

Book Review

Science journalism: An introduction

Martin W. Angler

Routledge Press, New York, NY, 2017 \$49.95
(Paper Back) pp. 348

Communicating science and technology through online video: Researching a new media phenomenon

Bienvenido León & Michael Bourk (Eds.)

Routledge Press, New York, NY, 2018 \$70
(Hard Cover) pp. 148

Ethics and practice in science communication

Susanna Priest, Jean Goodwin, & Michael F. Dahlstrom (Eds.)

The University of Chicago Press, Chicago, IL, 2018 \$40 (Paper Back) pp. 336

In the age of social media, personalized information, and digital experiments, science journalism sits upon a new frontier. Some see it in danger, with Dunwoody (2014, p. 43) writing: “science journalism is an increasingly imperiled occupation that, perversely, is needed now more than ever. In a world where both citizens and advertisers increasingly control their delivery of information via online channels, the kind of legacy mass media that have long served as the principal employers of science journalists—newspapers and magazines—are faltering in many countries. Journalists cut loose from these media organizations are scrambling to find their footing elsewhere.” Others see trailblazers standing up to a new age, with Hayden and Check Hayden (2018, p. 1) suggesting that, with a “broader media ecosystem awash

with low-quality, sensationalized, sometimes intentionally misleading material, science and environmental journalists and their allies have stood up to assert the value of rigorous, factual, independent coverage and scrutiny.”

It is in this contrasting frontier that it’s appealing to examine new books in science communication. These books often keep one eye on the principles and practice of various legacy media, espousing or critiquing traditional norms, while straining another eye to capture, and then articulate, an elusive digital future. The argument seems to be that those who read these books need to accept that flexibility and adaptability are now priorities, but that we are not yet ready to abandon the constant review of fundamental past practice, often propelled forward by the need for more extensive discussion of the ethics and moral values of science communication.

Martin W. Angler’s *Science Journalism: An Introduction* is a perfect example. Angler, a freelance science journalist who has published in *Scientific American*, *BBC*, and major German and Swiss publications, presents a new, practical guide. While Angler initially writes about definitions of science journalism as varied—“ask ten different science journalists and scholars, and you will receive ten different answers” (p. 3)—it is clear he has a vision for what practice looks like and intends the book to be used by those who want to be science journalists. Angler wants to cover the “whole science journalistic process” (p. 1), with chapters on finding stories, pitching,

interviewing, writing, and building a career (among others). Angler includes interviews with science journalists and lots of case studies and, by doing so, manages a fresh collection of additional voices that present a glimpse of science journalism as a diverse ecosystem of approaches and ideologies.

While the book is not an academic text that covers an expansive literature, Angler does recognize the need to bridge practice and scholarship on the subject. This may introduce scholarly references to newcomers, but also skews the cited academic sources to those that support ideas under discussion. This is not to say the book avoids debates in the science journalism (These are lively debates that cover many aspects of science journalism and the ethics of science reporting (Figdor, 2017))—there are instances, for example, in chapter eight, where the limitation of storytelling in science is broached (Angler, 2017, pp. 215–218)—but that the positive value of science journalism is clearly accepted, as the focus is on the practicality of the advice presented.

While Angler devotes a chapter to “science journalism in the digital age,” most of the book focuses on textual media. This is typical of many older books on science journalism, which, if they do address multimedia journalism, are not yet deeply exploring how principles may differ when applied to podcasting, visual storytelling, and virtual reality and augmented reality experiences. One of the advantages of digital media is certainly to provide new spaces for a variety of formats, so it is useful to expand this discussion with Bienvenido León and Michael Bourk’s edited collection, *Communicating Science and Technology Through Online Video: Researching a New*

Media Phenomenon. The book is the result of an international research project called “videonline.” According to the editors, the project included work from “19 researchers from nine universities across five countries,” reviewed more than 500 academic books and papers, and completed a content analysis of 826 online videos on climate change, vaccines, and nanotechnology. In contrast to Angler’s work on producing content, this book sought to ask: what is the texture and building blocks of these online videos?

León and Bourk’s collection sets some groundwork on the distribution and trends in the online science video ecosystem, including the presentation of a typology of 18 video formats by Garcia-Aviles and De Lara (chapter 2). Here, is it interesting that the book (for the three topics studied, at least) suggests that scientific institutions do not seem too interested in raising public awareness about science, as almost all the video content was produced by non-scientific institutions. Considering that all three subjects could be considered essential sci-tech issues and, to some degree, are considered controversial, this result points to how some major players may be absent from the video-based framing of public debates. We are, however, cautious on this front, as the work is heavily tied to the subjects chosen for the study: climate change, vaccines, and nanotechnology. When read together, however, Angler’s book does make us wonder how video content production on less controversial topics—such as theoretical physics and mathematics, where there are less immediate impacts on people’s lives—would differ.

While both books are valuable close-ups to understanding current practice and

video usage, they raise serious questions of how emerging digital spaces are linked to issues of responsibility. Science journalists and communicators are no strangers to the moral value of their stories. After all, ethical issues often exist at the core of controversial science, and discussions of watchdog roles are never far away. So it is fitting that this review end with Susanna Priest, Jean Goodwin, and Michael Dahlstrom's edited collection, *Ethics and Practice in Science Communication*, which is a healthy look at how ethics matters to professional practice. The editors suggest it is the first book of its kind: one that runs the gambit of topics, from risk to framing science to the use of narratives and a duty to communicate, all with a consideration that the "recognition that ethics is inherent in communication about scientific ideas is much overdue" (p. vii). The central message is not that we can ever hope to find "an explicit, comprehensive and coherent set of ethical principles to the way science is communicated" (p. 291), but that ethical actions can be seen as a way to protect our social group and that ethical principles are constantly in flux. As a set of standalone chapters on different aspects of ethics in science communication, it is a refreshing reminder that the communicators in Angler's and León and Bourk's books need to make up their own minds in fast-evolving situations. Grounding ourselves in reflective behavior may, thus, help us as we "move beyond an era in which science is generally accepted without question" (Priest et al., 2018, p. 295).

All three books have one thing in common: they show we are not through

discussing the models that guide practice (Secko, Amend, & Friday, 2013) and that the pace of change—specifically in digital media—is creating new spaces, with new challenges, new questions, and new obligations, all before we have had time to address past challenges. If we agree with Priest, Goodwin, and Dahlstrom (2018, p. viii) that "communication is essential for science to work at all," then the frontier—whether packed with danger or trailblazers—may indeed be a stage set for the most flexible.

References

- Dunwoody, S. (2014). Science journalism: Prospects in the digital age. In M. Bucchi & B. Trench (Eds.), *Routledge handbook of public communication of science and technology* (2nd edn., pp. 43–55). New York: Routledge.
- Figdor, C. (2017). (When) is science reporting ethical? The case for recognizing shared epistemic responsibility in science journalism. *Frontiers in Communication*, 2, 3, 1–7. doi:10.3389/fcomm.2017.00003
- Hayden, T., & Check Hayden, E. (2018). Science journalism's unlikely golden age. *Frontiers in Communication*, 2, 24, 1–3. doi:10.3389/fcomm.2017.00024
- Secko, D. M., Amend, E., & Friday, T. (2013). Four models of science journalism: A synthesis and practical assessment. *Journalism Practice*, 7 (1), 62–80.

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