

Columns can be as important to scholarship as monographs and research papers, but this is by no means inevitable. Here is my take on the most important qualities for good columns.

t's important to understand at the outset that columns aren't investigative journalism—though they can serve as its handmaidens by calling attention to key issues in the authoritative works of others. The column isn't an editorial and is no place for unbridled opinion and undocumented polemic. It should be a vehicle for thoughtful, well-reasoned, and verifiable arguments while serving as a conduit to ground-truth data from scholars, journalists, and other domain experts. The column's most important element is the links it provides to authoritative documents, Web resources, scholarly publications, the names of journalists or book authors, the works being conducted by legitimate research centers, and so forth; in this way it connects with legitimate journalism and scholarship with minimal clutter and distraction.

Columnists shouldn't be propagandists. Propaganda's chief spokesperson in the 20th century was public relations guru Edward Bernays. The first paragraph of his book *Propaganda* says it all: "The conscious and intelligent manipulation of the organized habits and opinions of the masses is

an important element in democratic society. Those who manipulate this unseen mechanism of society constitute an invisible government which is the true ruling power of our country." This idea was subsequently strengthened and reshaped by media critic Walter Lippmann into the prin-

ciple of "manufactured consent" (see also the rejoinder by Edward S. Herman and Noam Chomsky, *Manufacturing Consent*, Pantheon, 2002). Bernays and Lippmann envisioned their brand of "democracy"—what political scientist Robert Dahl labeled a polyarchy—as inherently paternalistic, controlling, and manipulative.

Propaganda serves a vital role in achieving compliance and obedience. Twentieth century German philosopher Martin Heidegger went beyond the rhetoric to build an entire alethic philosophy on such principles. He defined truth as "that which makes a people certain, clear, and strong in action and knowledge." (See the discussion in Noam Chomsky's "The Responsibility of Intellectuals."<sup>2</sup>) Heidegger felt that this postmodern conception of truth provided an effective antidote to the nihilism that could undercut popular support of the prevailing ideology or established power. Whereas Heidegger specifically used this concept of pragmatic truth to justify German National Socialism under Adolph Hitler, it's nearly ubiquitous in modern authoritarian regimes.

#### EDITOR HAL BERGHEL University of Nevada, Las Vegas; hlb@computer.org



Since the Nazis poisoned the p-word, euphemisms are used extensively. Phrases like "agenda journalism," "stakeholder journalism," and "corporate journalism" are surrogates. But it all comes to the same thing: propaganda. One characteristic of our current media miasma is that those who complain most vociferously about the aforementioned activities are likely to be using it to their own advantage. This irony is an outgrowth of propagandists' success with the mythical liberal media bias that has played so well for decades.

Propaganda is one of the more brutish and unsophisticated (but nonetheless effective) components of what media scholars like Neil Postman call "media ecology" (www.media-ecology .org/media ecology/index.html). The intoxicating body of research in this area is beyond our scope, but very relevant to more nuanced forms of thought-massage: agenda setting, framing, cueing, and priming. Such activities might be nuanced and even accidental. In the hands of skilled authoritarians, these tactics are far more dangerous to democratic principles than propaganda, especially when delivered by what media theorist Marshall McLuhan called the nonparticipatory but engaging "hot media" like radio and television.

Columns are no place for feelgoodery. We're drowning in a sea of political hype and hubris, historical revisionism, pseudo-scientific malfeasance, psycho-babble, unreflective nationalism, and false pride—all shoveled at mass audiences to mitigate responsibility for each and every deplorable condition in world affairs. We're not that innocent! Columnists should lead the charge against attack blogs, ambush media, aggressive memes, and Twitter bombs; and we must be vigilant in our efforts to eschew spin and focus squarely on facts. The columnist is an antidote to false beliefs

and provides checks on rampant cognitive biases.

The column must never be a writeonly publication—if it can't engage and connect with its targeted audience, it should be abandoned. The fact that columns aren't an original research vehicle doesn't absolve them from the responsibility of scholarship and the synthesis of important ideas. They should be engagingly objective and meticulously crafted.

Columns shouldn't act as apologists for any group or interest, because the benefactors of the hype and hubris mentioned earlier already have plenty. Interlocking networks of media outlets, think tanks (in most cases, meme tanks), ideological foundations, tax-exempt groups, front groups, training institutes, pseudo scholars, lobbyists, and political action com-

discourages any discussion that might be considered an irritant to the stakeholders. It's not likely that you'll see any earth-shattering exposés about Amazon Web services covered in *The Washington Post*. Nor, for that matter, will you see criticisms of Fox News's bias in captive media outlets like *The Daily Caller*. All media and publishing venues are vulnerable to such pressures, even if unwittingly and even if in service to the public or profession.

With increasing regularity, media outlets in service to special interests seek to keep important issues buried. More than that, although all individuals have a burning need for cognitive closure, for some readers this becomes pathological. They are constitutionally unable to deal with ambiguity and uncertainty, preferring instead order and regularity. These "cognitive closers"

# With increasing regularity, media outlets in service to special interests seek to keep important issues buried.

mittees already advance these objectives. Columnists shouldn't be polemicists, but they also shouldn't shy away from speaking truth to power. They enable the counter-narrative to flourish and the disinfection of mass media-induced putrefaction. This was precisely the problem during the Iraq War ramp-up in 2003, when nearly the entire press corps remained silent in the face of bogus claims made in support of the war. This widespread complacency made it possible to silence the few media personalities who did speak up, a phenomenon that I'll call the (Phil) "Donahue Effect."3

### **KEEPING ISSUES ALIVE**

Columns should keep important issues alive. The mass media miasma already

(read: close-minded) actually avoid any exposure to contrasting opinions. Although there are many published scientific studies on this subject, more accessible accounts can be found in recent books like The Republican Brain: The Science of Why They Deny Science and Reality by Chris Mooney (Wiley, 2012) and Conservatives Without Conscience by former White House counsel John W. Dean (Penguin reprint, 2007). Columns, therefore, might be our best hope of getting an alternative viewpoint presented to an unreceptive—if not hostile—audience. To be purposeful, these columns must not degenerate into sub-scholarly opinion journalism (for example, editorials and op-ed pieces), for that would be selfreinforcing and counterproductive.

Of course, demagogues and political hard-liners who might be content to be driven by base emotions such as fear, anger, jealousy, revenge, and so on aren't going to let fact interfere with opinion. Any column that isn't reinforcing ideology is wasted on them. Meanwhile, those who're both openminded and less deferential to other people making decisions for them are likely to benefit from challenging and thought-provoking columns.

A closely related requirement is iconoclasty. Most of us lead relatively active professional lives and are able to keep abreast of the issues most relevant to our career. Serious scholars look for resources not normally found in their routine course of work (most especially those from other disciplines), or thoughtful opinions that either complement or contrast with their own views. Such orthogonal input is the best source for deflection points on the otherwise basically linear evolution of ideas. Columns can cross this "Wallace line" of truth by breaking through shrouds of antiscience and Lysenkoism (skewing the scientific process to enforce an agenda or bias) that all too often rear their ugly

deductive inference, can be thought of as inference to the best explanations rather than probability estimates or necessary conclusions. Urbain Le Verrier used abduction in the mathematical prediction of the existence of Neptune in the 1840s: either the unobserved planet had to exist or the laws of celestial mechanics put forward by Johannes Kepler and Isaac Newton had to be rejected. There was no other good way, much less a better one, to explain the irregularities in Uranus's orbit. Neptune's presence was clearly the best explanation. Science and diagnostic medicine wouldn't be possible without abductive inference. In the same way, the column serves to document for the reader how a position is the best explanation of observed events. If the issues were amenable to deduction or induction, a proof, rather than a column, would be the appropriate medium.

These last two requirements, iconoclasty and abduction, are the technical foundation of a good column. Unfortunately, we live in a world where puerile opinion and sound argument are frequently given equal weight. This is the genesis of talk radio popularity, as pre-

The columnist must challenge the pageantry of misinformation that parades under the fraudulent label of news these days.

heads in popular science. Column editors should improve transparency on important issues, even if it results in the occasional affront to stakeholder interests. Distorted ideas grow in a political vacuum, whereas open discussion exposes the underlying illogic and irrationality of really bad ideas.

Columns should be an abduction engine in the logician's sense of delivering the best explanation of the events of interest. Abductive inference (http://plato.stanford.edu/entries/abduction), unlike inductive and

dicted by George Orwell in 1984 and Aldous Huxley in Brave New World and Brave New World Revisited, and amply exposited by Neil Postman in Amusing Ourselves to Death: Public Discourse in the Age of Show Business (Penguin, 2005). It's worth noting that Orwell defined a working vocabulary for what we now call talk shows: "newspeak," "duckspeak," "bellyfeel," and so on (www.orwelltoday.com/duckspeak .shtml). One of Huxley's great insights was that the dysfunction was distributed and cultural and not simply a

product of "Big Brother." For this reason, the columnist must challenge the pageantry of misinformation that parades under the fraudulent label of news these days.

## THE COLUMNIST AS CHIEF NUISANCE OFFICER

Finally, columns must inevitably be contextual, which could have political implications. It's unreasonable to expect science and engineering to be apolitical today. The aims of politicians, industry, and special interest groups of all stripes have long been forced on the broader scientific and scholarly communities: the Bayh-Dole Act is a paradigm case. Anti-science and agendascholarship are lucrative cottage industries for big tobacco, big pharma, political patronages, religious conservatives, and all manner of deniers and zealots who seek to distort scholarship to fit their own biases and agendas.

Illogic and unscientific methodology are increasingly injected into the silliest of positions on evolution, pollution, acid rain, endangered species, diet, stem cell research, climate change, the health effects of thirdhand smoke (big tobacco seems to have given up defenses of first- and secondhand smoke), genetically modified food, pesticides, and so on.<sup>5-7</sup> The most recent example of this is likely senator Ted Cruz's (R-Texas) proclamation that "global warming alarmists are the equivalent of the flat-Earthers."8 Cruz's attitude gives credence to Mooney's position that education doesn't necessarily decrease bias-on occasion it can actually increase it. Mooney calls this the "smart idiot effect" (www.you tube.com/watch?v=ANeW7U0qRKo), and anyone who has doubts about it should become familiar with social science studies of cognitive biases, a brief literature review of which will reveal a very long list indeed. And things just keep getting worse for the scientific community. As Dan Vergano reported in USA Today, former Surgeon General C. Everett Koop "testified that if he had been impeded in the same way as his

successors, some of his most important work—including reports on smoking and health—would 'never have happened.'" In today's world, a column that avoids any controversy is impotent.

Columnists who agree with my formula would benefit from independent wealth or proximity to retirement because speaking truth to power is always career threatening—just ask Dan Rather and Phil Donahue! But columns also bring rewards to their authors. First and foremost among them is the constant interaction with intelligent readers.

ppreciating conflicting points of view is an acquired taste and isn't likely to have universal appeal. Any column that attempts to be all things to all people will fail miserably. The columns (and blogs) that I read are targeted to a readership with which I self-identify. Any column worthy of the name will provide information and perspectives that I wouldn't otherwise have had. And by the way, this works in two directions. I use the Out of Band readership as a recommender system for new publications. I can say that thus far (though I make no guarantees for the future), I've purchased every book that thoughtful readers have recommended to me, and I've already read most. More importantly, so far this recommender system has proven to be 100 percent accurate—I've yet to read a recommended book that I didn't find interesting and important. This is infinitely more efficient and satisfying than trying to interpret reviews by strangers. The only downside is that I can't read the books as quickly as you can recommend them to me.

I've left the most important column requirement for last: a good column should make the mind smile.

#### **REFERENCES**

 E. Bernays, *Propaganda*, 1928 repr. 2005 by lg Publishing.

- N. Chomsky, "The Responsibility of Intellectuals," The New York Review of Books, 23 Feb. 1967; www.chomsky .info/articles/19670223.htm.
- 3. D.J. Bernstein, "Silencing Donahue and Anti-War Voices," Consortium News, 15 Jan. 2012; http://consortium news.com/2012/01/15/silencing -donahue-and-anti-war-voices.
- D. Byers, "Mickey Kaus Quits Daily Caller after Tucker Carlson Pulls Critical Fox News Column," Politico, 17 Mar. 2015; www.politico.com /blogs/media/2015/03/mickey-kaus -quits-daily-caller-after-tucker -carlson-204135.html.
- C. Mooney, Unscientific America: How Scientific Illiteracy Threatens our Future, Basic Books/First Trade, 2010.
- N. Oreskes and E.M. Conway, Merchants of Doubt, Bloomsbury Press reprint, 2011.
- S.L. Otto, Fool Me Twice: Fighting the Assault on Science in America, Rodale Books, 2011.
- 8. P. Bump, "Ted Cruz Compares Climate Change Activists to 'Flat-Earthers.' Where to Begin?," The Washington Post, 25 Mar. 2015; www .washingtonpost.com/blogs/the-fix /wp/2015/03/25/ted-cruz-compares -climate-change-activists-to-flat -earthers-where-to-begin.
- D. Vergano, "Science vs. Politics Gets Down and Dirty," USA Today, 7 Aug. 2007; http://usatoday30.usatoday .com/tech/science/2007-08-05 -science-politics\_N.htm.

HAL BERGHEL is an ACM and IEEE Fellow and a professor of computer science at the University of Nevada, Las Vegas. Contact him at hlb@ computer.org



Selected CS articles and columns are also available for free at http://ComputingNow.computer.org.

