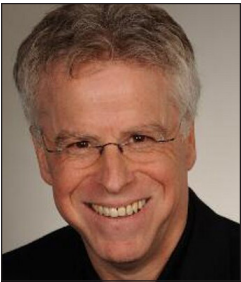


News as collaborative intelligence: Correcting the myths about news in the digital age

By Tom Rosenstiel

INTRODUCTION



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The state of news in America is a paradox.

Some dimensions of what citizens can learn about civic affairs and the world around them are clearly better. Technology has brought news tools that make storytelling far richer than we could have imagined a generation ago. Computers are connecting citizens, increasing engagement, adding more perspectives, more witnesses and a wider spectrum of voices to the news. By any number of measures, the demand for news is growing. And after a decade of worries that digital screens were shortening attention spans and destroying the demand for long-form journalism and a deeper understanding of public affairs, the data are now unmistakable that people do consume longform on screen (and that's because of rather than despite the smaller screens of tablets and smart phones). In the last three or four years, there has also been investment by venture capital in content creation companies, most of which, with time, are gravitating toward more serious subject matter to widen audiences and advertising. Even some developments that skeptics view with alarm, such as moves toward new sponsored and native advertising and revenue experiments, should be understood as efforts to improve on a first generation of digital advertising—banner ads and pop up ads—that consumers have generally resisted.

These unmistakable signs of growth, however, have to be balanced with clear signals of decline. Most newsrooms in America are drastically smaller than a decade ago—many half the size they once were—and they are still shrinking. From 2005 to 2013, the overall revenue of American newspapers, the primary outlets that cover local civic affairs, fell by 38 percent, and advertising revenue by 52 percent.¹ The same fall in barriers to entry in publishing that opened public debate to more citizen voices also opened it to those who want to mislead and manipulate citizens, which leverages the power of money even further. And finally, the promise that the web would democratize our media

system—“here comes everybody” in the age of “we media”—has largely proved elusive. Large media companies have been supplanted by even larger technology companies.

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This paradox in our news ecosystem, however, is not well understood. In part that’s because change is so rapid the picture often appears blurry. But we also struggle to grasp the state of media because too much of the discussion about it has resembled a philosophical debate rather than a dispassionate assessment. At the risk of oversimplifying, on one side of the debate have been people steeped in journalistic tradition but prone to nostalgic alarm about what is going away. On the other side has been a group

perceptive to the possibilities of technology but too often inclined to a kind of digital utopianism and even glee about what is being destroyed. As the two sides have dug in, the pitched battle has obscured something more basic—that journalism to thrive must embrace what technology makes possible and that technology to serve civil society must recognize what parts of journalism’s legacy should be embraced, built upon and made stronger.

This paper will attempt to avoid these battles and try instead to view the landscape of news with a cold eye. It will track what has happened to news since the advent of the public web roughly two decades ago and attempt to sort out what in that creative destruction has been creative and what has been destructive—from the perspective of citizens rather than journalists.

The answer to the question about whether the web’s impact on our lives has left us better off or worse off is almost always the same. That answer is both, for each technology, each platform and each media tend to carry with them different strengths and weaknesses. As technology changes, some abilities are enhanced and some wither, though old technologies rarely disappear completely. Rather than arguing about whether we are better or off or worse, the most pertinent question now is understanding *what is better, what we are losing, and what we can do about it.*

My answer to the question and the thesis of this paper is this: Technology has created the potential for a new kind of journalism, one that is richer, more compelling, and more accurate than what was possible before. Much of the potential is still ahead of us. And much of the progress toward it, as well as nearly all the investment in new media, is occurring at the national level, where scale and brand—the coin of the realm for startups—can be achieved most rapidly. The great crisis for American journalism and democratic society shouldn’t be thought about at the platform level—newspapers versus online or television versus streaming, social media versus traditional. It should be understood at the civic and geographic level. The crisis is local. That is where the shrinking is most severe and where there is least sign of growth. That is where the civic implications are most acute. And the changing economics of advertising may make that worse.

A VISION OF A NEW JOURNALISM

The most significant upside is that new technology offers the promise of a new kind of journalism I call “news as collaborative intelligence.”

In this vision, news is no longer a product delivered by one cohort—journalists—consumed largely in private by another—audiences—who then interact with each other in a mostly in an invisible way around a proverbial water cooler. The new journalism has the potential be a more dynamic interaction between these cohorts and at its best even a virtuous circle of learning.

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News as collaborative intelligence has three primary components. The first is the introduction of strength of computing power.

Computers with their ability to count vast amounts of data at lightening speed, have made our understanding of the world, and our journalism, more empirical, more numerical, and potentially more accurate.

The second element is the community, or the fact that networked citizens can communicate more easily. (Citizens, in Jay Rosen’s smart coinage, are “the group formerly known as the audience.”) At their best, connected citizens bring more perspectives, more views, and more collective experience to our understanding of the world than journalists could ever have achieved from their individual rolodexes. By adding new dimensions to the public’s voice, a networked community makes what is always something of a distant mirror for journalism—a nuanced understanding of the public mind—a little closer.

And what we once considered journalism—professional journalists—represent the third vital element of news as collaborative intelligence. Professional journalists add fundamental strengths that the first two elements largely lack. Journalists have access to interrogate people in power. They have ability, particularly working in organizations, to triangulate the intelligence of the computer data and the networked community. They have the storytelling skills to make the intelligence they have gathered more understandable to broader audiences, and the brand and market share to gather it in a common public square. And they have something else, though it is less well understood and sometimes criticized. Professional journalists, at their best, bring a discipline of verification and an ethos of open-minded inquiry that is different from those actors in media and society, including most citizens, focused on argument and persuasion.

(In some quarters, this aspiration of open-minded inquiry has been denigrated as the view from nowhere or the delusion of objectivity.² I believe that properly understood it is much more, and more valuable, than that. It is an aspiration toward getting the facts and the context down right, toward letting all sides presented make their best case, and toward empathy rather than advocacy. This focus on facts rather than argument is vital for a functioning democracy. It is like the carpenter’s level which makes sound argument possible and compromise permissible. It certainly is not achieved as often as any of us would wish. It may even be something that is largely unattainable in a given story. But the aspiration matters. The news is not from nowhere. It is, rather, always written to enlighten, to challenge and to inform rather than inflame or persuade the community it serves. Far from nowhere, as every experienced editor knows, the market imperatives have always dictated that this news be written with the view from exactly *here*—a pluralistic vision of whatever community you serve, be it geographic or demographic. If the news were produced otherwise, it would fail utterly as an economic proposition.)

In this vision of news as collaborative intelligence, journalists are not displaced by citizens or by technology. They complement one another, building on exploiting the unique strengths of each. For journalists, that involves making

data and social science a larger component of their work. It also makes listening a critical journalistic skill, listening and seeing citizens as allied resources to the work journalists do as observers, connectors and authenticators.

To get an understanding of the concept, consider the story of chess champion Gary Kasparov and IBM's supercomputer Big Blue, (notably recounted by author Clive Thompson in his book *Smarter Than You Think*). In 1997, IBM's computer decisively beat Kasparov in a six game match. The moment was viewed as a tipping point in the evolution of artificial intelligence. Kasparov, however, had a different reaction. What would happen, he wondered, if rather than competing, human and computer chess intelligence collaborated? The machine's way of thinking, Kasparov recognized, was fundamentally unhuman. The machines could hold vast amounts of data and can calculate at lightening speed dozens of moves ahead—far more than even the best chess champion—and Kasparov became exhausted trying to compete at these calculations. But Kasparov saw he had different skills. He had intuition, insight and psychology. Freed from the need to rely largely on memory of past champions, Kasparov was able to focus more on the creative texture of his play. He called the combination of the machine's ability to project moves and his own ability to be creative "advanced chess." And in a series of matches, Kasparov and computer together proved always superior to any software as well as any human player. The hybrid chess was simply better than either alternative. (It was also different. On his own, Kasparov was the best human chess player on earth. In combination with computers, other players, not nearly so good on their own, were better than he. In other words, advanced chess meant a changing of the guard.)³

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We have countless examples already of what this kind of collaborative "advanced chess" looks like in journalism. A snowstorm photographed by 1,000 people posting on Instagram will offer us a far richer pool of photos than the staff of any newspaper could by itself. But the photos become even richer if they are sifted by skilled photo editors. The tweets of a 1,000 eyewitnesses to a breaking news event will give us more information than that funneled through the police spokesperson. But those repetitive and contradictory eyewitness accounts become more useful when vetted by journalists skilled

at monitoring social media—identifying the faulty accounts, removing faked photos, corroborating key details. The knowledge of a thousand heart specialists responding to an inquiry on social networks by a journalist doing a story on faulty heart valves empowers that journalist far more than was possible before.

What is required for this new form of journalism to be realized on a broader scale? To understand that, we need to review what has changed in the news landscape and where it has helped our civic understanding and where the vulnerabilities are.

JOURNALISM AS LISTENING

Some news organizations, both legacy and new, have already taken significant organizational and cultural steps toward the kind of collaboration I'm talking about. Perhaps the closest systematic approach is practiced at the England-based Guardian newspaper organization, which calls the concept "Open Journalism." The crux of Open Journalism is that it sees listening as a core skill, the community as a partner in its newsgathering and social networks

as essential journalistic tools. As outgoing editor Alan Rusbridger has described it, it is built on ten core principles: 1) it encourages public participation; 2) it is not inert (the journalist to the public), or a static product; 3) It involves the public in the pre-production process; 4) it forms communities of interest; 5) it is open to the Web, links to it, collaborates with it; 6) it aggregates and curates; 7) it recognizes that journalists are not the only voices of authority; 8) it aspires to achieve and reflect diversity; 9) publishing is the start, not the end of the process; 10) it is open to challenge, correction, and clarification. ⁴

The Guardian is not the only legacy journalism organization to move toward listening both as a journalistic tool but also as a form of deeper engagement (and thereby increasing revenue). Deseret Digital Media, the LDS-owned media company in Salt Lake City, is among the most advanced media companies in the United States in embracing the potential of the web. It has built social spaces that are not formally connected to its newspaper or TV station (around subjects like family and faith, with names like [lovemymom](#), [lovemyfamily](#), and [Yo Amo a Mi Familia \[Familias.com\]](#)). It listens to the conversation of citizens in these spaces and then builds journalism that joins and informs that conversation. American Public Radio built the Public Insight Network, in which listeners register and reporters can tap that network to identify community members by their expertise.

No individual journalist has earned more recognition for using the community of voices to create a new connected journalism than Andy Carvin, who is now working at First Look Media. When the Arab Spring began in 2011, Carvin was a social media strategist at NPR. He quickly began to monitor the information being shared on Twitter by people on the ground in Cairo's Tahrir Square and elsewhere—then he began to triangulate, highlight, and redistribute it, tapping those same people to help verify the reports of others. Some sources he knew. Others he checked out. Carvin curated the collection in a way that was thoughtful and transparent, and his Twitter feed, [@acarvin](#), became a kind of news service of a growing number of authentic, credible voices few others could find.

Carvin calls the skills he used “situational awareness,” seeing the big picture by following his collection of on-the-ground voices speaking in real time. As journalist Monica Guzman has put it, “Carvin turned the random chatter into collected wisdom and gave that wisdom right back to the people who needed it most. All without writing a single traditional news story.”

Guzman, a young journalist from Seattle and a former columnist for the Seattle Times, is among the most articulate young voices about the power of journalism as listening. “In a world where everyone can participate in newsgathering, cultivating self-informing communities is itself an act of journalism,” she has written. “To accomplish it, we need to not only learn the language of these spaces, but also smart ways to join, respect and inspire the voices within.”⁵ In this way, Guzman has argued, community is not a means to an end for journalism. It is the end.

So the models for this new kind of journalism exist. They are no longer even individual or random. They need, however, to spread.

NEW STORYTELLING TECHNIQUES

Another clear positive change brought on by disruption is the potential for new forms of storytelling. One of the most important falls under the general heading of “data journalism.” It boils down to incorporating the power of a more empirical world into journalism, and doing so often in a more visual and less narratively dependent way. In this form of storytelling, the atomic unit of news is no longer the daily news story. The key piece of content may be a graphic,

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a dynamic timeline, a distillation of tweets filtered in real time—whatever element tells a given story best. Bill Adair, now a professor at Duke, created the fact checking news operation Politifact around factual claims—not stories—and turned those claims into “structured data” that are sortable and analyzable by users.

New storytelling forms include the ability to offer evidence and allow citizens to go deeper into texts or data or visuals through links, footnotes and other citation elements that were impossible in flatter technologies. Timelines, interactives, sortable databases, videos of key interviews and

so much more are now possible (my current list of story forms now counts over 60). The web makes every publisher potentially a multi-media outlet, free of the limits of time, space or platform. The advantage, in a nutshell, is this: traditional news stories require us all to enter in the same place (the lead). But not every citizen comes to subjects with the same knowledge. New story telling forms, especially when they are combined richly together, allow each of us to enter where we are ready to learn.

MORE CITIZEN ACCESS

The third obvious advance of the digital age is that it has given citizens more access to information they care about. Our geography imposes far fewer limits on what we can know. A young person passionate about earthquakes can delve into the topic wherever she lives. Someone in a small rural community with limited local media options can follow national or international news far more easily than before. This, for some topics at least, has mitigated the cutbacks news outlets have made. Many were alarmed, for instance, when newspapers such as the *Boston Globe* and *Philadelphia Inquirer* eliminated most of their foreign correspondents. To a measurable degree, however, audiences have simply shifted their behavior to get that information from other and perhaps in some ways deeper sources for international reporting, often from abroad. Consider, for instance, that among the top 50 news sources online in U.S. traffic in 2014 were six outlets from Britain—the *Daily Mail* (10), the BBC (15), the *Guardian* (17), the *Daily Telegraph* (29), the *Mirror* (40), and the *Independent* (41).⁶ And new technologies, particularly search engines and social media networks, have helped consumers discover more “new” and varied sources. In soon-to-be-published research we have done at the American Press Institute with Twitter, for instance, 67 percent of Twitter users say they have discovered new writers and commentators that they now follow both on that social network and elsewhere, and 45 percent say they have discovered new news organizations.⁷

NEW MEDIA ENTRANTS WITH NEW IDEAS

A fourth sign of vitality in the new news system, which is related to the innovations in storytelling and listening, is the advent of new publications with new approaches and thinking. Many, such as BuzzFeed, Vox Media, Gawker, Vice, *Huffington Post*, and *Politico* are examples of entirely new publishing companies. Others, such as Recode, 538, and subdomain news site Vox led by Ezra Klein were incubated at least initially inside legacy companies. But there is little doubt the level of innovation has accelerated beyond what was occurring before the advent of the web and the financial crisis and the prospects for innovation it brought with it.

What distinguishes these innovative companies is not only how many there are but how many have established substantial followings relatively quickly. Vox Media, for instance, has developed internal publishing platform software and pioneered a more attractive digital advertising display that is changing how all publishers display ads. BuzzFeed has been an innovator in understanding audience data, developing the idea that what material audiences will share (what it calls “social lift”) is an important measure of value and can even be predicted with data science, and, though it has been controversial, in developing new forms of advertising beyond banner and pop up ads. Ezra Klein and Nate Silver have raised the bar in using data to do analytical reporting. BillyPenn, led by founder Jim Brady, is a millennial focused mobile-first publication in Philadelphia experimenting with new ways to cover cities. Probably not since the dawn of the penny press in the late 19th century (brought on by cheap paper costs) has a single decade seen so much innovation by new media outlets.

CONCERNS THAT DIDN'T MATERIALIZE AS PREDICTED

At the same time, some changes on the Web that raised alarm in certain quarters haven't materialized, at least not as predicted. Many of these have to do with the fear—or hope—that what some called “citizen journalism” would come to displace the work of professionals. That prospect horrified many journalists. “The civic labour performed by journalists on the ground cannot be replicated by legions of bloggers sitting hunched over their computer screens,” Bill Keller, then the executive editor of the *New York Times*, said in a 2007 public lecture in London.⁸

Keller and others were reacting in part to the argument by some digital advocates that citizen journalism was an improvement over the deluded concepts of professional newspeople, and that in many ways professional journalism had now been rendered unnecessary by technology. “The Internet has solved the basic distribution of event-based facts in a variety of ways,” the AP's Jonathon Stray wrote at Nieman Labs in 2013. “No one needs a news organization to know what the White House is saying when all the press briefings are posted on YouTube. What we do need is someone to tell us what it means.”⁹ Stray was building on arguments of a host of writers who form what has been dubbed the Future of News Movement. No more articulate an expression of the ideas of the group has been put down than in the “manifesto” authored under the title *Post-Industrial Journalism* by three academics, C. W. Anderson, Emily Bell, and Clay Shirky. “The journalist has not been replaced but displaced, moved higher up the editorial chain from the production of initial observations to a role that emphasizes verification and interpretation, bringing sense to the streams of text, audio, photos and video produced by the public.”¹⁰ The journalist as fact gatherer is no longer necessary. She has been displaced. The journalist, instead, can simply synthesize and vet what comes to her from technological and citizen sources.

With time, we have seen that both the fear and the prospect were exaggerated. It has turned out most citizens have other things to do than spend time being amateur reporters. Rather than citizen journalism, we have seen the rise of social media instead, a space where people tend to act like citizens rather than journalists, which is to say they share news, voice opinions and act as occasional witnesses. Today, more than half of all adults and more than nine in ten Millennials say they share news through social media, messaging or email, according to research we have produced at the American Press Institute with our partners at the Associated Press and the National Opinion Research Center at the University of Chicago.¹¹

Social media raises different concerns than citizen journalism. The rise of citizens voicing their opinions in public spaces increases engagement (which is the point of journalism in the first place). But it brings with it more risk that we now move to commentary so rapidly that our understanding of the facts of any situation is more scant and

more faulty. In the end, this is as much a function of speed as openness. Cable news is barely less prone to rush to judgment than people posting on Facebook. The solution, or the solace, is that time has always tended to sort out the truth eventually.

A related concern about the move toward web commentary is tonal. Virtual communication, and particularly commenting sections of news sites, seems prone to a kind of misogyny and misanthropic malice. While some have toyed with eliminating commenting forums altogether, the better answer, according to veterans of digital publishing, is monitoring, filtering and policing commenting spaces.

Finally, one other concern raised early on about the rise of citizens and the decline of journalists as gatekeepers is the notion of the filter bubble, or the idea that people given more choice over their media will narrow their field of interests and begin to get news only from places where they feel ideological affinity. The research we have done at the American Press Institute with our partners at the Media Insight Project with The Associated Press-NORC Center for Public Affairs at the University of Chicago suggest that these concerns are to some extent overstated. Americans overall seem to have wide fields of interests they follow and different sources for different topics. Their sources, moreover, are not divided by ideology or even age demographics but topic expertise (ESPN for sports, tech publications for tech, etc). The exceptions to this tend to be the reliance by viewers on cable news for national politics. Interestingly, and contrary to what some might have feared, the growing role of social media in our news acquisition is probably mitigating against this narrowing, because in our social feeds people we know from many realms in our lives post material.¹²

Rather the rise of citizen connectedness or live streaming of government counsels displacing professional journalism, the bigger concerns about our news system are economic and have to do with the decline in the number of people who work in certain areas of news. To understand that, we need to take a close look at what has withered in the last two decades where there has been no significant compensation from technology.

THE POWER SHIFT AWAY FROM CONTENT CREATION

One change that should raise some concerns is a power shift in our media economy away from journalism institutions that create content and civic knowledge to companies that build technology and platforms instead. In the first two decades of the Web at least, content has not been king. Platform has.

One measure of this shift can be seen by looking at the places Americans now gather online. Take a look at the top 50 Web networks in audience in 2014, as measured by the rating firm Comscore, and we can see the pattern clearly. Of the 50 top destinations online (many of them combined websites and apps of different companies), 18 are platform or technology companies, including all of the top six, which dominate the traffic numbers (Google, Yahoo, Facebook, AOL, Amazon, and Microsoft).¹³ Another nine of the top 50 networks are information entities (such as WebMD or Wikipedia), all of them new since the advent of the Web. Two more are retailers that predated the Web (Walmart and Target). And ten are primarily entertainment companies (including those of the old broadcast and cable networks plus the NFL, Fox Sports, iHeart Radio, and Pandora). (The Top 15 on the list in order are Google sites, Yahoo's, Facebook, AOL's various networks, Amazon's, Microsoft's, the CBS Interactive, Comcast Universal, Apple, Mode Media [formerly Glam], Turner Digital, Wikimedia, eBay, Gannett Sites, and ESPN).

By contrast, just 12 of these top 50 digital networks where Americans gather could be described as primarily creators of journalism (Gannett, ESPN, Time Inc., Hearst, BuzzFeed, Conde Nast, *The New York Times*, Fox News, Meredith, Gawker Media, Vox Media). All of them, it is worth noting, are much lower on the list, and average less traffic. Add to these 12, four entertainment companies that produce some journalism (the three broadcast networks and the Turner group that includes CNN) plus two technology companies (Yahoo and AOL), and you have 18 of the 50 that produce some journalism.

As another measure of where the dynamism has occurred, incidentally, just three of these top journalism destinations (whether you count them of 12 primarily journalistic or 18 even partially) are new companies—Buzzfeed, Gawker, and Vox. By contrast, more than half, 31, of the top 50 digital networks overall, are companies founded in the digital age.

Another way of measuring the shift toward distribution over content is by looking at online advertising. In 2014, six companies accounted for more than half (53 percent) of all online advertising worldwide (Google, Facebook, Baidu, Alibaba, Microsoft, and Yahoo). And the concentration is even more acute in mobile, where the top six companies control 75 percent of all ad revenue. (Microsoft on that list is replaced by Twitter.)

There are signs now indicating movement now the other way—toward that idea that in a crowded marketplace good content will help distinguish one pipe from another. (This is a major reason why Bloomberg, whose revenue model is built around financial information, tries to distinguish that data with journalism it produces). For now, however, the power shift toward distribution rather than creation is one of the most dominant and unmistakable distinctions of the digital age.

THE DECLINE OF LOCAL NEWS

The other critical change of the digital era of news is away from what has been the traditional bulwark of American journalism—local news institutions—toward national. From the standpoint of democratic implications, this may be the most significant of all.

There are various signs of the trend. If we look at that list of the most popular digital networks, we see one signal. Of those 18 sites that produce journalism either primarily or in only part, just four are engaged in significant degree in local content creation—Gannett, *The New York Times*, Hearst, (through its newspapers, but not its magazines) and Conde Nast (through its Advance newspapers).

The same shift away from local news and local accountability is true if we look at a different list online destinations—the top 50 web networks that fall in the news category.¹⁴ (That list breaks some of the networks from the other list into subcategories). On the list of just journalistic destinations, 36 of the top 50 digital journalism networks are national in nature. Just 14 are local, or even include significant local components. This definition of local, by the

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way, is generous. It includes, for instance, Bleacher Report, a national sport blog site, because it localizes teams. My list of 14 also includes various sites whose audiences are not strictly local at all, such as *The New York Times* (No. 8) and *The Washington Post* (No. 11). The rest are large regional papers, the *Los Angeles Times* (No. 21), the *New York Daily News* and *New York Post* (20 and 22) and two sites from the *San Francisco Chronicle* newspaper family (25 and 32). While some might say national destinations are always going to have larger audiences, that was

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not the case in an earlier era. Publishing entities such as the *Los Angeles Times* or *Chicago Tribune*, because of their singular role in their markets, could boast readerships that exceeded many national publications. (The top 15 on this list in order are Yahoo-ABC News, CNN, NBC News, *HuffingtonPost*, CBS News, *USA Today*, BuzzFeed, *New York Times* brand, Fox News Digital Network, Mail Online/Daily Mail, *Washington Post* Bleacher Report, Business Insider, Elite Daily and BCC).

Another piece of evidence in the shift away from local is the number and location of journalistic boots on the ground. According to the Labor Department, the number

of journalists employed in the U.S. has grown in only two cities—Washington, D.C., and Los Angeles—over the last decade, the time period of the greatest media disruption. The number of journalists employed in Washington from 2004 to 2014 nearly doubled (from 1,450 to 2,760). The number in Los Angeles rose by 20 percent. In one other city, New York, the number of reporters employed remained unchanged. Everywhere else in the country, however, one out of every four reporting jobs disappeared, a loss of some 12,000 journalists—with many moving to public relations.

The numbers for newspapers puts the shift away from local news in particular into relief—given the intensely local nature of American newspaper media. Since a peak of 2001, when newspaper newsrooms could count 56,400 jobs, the number of journalists working in newspaper media has dropped by 35%, to 36,700 people.¹⁵ And there has been no commensurate growth locally in other media.

Even in Washington, D.C., the place where the labor data suggests growth, there has been an important shift in where those journalists work. A study of Washington journalists I co-authored in 2009 at the Project for Excellence in Journalism found that the number of journalists working in Washington had not dropped but had shifted—from general interest publications to foreign and specialized. While from the mid 1980s until 2008, the number of newspapers with bureaus in Washington had fallen by more than half, the number of specialty newspapers, magazines and newsletters has risen by half. Newsletters had grown by two thirds. Accredited foreign correspondents from abroad had grown even more—tenfold since the late 1960s.¹⁶

In other words, the crisis in American journalism isn't that we don't have enough people at the White House, though the makeup of that group has shifted. (Martha Kumar of Towson State University, probably the nation's leading scholar on the subject, notes that the White House traveling pool in April 2015 included such newcomers to the pool in the last decade as *The Daily Beast*, BuzzFeed, *The Daily Caller*, *The Guardian*, BNA, RealClearPolitics, The Root, and *Politico*.) The crisis is how few people now cover local, city and state councils of power.

These forces, away from local news and journalism, are reinforced by the changes in the way digital advertising works. National advertisers who once looked to local publications to reach audiences in different communities now can reach those same audiences—and know their geographic location as well as interests—without using local media sources. That is why the venture capital investments in media move to publications like BuzzFeed, Vox and Gawker. Commercial money for new media ventures is now flowing, but it moves toward those publications that can get to scale and brand as fast as possible—which are national publications and broad popular topics, not local civic news.

Why is this so concerning? To understand what might be lost from the shrinking of local interest and local news outlets, it is useful to understand for a moment how the old ecosystem of news worked.

UNDERSTANDING THE OLD LOCAL ECOSYSTEM

To a much greater degree than many other countries, the American media system has always been distinctly local. We have 1,350 daily newspapers and some 6,500 weekly papers. Yet in our legacy models, only three of our newspapers were national (*The New York Times*, *USA Today*, and *Wall Street Journal*). Some 600 local television stations have historically produced news around the country (and commanded by far the largest audience) while just six (the three networks and three cable news channels) were national. Radio was local. But by 2014, unburdened by the same regulations that governed the medium until the 1980s, only 19 cities still supported all-news commercial radio stations.¹⁷

For most of the last half of the 20th century, local media operated as much as an echo chamber as a competitive system. At the top, from a civic standpoint, sat local newspapers. Scholars Stephen Lacy, Frederick Fico and their colleagues have repeatedly found, for instance, that most of the news about civic institutions and government began in newspapers.¹⁸ What started in newspapers would echo then to a wider audience through the media distribution chamber. Stories that began in newspapers, if they were deemed to have wide enough interest, would be picked up and repackaged for a broader audience locally by television and radio and nationally by the Associated Press.

Some of electronic media's reliance on newspapers as their sentinel was a function of volume. A typical newspaper in 2006 contained about 70 stories.¹⁹ A typical 30-minute local TV newscast contained about 12. Some of this, however, was intentional, born out of the conviction by local television professionals that civic news won't engage audiences. A study of 2,400 newscasts, some 33,000 stories conducted over four years, crime accidents and disasters made up 36 percent of all local TV news stories (and 64 percent of all lead stories) while civic and political news made up just 10 percent (and eight percent of leads).²⁰ The same research also proved the conviction was faulty.

Some of the reliance on newspapers was a function of the number of people in the newsroom. A traditional rough formula for employment traditionally held that newspapers employ about 10 journalists for every 10,000 in circulation. The *Los Angeles Times* with a circulation of 1.1 million once employed roughly 1,100 editorial employees, while a 50,000 circulation suburban daily would employ about 50. The median Local TV newsroom, with millions of viewers, by contrast, is 34, and the top 25 markets have a median staff size of 70.²¹ In part local television stations were small because the newshole of a 30-minute newscast was small. But the more important reason for the small size of local TV newsrooms was financial. Local television stations were expected by Wall Street to bring returns of 40 plus percent in profit margins, and in smaller markets even higher.²² Paying for deeply staffed newsrooms to fill a tight newshole, whose correspondents wouldn't appear as often onscreen, was perceived to be an unnecessary expense.

As local newspapers have cutback on staff, however, that echo chamber has been severely constricted, with no significant compensation from other media.²³

THE NONPROFIT ALTERNATIVE

[A] disinterested evaluation suggests that at best the nonprofit prospect is a challenging road—and the gains come nowhere near matching the losses in commercial media—let alone the lost jobs, particularly at newspapers.

One hope, at least in some quarters, was some of the lost capacity in local news could be restored by funding a new cohort of local nonprofit media organizations, largely online. Various studies, usually by those either funding the sites or helping them try to develop skills, have tried to assess their sustainability. The latest, by the John S. and James K. Knight Foundation, tries to benchmark best practices and be a guide for how nonprofits can survive. But a disinterested evaluation suggests that at best the nonprofit prospect is a challenging road—and the gains come nowhere near matching the losses in

commercial media—let alone the lost jobs, particularly at newspapers. In its newest report, Knight estimated that half of the 20 nonprofits it studied had either flat or declining revenues year to year in the last three years.²⁴ A study I managed before I left the Project for Excellence in Journalism tried to assess the scale of that universe in 2012 and 2013. Taking every possible list of nonprofit news sites we could find, including scanning IRS reports and other lists, removing duplicates and then those that had not survived, we were able to identify 172 digital nonprofit outlets launched between 1987 and 2012. Most of these, 78 percent, reported having five or fewer employees. Half had revenues under a quarter million a year. Simply put, as Fico and Lacy concluded looking at the scholarly literature, there isn't enough money in the nonprofit sector to compensate for the losses in commercial media at the local level, particularly the roughly \$30 million annually that has departed newspapers.²⁵

FIVE PROPOSALS

In the end, the answer to the paradox of media is that many of the fears and hopes about the effects of technology were misplaced. Technology has hardly displaced the need for professional journalist. But rather than making reporting impossible, technology has enhanced the tools of gathering information and the means for presenting it. Nor has the rise of networked citizens threatened or replicated professional journalism or drowned it out. Technology also has not, as feared, demonstrably narrowed the interests of citizens in filter bubbles of ideological or topical isolation. Mobile technology and social media, rather, have enhanced the demand for news, made it more engaging and more present in our lives. The crisis is geographic and financial—and in a word local.

The question is what can be done. Here are five ideas that are steps toward moving the dynamism of media into more local spaces.

1. Build local networks of collaborative intelligence: The first is to view the technologies that many local publishers have seen as disruptive instead as opportunities. See social networks, mobile and technology as new ways to reach citizens in a more meaningful way. Begin to build, in the fashion of publishers like the Guardian, open collaborations with networks of local audiences. This requires, however, a new approach by journalists—one that involves listening as an act of journalism in a more significant way. It requires becoming a data and a digital technology company as

well as content creator. And it requires focusing on your function—as gatherers of civic intelligence—rather than on your platform—we are newspapers or TV operations.

2. Reimagine advertising: The second step is for local publishers to reimagine advertising. Advertising has always been something deeper than branding. From the invention of classified advertising by newspapers at the beginning of the 20th century, to the invention of radio and television advertising later in the century, advertising has also been information that consumers use to make choices, save money and feel that they are enhancing their lives. The advertising for a digital age to a large degree has yet to be invented (just as search ads did not exist 25 years ago). The future of advertising is something that will exploit the synergy of different screens and probably end in a mobile device. For mobile phones, while a smaller screen, have something older platforms did not. Mobile phones are personal—they are diaries, phones, photo albums and news devices all in one. And they are advertising in physical space, and advertising device one carries into the store and even uses to pay for the item.

3. Rethink coverage: Results of our content work: The third concept is to take charge of audience data at a new level and become empirically driven local businesses—both to benefit editorial decisions and local businesses. At the American Press Institute, we have developed a content strategy program to help local publishers understand their journalism at a deeper level. The content app involves meta tagging news for its journalistic characteristics, and thus transforms their traditional analytics—such as page views or time per story—into journalism metrics by telling publishers quantitatively what kind of journalistic qualities drive more people to read stories, read them longer, share them and read them days or weeks later. Without getting into too much detail, the findings show that stories driven by newsroom initiative (as opposed to reacting to the news events) generate 47 percent more engagement (a blend of views, time and social sharing) than other content. Major enterprise stories generate 44 percent more engagement. And within different topics, different approaches work best. In coverage, for instance, covering government meetings hurts engagement. Explanatory stories, watchdog stories and initiative stories, do far better. The point is that better coverage of key civic topics doesn't mean doing more stories. It means doing them differently, and moving to a more sophisticated understanding of data. And it is doable. The publishers we are working with have seen engagement of their key or franchise topic areas rise 21% with this approach. It requires editors, however, to see data as information that makes them better journalists, not a threat to their independence.

4. Embrace social: So-called millennials are the leading edge of our media future, from their embrace of mobile, and instant messaging to their use of social media as a primary means of acquiring news. Some early research about millennials, based on their tendency to not to take a direct path to newspapers or TV stations, even online, inferred that Americans under 35 were an inward and “newsless” generation.²⁶ That inference is false, as research by the Media Insight Project, and now reinforced by others, shows.²⁷ Social media, led by but not limited to Facebook, is a pathway to news, not a diversion away from it. In that sense, social media is no longer social. And just as it already has become for millennials, social media will increasingly become the pathway to news outlets reconnecting to new audiences that they do not currently reach, and through tight relevance around issues it is an extraordinary opportunity for local media.

5. Ask the existential question about purpose: Finally, for media to take advantage of the potential of technology requires publishers to ask the existential strategic question—what function do you play in the lives of your community? The answer to that question is not we produce print or broadcast news and sell advertising. The answer, at least my construction of it, is that publishers create knowledge and connections for citizens of whatever community

they serve, both on the news and commercial side. Platform increasingly has less relevance. Once a newspaper or television media outlet internalizes that culturally, it can begin to reimagine its business from the ground up.

These five kinds of changes are possible. A few local publishers, such as Deseret Digital Media in Salt Lake City or the Texas Tribune in Austin, Texas, are proof that innovation and success at the local level is possible. What it requires is vision, a plan that looks years rather than merely quarters ahead, and the recognition that incremental change is a prescription for further decline.

GOVERNANCE STUDIES

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ENDNOTES

1. Total newspaper revenue peaked at \$60.2 million in 2005 and had fallen to 37.6 by 2013, according to data compiled by the Newspaper Association of America. Ad revenue peaked at \$49.44 million and had fallen to \$23.57 million.
2. The term “the view from nowhere” is one used by Jay Rosen, but the criticism of objectivity goes back almost to its migration from social science to journalism in the early 20th century. In *The Elements of Journalism: What Newspeople Should Know and the Public Should Expect*, Bill Kovach and I argue that properly understood, objectivity was originally meant to refer to replicable and transparent methods, not journalists denying they have personal opinions.
3. Clive Thompson, (2013). *Smarter Than You Think: How Technology Is Changing Our Minds for the Better*. New York: Penguin Group.
4. Alan Rusbridger, speech to the Newspaper Association of America, 2013, attended by author.
5. Monica Guzman, *The New Ethics of Journalism: Principles for the 21st Century*, ed. Kelly McBride, Tom Rosenstiel (Thousand Oaks, CA: CQ Press, 2013), 206.
6. See Appendix II, Digital: Top 50 Online News Entities (2015) Data from Comscore derived by Pew State of the News Media 2015 report.
7. These numbers come from a not-yet-published study produced by the American Press Institute in partnership with Twitter and the research firm DB5.
8. Stephen Brook, “News Reporting Faces Web Challenge, Writes New York Times Editor,” *Guardian*, November 29, 2007; available at <http://www.guardian.co.uk/media/2007/nov/29/pressandpublishing.digitalmedia>.
9. Jonathan Stray, “Objectivity and the Decades-Long Shift from ‘Just the Facts’ to ‘What Does it Mean?’” Nieman Lab, May 22, 2013; available at <http://www.niemanlab.org/2013/05/objectivity-and-the-decades-long-shift-from-just-the-facts-to-what-does-it-mean/>.
10. C.W. Anderson, Emily Bell, and Clay Shirky, *Post-Industrial Journalism: Adapting to the Present* (New York: Columbia Journalism School Centennial, 2012), 22.
11. The data come from two studies by the Media Insight Project, a partnership of the American Press Institute and AP-NORC (a collaboration of the Associated Press and the National Opinion Research Center of the University of Chicago. The two studies are “The Personal News Cycle” and “How Millennials Get News: Inside the Habits of America’s First Digital Generation.” <http://www.americanpressinstitute.org/wp-content/uploads/2015/03/Topline-How-Millennials-Get-News-Media-Insight-Project-March-2015-FINAL.pdf> http://www.americanpressinstitute.org/wp-content/uploads/2014/03/AP_NORC_API-Personal-News-Cycle_Topline_March-18-Release.pdf
12. *ibid*
13. Comscore list: <http://www.comscore.com/Insights/Market-Rankings/comScore-Ranks-the-Top-50-US-Digital-Media-Properties-for-October-2014>

14. The data is taken from Pew State of the Media 2015, whose list is derived from Comscore. The analysis of the sites is done by the author.
15. Annual ASNE census of newspaper newsroom jobs <http://asne.org/content.asp?pl=121&sl=387&contentid=387>
16. Project for Excellence in Journalism, "The New Washington Press Corps," <http://www.journalism.org/2009/07/16/new-washington-press-corps/>
17. Project for Excellence in Journalism, State of the News Media 2013, "Audio By the Numbers." [Www.stateofthemedialife.org/2013/audio-digital-drives-listener-experience/audio-by-the-numbers](http://www.stateofthemedialife.org/2013/audio-digital-drives-listener-experience/audio-by-the-numbers)
18. Stephen Lacy, Frederick G. Fico, Thomas Baldwin, Daniel Bergman, Steven S. Wildman and Paul Zube, Dailies Still Do 'Heavy Lifting' in Government News, Despite Cuts, *Newspaper Research Journal*, V. 33 No. 2, Spring 2012, pp. 23-39; Stephen Lacy, Steven S. Wildman, Frederick Fico, Daniel Bergan, Thomas Baldwin and Paul Zube, How Radio News Uses Sources to Cover Local Government News and Factors Affecting Source Use, *Journalism and Mass Communications Quarterly*, 2013; Frederick Fico, Stephen Lacy, Thomas Baldwin, Steven S. Wildman and Paul Zube, Newspaper Coverage of County Government, *Newspaper Research Journal*; Frederick Fico, Stephen Lacy, Thomas Baldwin, Daniel Bergan, Steven S. Wildman and Paul Zube, Commentary About Government Both Broad, Diverse, *Newspaper Research Journal*, Vol. 33, No. 2 Spring 2012, pp. 100-114.
19. In 2006, my colleagues and I at the Project for Excellence in Journalism produced a comprehensive study of the media ecosystem nationally and in three cities. The report, called A Day in the Life of the Media, is embedded in the State of the News Media 2006 report, but serves as a valuable stand alone study. It compared what citizens could get from all media sources and offers a detailed sense not only of the range of content, but the sourcing and other characteristics of those stories. These findings come from there. Project for Excellence in Journalism, Day in the Life of the Media, <http://www.stateofthemedialife.org/2006/a-day-in-the-life-of-the-media-intro/>. The report specifically on newspapers can be found at <http://www.stateofthemedialife.org/2006/a-day-in-the-life-of-the-media-intro/newspaper/>. In 2015, the successor to PEJ, the Media and Journalism group of the Pew Research Center, produced an updated study adapted from the design of Day in the Life of the Media.
20. Tom Rosenstiel, Marion Just, Todd Belt, Atiba Pertilla, Walter Dean, Dante Chinni, "We Interrupt This Newscast: How to Improve Local News and Win Ratings, Too," Cambridge University Press 2007, p. 35.
21. http://www.rtdna.org/article/tv_news_staff_numbers_slip#.VWXeU1IViko
22. Tom Rosenstiel, Marion Just et al., "We Interrupt This Newscast."
23. Frederick Fico, Stephen Lacy, Steven S. Wildman, Thomas Baldwin, Daniel Bergan and Paul Zube, Citizen Journalism Sites as Information Substitutes and Complement for United States Newspaper Coverage of Local Governments, *Digital Journalism* 26 October 2012
24. <http://www.knightfoundation.org/features/nonprofitnews-2015/>
25. <http://www.journalism.org/2013/06/10/nonprofit-journalism/cite-non-profit-report-by-pew/>; Frederick Fico, Stephen Lacy, Steven S. Wildman, Thomas Baldwin, Daniel Bergan and Paul Zube, Citizen Journalism Sites as Information Substitutes and Complement for United States Newspaper Coverage of Local Governments, *Digital Journalism* 26 October 2012

26. These concerns have been raised repeatedly by researchers and authors, including Paula M. Poindexter in *Millennials, News and Social Media: Is News Engagement a Thing of the Past?* (Peter Lang Publishing, 2012); by various work from the Pew Research Center, <http://www.poynter.org/news/mediawire/225139/pew-surveys-of-audience-habits-suggest-perilous-future-for-news/>; and by political researchers such as Mark Mellman in “The Young and the Newsless,” <http://thehill.com/opinion/mark-mellman/230946-mark-mellman-the-young-and-the-newsless>. The term “newsless” appears in Poindexter’s book, in Mellman’s writing, and is the title of a book by Christina Tangora Schlachter, *Newsless: How the American Media is Destroying Democracy* (CSRL Publishing, 2009). - See more at: <http://www.mediainsight.org/Pages/how-millennials-get-news-inside-the-habits-of-americas-first-digital-generation.aspx#sthash.H6On1RHx.dpuf>
27. The most comprehensive work so far establishing the impact of social media and news—a combination of in-depth interviews in four cities and a nationally representative phone survey--was done by the Media Insight Project, the partnership of the American Press Institute and AP-NORC National Opinion research Center, *How Millennials Get News: Inside America’s First Digital Generation*, <http://www.americanpressinstitute.org/publications/reports/survey-research/millennials-news/>. This research was recently reinforced by research looking more narrowly at how Millennials get political information, conducted through an online panel survey by the Pew Research Center: Amy Mitchell, Jeffrey Gottfried and Katerina Eva Matsa, *Millennials and Political News: Social Media – the Local TV for the Next Generation?* <http://www.journalism.org/2015/06/01/millennials-political-news/>.