

## 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.<sup>1</sup>

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

---

© 2010 by Jack Fuller

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."<sup>2</sup>

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."<sup>3</sup>

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.<sup>4</sup>

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.”<sup>5</sup>

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.”<sup>6</sup>

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.

*What is  
happening  
to news?*

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.<sup>7</sup>

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 hissingly 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.”<sup>8</sup> 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.”<sup>9</sup>

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.

*What is happening to news?*

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

- <sup>1</sup> Walter Lippmann, *A Preface to Morals* (New York: MacMillan, 1929), 157.
- <sup>2</sup> Paul Ricoeur, *Time and Narrative*, vol. 1, trans. Kathleen McLaughlin and David Pellauer (Chicago: University of Chicago Press, 1984), 235.
- <sup>3</sup> Matthew Arnold, "Stanzas from the Grande Chartreuse," in *The Poems of Matthew Arnold, 1849 – 1867* (London: Oxford University Press, 1926), 272.
- <sup>4</sup> A full discussion of the implications of neuroscience for journalism can be found in Jack Fuller, *What Has Happened to News: The Information Explosion and the Crisis in Journalism* (Chicago: University of Chicago Press, 2010), from which much of this essay is drawn.
- <sup>5</sup> Martha Nussbaum, *Upheavals of Thought: The Intelligence of Emotions* (Cambridge: Cambridge University Press, 2001), 1.
- <sup>6</sup> Linda Stone, quoted in "A Survey of New Media," *The Economist*, April 22, 2006, 24.
- <sup>7</sup> William Barrett, *The Illusion of Technique* (Garden City, N.Y.: Anchor Press/Doubleday, 1979), 149.
- <sup>8</sup> Nussbaum, *Upheavals of Thought*, 109.
- <sup>9</sup> Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: Avon Books, 1998), 52 – 53.