to subscribers who, "from interesting conversations with reporters, statesmen and scientists, learn the news of the day."²³

Speculative fiction of the twentieth and early twenty-first centuries offers "not-flatly-impossible" worlds of news reporters and news media that imagine at least four other possibilities. First, speculative fiction plays with the idea of improving humans' ability to hear, smell, and see, acuities that would be especially useful to reporters. The reporter Clark Kent/Superman, for example, can see through anything, smell what humans cannot smell, and hear the quietest of sounds across a wider frequency than mere mortals. (Clark Kent/Superman to arms dealer: "I can hear your heartbeat. I know you're lying.")

Science fiction has a special fascination with improving the human eye of reporters to permit their audiences to experience what otherwise might be impossible. The television network boss (Harry Dean Stanton) in *Death Watch*, a 1979 movie based on D. G. Compton's *The Continuous Katherine Mortenhoe* (1974), implants a miniature camera in the head of Roddie the reporter (Harvey Keitel) so that, in a world where human death has virtually disappeared, he can film a medical aberration, Katherine Mortenhoe (Romy Schneider), who is dying of an incurable disease. Maya Andreyeva, the News One "telepresence" camera in Raphael Carter's *The Fortunate Fall* (1996), can transmit to viewers' heads a holographic memory of an hours-long interview: "The event seems vivid and complete."²⁴

Real-world research projects today recall bionic eyes from science fiction. A stretchable, silicon electronic "eye" camera – the size and shape of a human eye –

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integrates a transparent hemispherical cap and a simple imaging lens.²⁵ Such a device, already implanted in a small number of patients, restores vision to people blinded by retinal diseases. Researchers say a computer system's high-speed video cameras, acting as eyes, outperform the eyes of line judges and reporters at tennis matches, especially on balls ruled out that are actually in. (A 150-mile-per-hour serve travels faster than the human eye and brain can track it.)²⁶

Second, speculative fiction imagines various Others – avatars, androids, and cyborgs – in place of entirely human journalists. In the 1980s, *Max Headroom* – a British and U.S. television series, a video game, and a U.K. telefilm, *Max Headroom: 20 Minutes into the Future* – featured an artificial intelligence (Headroom) that succeeds Network 23's star investigative reporter, Edison Carter, who is unconscious and suffering from head injuries. (A copy of Carter's mind is downloaded into a computer, resulting in Headroom.)

The supposedly computer-generated Headroom delivers the news in a staccato, stuttering style, as if he is a computer. But in the mid-1980s, computer technology was not advanced enough for a full-motion, voice synchronized talking head; in the British television series, the actor Matt Frewer, covered in foam-and-latex makeup and a fiberglass suit, played Headroom. He was superimposed over a moving geometric background, which also was not computer generated.

Versions of Headroom began to appear in the real world of news less than a generation later. In 2000, the British news agency Press Association introduced Ananova.com, billed as “the world's first virtual newscaster.”²⁷ A text-to-speech engine read news stories while a parallel three-dimensional engine animated an attractive female face ringed with hip, close-cropped, green-tinted hair.

While Ananova, the digital news personality, did not survive, other experiments update the effort to broadcast news from computer-generated avatars. Kristian Hammond, codirector of Northwestern University's Intelligent Information Laboratory, has had his students creating computer-generated *News at Seven* virtual newscasts since 2006. Two young avatars – a woman in gray dress, dark sweater, and glasses and a man in knot-down red tie and white shirt, shirttails hanging out of his pants – present the news.

News Anchors: The Next Endangered Species? – a Miles O'Brien-narrated video posted by the National Science Foundation, which helped fund *News at Seven* – reminds viewers that human newscasters, in contrast to the *News at Seven* avatars, cost their employers significant salaries and have bad hair days. Other computer programs that are being developed by Northwestern's Intelligent Information Laboratory suggest that even more humans from the world of news may someday be threatened with extinction. Those programs, for example, generate movie reviews and baseball game recaps (bylined “The Machine”).²⁸ The Intelligent Information Laboratory's Hammond envisions generating coverage of, for example, Little League Baseball: “No one ever writes a game story for the thousands of games that get played each spring. But we could. And could do so in multiple languages.”²⁹

The idea of machines with bylines encourages us to consider what the literary critic Larry McCaffery calls “the basic paradigms and oppositions that we've relied upon to understand ourselves and our relationships to the universe – the categorical oppositions, for example, of organic/inorganic, male/female, originality/duplication (image/reality, artifice/nature), human/nonhuman.”³⁰

Science fiction dramatizes the human-nonhuman tension. Chester Hummin, the human reporter in Isaac Asimov's *Prelude to Foundation* (1988), turns out to be a robot, R. Daneel Olivaw; the R stands for robot. In *Made in U.S.A.* (1953) by J. T. McIntosh (a pseudonym of James Murdoch MacGregor), the morning after Roderick, a psychologist, marries Allison, an ex-copywriter, she tells Roderick, a human, that she is an android. He sues for divorce, despite a recent ruling that the android half of the population has full legal equality. Two reporters for *Twenty-four Hours* – Anona Grier, human, and Walter Hallsmith, android – cover the historic trial with the intention of ensuring fair coverage between them.³¹

The human-nonhuman opposition often evolves into something threatening. Clifford Simak's story "Skirmish" (1950) features a reporter's typewriter that talks back to him, a liberated sewing machine, and a giant computer that has escaped from Harvard University. The reporter worries that the freed machines could threaten humanity. Simak writes, "They might set up a machine civilization with Man as the servants of machines, with the present roles reversed."³²

Third, speculative fiction posits journalist-free dystopias. Norman Spinrad's *A World Between* (1979) takes place on Pacifica, an Earth-colonized planet where an inquisitive citizen can plug "into the electronic universe of the . . . media network," the Galactic Media Web. No reporters are necessary. "Through cameras, microphones, and screens," each citizen's hearing and sight "became not only planetwide but multiplex and compounded like the vision of an insect." Everyone's face and voice on worlds beyond, all of human history since videotape's invention, and

current news from every perspective "might march before her eyes at whim."³³

Drawing on cybernetics and communication webs, William Gibson's cyberpunk novels, beginning with *Neuromancer* (1984), introduce hackers and other high-tech lowlifes who prepare us for a twenty-first-century reality of fewer shoe-leather storytellers and more "hacker journalists" – programmers who massage computer databases, search engines, and other technology tools to dig up mountains of facts and other data.³⁴ Not surprisingly, the aggregators/editors equipped today to quickly digest the hacker journalists' work, speedily create Web pages, and link to the latest in breaking news are known by a word that comes from the title of a science fiction movie: RoboCop editors.³⁵

Fourth, speculative fiction questions notions of reality. Is, for instance, the universe three dimensional, four dimensional, or five dimensional? Science fiction writers often focus on the dimension of time – especially the possibility that journalists might someday be able to experience the past and exploit their knowledge of the future.

In Robert Silverberg's "What We Learned from This Morning's Newspaper" (1972), *The New York Times* beats the competition by printing news that will not occur for nine days. A brilliant scientist in John Buchan's *The Gap in the Curtain* (1932) offers several men the chance to glimpse the *Times* of London a year in the future; two think that they have read their own obituary, but guess that it is perhaps "a hoax or some journalistic blunder." One dies exactly a year later, one does not. Edward W. Manger, the *Beacon* correspondent in Charles Dickinson's *A Shortcut in Time* (2002), obtains the money for a world-circling jaunt by betting on that year's

winning Kentucky Derby horse and World Series victor “because a girl had returned from the future and told him to do so.”³⁶

Scientists long have regarded time travel as mind magic – a waste-of-time exercise of the imagination. But J. Richard Gott (“time travel to the future is possible”), Paul Davies, and other twenty-first-century scientists now treat the subject seriously. Davies, a physicist, writes, “Just the fact that time travel seems doubtful, or even impossible to us today, doesn’t mean that we can ignore its implications. It may be that easier ways to build a time machine will be discovered, ways that would not require the resources of a supercivilization.”³⁷

Historians, scientists, and others who have seriously addressed the future usually have preferred to call on reason and the scientific method, not magic or pure imagination, as their tools of choice. “Imagination” suggests the play of children – “Don’t let your imagination run away with you!” – not the serious thought of adults.³⁸ But do not discount the playful, powerful use of the imagination that characterizes the best of speculative fiction’s creative, counterfactual representations of the future.

The MIT Media Lab’s Marvin Minsky, an expert in artificial intelligence who has dabbled in science fiction, says that “a couple of hundred years from now, maybe [the science fiction writers] Isaac Asimov and Fred Pohl will be considered the important philosophers of the twentieth century, and the professional philosophers will almost all be forgotten, because they’re just shallow and wrong, and their ideas aren’t very powerful.”³⁹

Minsky credits Robert Heinlein’s science fiction for his interest in tele-operators. “And if we had all read the books

by [the science fiction writer John] Brunner more carefully,” Minsky says, “we would have had screens in our eye-glasses” in the 1980s. He says the movie *2001* introduced him to the idea that a computer might eventually be able to lip read: “I have spent years trying to devise computer lipreading systems.”⁴⁰

The thought experiments of speculative fiction may even help us face whatever real futures await us, says Orson Scott Card: “We have to think of them so that if the worst does come, we’ll already know how to live in that universe.”⁴¹ Our desires and fears are like voices inside ourselves debating what constitutes the good life and what threatens to end that good life. Speculative fiction about the world of news explores those conflicting voices. One voice embraces future communications technology and a utopian tomorrow, the other voice worries about the dangers of that technology to human privacy and envisions an apocalyptic future. One voice rejoices in an industrialized, urbane, increasingly urban existence in which all humans directly communicate the news to other humans without journalist intermediaries, the other voice worries about sprawling, oppressive megalopolises and yearns for the life of a small-town editor rooted in a remote village.

Drawing on myth, history, science, and the stereotypes and conventions of the present, speculative fiction creates worlds and characters that explore those conflicting voices. John Varley’s *Steel Beach* (1992) provides an example of the conflicting voices at work in speculative fiction, based on myth and movies, science and stereotypes. Following Earth’s destruction, the reporter Hildy Johnson, who has adopted the famous *Front Page* reporter’s name, covers Luna, Earth’s colony on the moon, for the elec-

tronic *News Nipple*. Johnson has a love-hate relationship with Luna. He loves living virtually forever and changing his gender at will. The Central Computer, the artificial intellect that runs Luna, keeps the air clean and comfortable and provides fabulous, if fake, sunsets.

But Johnson dislikes his/her job. Luna's inhabitants expect to experience the news from their info-nets instantaneously, and the news consists of "celebrity scandal, the pseudo-scientific breakthrough, psychic predictions, lovingly bloody coverage of disasters." The ultimate headline trumpets: "Win Free Sex Aboard a UFO to Old Earth."⁴²

Most reporters have gone to "Direct Interface." They interface with their computers not through a keyboard or microphone but, after entering an altered state, directly through their brain. Johnson, however, takes notes and writes stories on an old-fashioned "handwriter." By pressing the three rows of four colored dots of the handwriter, which is installed in the heel of his/her left hand, Johnson can write stories in shorthand, and, he/she says, "watch the loops and lines scrawl themselves on a strip of readout skin on my wrist, just where a suicide would slash himself."⁴³

Johnson also provides moving images from the holocam in his/her left eye. Johnson regrets failing to report momentous news – the five times when the human race almost came to an end – though the Central Computer reassures Johnson that "people don't want to hear these things because they don't understand them."⁴⁴

Depressed, Johnson moves to Luna's 1830s Disneyland village – New Austin, West Texas – to teach students reading (a skill really of no use anymore) and to put out a twice-weekly newspaper. Eventually Johnson has an operation that makes him/her asexual, becomes

New Austin's mayor, and tackles the evil as well as good done by Luna's Central Computer.

Varley's novel explores a concern with computers, television, and other technologies voiced by many science fiction writers. Even before the age of television reality shows best known for their unreality, these writers focused on the ability of the latest technological toys, especially television, to transform or avoid reality. In Ray Bradbury's short story "The Veldt" (1950), parents anger their children by threatening to take away their television room. The children use their television room – a giant three-dimensional television set that creates images, smells, and sounds from their imagination – to retaliate. The children imagine that lions devour their parents. The lions do.

Almost three decades ago, long before YouTube and Facebook, the science fiction writer J. G. Ballard said, "You're about to see the transformation of the home to a TV studio, in which we're each the star, director, scriptwriter, and audience of our own continuing movies."⁴⁵ In Ballard's *The Day of Creation* (1987), Doctor Mallory, the narrator, dreams of bringing a lifesaving river to arid central Africa. The river appears.

Mallory's rival, Professor Sanger, a television documentary maker, challenges Mallory's apparent creation. Sanger says, "Look at your river – that's a complete invention."

Mallory: "A television company might even have thought it up?"

Sanger: "Perhaps it did. And the difference? Sooner or later, everything turns into television."

Sanger concludes: "The truth is merely the lie you most wish to believe."⁴⁶

A postmodernist like Jean Baudrillard argues that the truth or reality that journalists observe is really a fiction anyway:

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science
fiction
suggest
futures
for news?*

“It is thus not necessary to write science fiction” because we already live in it.⁴⁷ Some experts argue that reality is so complex, so difficult to see, despite the power of modern cameras and computers to “see” what human senses cannot see, that we lack an adequately convincing vision of reality.⁴⁸ To Ballard that means the role of speculative fiction is “to invent the reality.”⁴⁹

The notion of inventing reality is not the exclusive preserve of speculative fiction. In Asia, computer-generated “news reports” now offer what *The New York Times* calls “Maybe Journalism,” which depicts events “no journalist actually witnessed – and that may not have even occurred.”⁵⁰ The animators at Next Media, a Hong Kong–based, Chinese-language entertainment and news firm, produce online video “daily-motion news reports” that guess at, for example, the facts surrounding the Tiger Woods SUV crash. The police may have said Woods’s wife was using a golf club to free him from the car, but the animators, programmers, and actors at Next Media show her chasing Woods with a golf club.

However pessimistic science fiction’s tales about the technologies of the present and future, such fiction often asks us to embrace change – spectacular, often sudden, change – as central to life. Speculative fiction’s almost religious faith in best understanding the world through understanding change permeates Octavia E. Butler’s *Parable of the Sower* (1993). In Butler’s dystopian United States of walled enclaves, drug-crazed arsonists, and death, the eighteen-year-old Lauren Olamina escapes north, recruiting followers to her embryonic faith called Earthseed. The secular religion’s credo is

All that you touch
You Change.

All that you Change
Changes you.
The only lasting truth
Is Change.
God
Is Change.⁵¹

Usually, speculative fiction asks us to be cautious in our assumptions about change. Humanity plays a children’s game called “Cheat the Prophet,” said G. K. Chesterton: “The players listen very carefully and respectfully to all that the clever people have to say about what is to happen in the next generation. The players then wait until all the clever men are dead and bury them nicely. They then go and do something else.”⁵²

Not surprisingly, speculative fiction, as a literature of change, keeps changing. The so-called modern genre of science fiction, associated with *Amazing Stories* (started in 1926) and other pulp magazines founded by Hugo Gernsback and his successors, first featured holy-cow stories. One such story, Isaac Asimov’s “Nightfall” (1941), appeared in John W. Campbell’s *Astounding Science Fiction* magazine. The short story stars a cocky young redheaded Saro City *Chronicle* reporter and syndicated columnist, Theremon 762, on the Earth-like planet of Lagash. For two months, a skeptical Theremon has written articles ridiculing astronomers’ efforts to have humanity take steps against an approaching darkness that threatens it.

As the light from the last sun, Beta, wanes, Theremon, out of habit and conscientiousness, keeps writing in his notebook for the article he plans to write the next day: “I’m a newspaperman and I’ve been assigned to cover a story. I intend covering it.”⁵³ But he realizes his work is meaningless. The eclipse occurs. Theremon goes mad and knows it. The long night of dark doom has arrived.

In the almost three generations since Asimov's story, speculative fiction has become a more sophisticated way of thinking about the future. Brooks Landon sees contemporary speculative fiction as "a language that must be learned or as a mode of writing as distinctive as poetry, complete with its reading protocols quite different from those used for reading other kinds of fiction."⁵⁴ The language of computers, the reality of virtual games, the existence of robots – all contribute to a different reading protocol, reinforcing the message of change.

Sentences like "The red sun is high, the blue low," and "I'm not human till I've had my coffee" need to be read differently in speculative fiction. Those sentences are "if" sentences, warning us that reality as we have known it now requires careful questioning. As Ursula K. Le Guin explains: "The reader can't take much for granted in a fiction where the scenery can eat the characters."⁵⁵

We do not know where the digital revolution and other transformative changes will take journalism or where world environmental crises, global terrorist threats, numerous nuclear-armed nations, and other potentially species-threatening challenges will take humanity and this planet. Will the availability on the Internet of infinite amounts of information make professional journal-

ists obsolete, the human horse-drawn carriages of the twenty-first century? In pursuit of audience will those journalists who survive, whether professionals or amateurs, redefine news to focus less on what we think of as reality and more on faux facts – make-believe news about society's sinners and celebrities that entertains but fails to edify? What reality or unreality will be the subject of journalists' work?

The novelist E. L. Doctorow, an inventor of reality who is not himself a science fiction writer, describes a secret of his craft. "A sentence spun from the imagination, that is, a sentence composed as a lie," Doctorow says, "confers on the writer a degree of perception or acuity or heightened awareness that a sentence composed with the strictest attention to fact does not."⁵⁶

Using the Big Bang theory of the origin of the universe as a metaphor, Doctorow attributes a little bang to writers' imaginations. Doctorow's description strikes me as an especially apt explanation of science fiction writing – of why the storytelling of speculative fiction, committed to the notion of extraordinary change in the world, may contain a significant measure of meaning and understanding about the potentially quite otherworldly future of news.

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Poem by Greg Delanty

In a Diner Above the Lamoille River

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The rocks below on the river trail foam fins
as if they swim upstream along with the salmon
returning to their spawning grounds, leaping
falls, freshets, the ancient anonymous struggle.
The fish age instantly to mottled old-timers,
dying in the nursing pools of their birth waters.
A tour group of elderly are the only other diners,
their skin mottled not unlike the salmon.
They seem to get along. They jaw about the weather,
the water height, the amount to tip.
One woman's trembling hand fills the diner questionnaire
with praise. I scribble this on the back of mine,
and tip the kind waitress a little more than usual.
She laid their steaming bowls like a priestess setting
her libation on the altar of trembling elder gods.

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Inside back cover: A man uses a mobile phone to record images of a protest in Tehran, Iran, in this undated photo made available June 22, 2009. The George Polk Awards in Journalism have recently, for the first time in the history of the Awards, honored work that was produced anonymously. The 2010 George Polk Award for Videography recognizes the efforts of the unnamed people responsible for recording the death of twenty-six-year-old Neda Agha-Soltan at a June 2009 protest in Tehran, and uploading the video to the Internet. John Darnton, curator of the George Polk Awards, said, "This award celebrates the fact that, in today's world, a brave bystander with a cell phone camera can use video-sharing and social networking sites to deliver news." Photograph © REUTERS via Your View.



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