
David Smillie

Comparative Issues in the History of Circumpolar Science and Technology
Volume 33, Number 2, 2010

URI: https://id.erudit.org/iderudit/1006155ar
DOI: https://doi.org/10.7202/1006155ar

Cite this review
institution embodies the changing social understanding of what is 'public'.” (p.19) “Academic capitalism does not involve ‘privatization’; rather it entails a redefinition of public space and of appropriate activity in that space.” (p.20) Perhaps, the next volume can explore in this direction.

GEORGE FALLIS
York University


There seems to be a move afoot in the history of science. A move away from laboratories and field stations to focus not on the generation of scientific knowledge, but on its spread into the wider consciousness. Many scholars have focused on the role of printed materials—textbooks, popular science books for children or science articles in periodicals—particularly in the 19th century. But any attempt to look at scientific communication in the 20th century has to come to grips with the advent of radio and television: two media so often marked by their ephemeral nature. How do you relate the importance of a medium that leaves so little trace?

This is the challenge Marcel Chotkowski LaFollette takes on in her immensely-readable Science on the Air. In her earlier book, Making Science Our Own, LaFollette looked at the rise of the Scripps Science Service—a noble (if ultimately futile) attempt to use scientifically-trained communicators to deliver quality science news to newspapers.

In this book, LaFollette takes a similar look at the early days of radio and television, when a band of idealistic communicators believed the new media could be more than mere entertainment.

The early days of radio seem to have been a glorious time for scientists as the first generation of radio stations—desperate to fill air time—found lectures and scientific discussions an effective (and cheap) way to fit the bill. Chotkowski focuses on early attempts by institutions like the Smithsonian Institution or the Harvard Observatory to use the new medium. The rapid rise of radio stations in the early 1920s created countless opportunities for scientists to take to the airwaves. But over time, as more attention began to be paid to audience size, and as radio stations began (later in the 1920s) to come together into larger, more powerful networks, scientists found it much harder to get airtime to deliver an unmediated message to a mass audience. Within the span of
little more than a decade, we move from Harlow Shapley delivering his own lectures on astronomy to actors portraying dramatic “recreations” of scientific discoveries (in which the science often takes a back seat to entertainment values). At the heart of the story is a fundamental conflict: the educational aspirations of scientists versus the desire of radio and television professionals to be entertaining.

The subtitle of LaFollette’s book, *Popularizers and Personalities on Radio and Early Television*, is telling, as she focuses as much on the personalities of these early popularizers as on what they said on the air. The result is a delightful read that manages to get under the skin of the early popularizers. One solution to the conflict between science and entertainment was the creation of hybrids: scientifically-literate communicators, rather than specialists talking about their own work. LaFollette zeroes in on popular communicators like Watson Davis, Austin Hobart Clark and Thornton Waldo Burgess as they attempted to make science entertaining to a broad audience. (It is interesting to note that the public face of science for the popular Disneyland TV series, Dr. Research, was not a scientist at all, but a professor of literature named Frank Baxter).

To get a sense of how effectively the scientific message was being transmitted, Chotkowski relies on contemporary accounts from newspapers and magazines, as well as on ratings to gauge how wide an audience the message was reaching. In the end, what is missing from the book (because it would be impossible to gauge) was what impact these early attempts at science communication and popularization had on public attitudes to science. To be fair, Chotkowski’s focus is on the people doing the popularizing, rather than determining what (if any) impact they had on scientific literacy. But the profiles do raise questions about how these early popularizers may have affected the public understanding of science in their day.

For the historian of science, Chotkowski’s book opens up potential new lines of research along these lines even as it raises other questions: How did the situation in countries with prominent, State-run broadcasters (such as Britain, Canada or Australia) compare with that of the decentralized United States? To what extent is there a “founder effect” in science broadcasting? (Do we owe so many of today’s skilled communicators of astronomy and cosmology to a post-Cosmos “Sagan Effect”?) And what about science in the broader popular culture? What impact do scientists as positive role models in the mass media have on public attitudes to science (even if they do nothing to promote science literacy)?

Chotkowski’s work may also be of interest to working scientists. Many scientists today seem to have a better sense of the importance of communicating their work to a wider audience. Countless science blogs
and podcasts attest to the outreach attempts being made by working scientists. But as Chotkowski makes all too clear: good intentions are not enough. To communicate effectively, to reach a broader audience, scientists have to understand their audience and the constraints of their medium, be it radio, television or the Internet.

As Edward R. Murrow famously commented in 1958 about television (but could have applied just as well to radio two decades earlier), “This instrument can teach, it can illuminate; yes, and it can even inspire. But it can do so only to the extent that humans are determined to use it to those ends. Otherwise it is merely wires and lights in a box.” LaFollette’s book gives us a glimpse of those humans who were determined to use the new media to teach, illuminate and inspire. In the end both radio and television ended up little more than wires and lights in a box. But as LaFollette makes clear, it was not the fault of the early popularizers. Rather it was the audiences who voted for lighter fare, and the radio and television producers, faced by commercial considerations, who gave it to them. To quote Murrow again, this time from his famous *See It Now* broadcast on the McCarthy hearings, “The fault, dear Brutus, is not in our stars, but in ourselves.”

DAVID SMILLIE

*University of Toronto*

**Environment / Environnement**


The authors of this book have undertaken the challenging task of charting the temperamental and wide-flowing waters of a single river, the Bow River in western Alberta, over the course of its human history. This is a formidable task and the authors should be congratulated on following up a tantalizing direction in research, particularly for environmental history. They indeed provide better understandings of the historical relationships between rivers and their tributary, adjacent and downstream human watersheds. In doing so, they have also bucked the well-worn channels of older approaches to the topic, Canadian histories that use rivers as a central theme to water their fur trade, staples and shield narratives. The writers consistently argue that this river’s long history sloshed back and