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Introduction to Sharon Dunwoody Memorial Issue

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# Abstract

This introduction to our February 2023 issue is intended to provide context for the issue content, which presents multiple examples of the ongoing influence of the work of the late Sharon Dunwoody. Contemporary research articles, commentary pieces, and the introduction itself reflect Sharon’s deep influence on science communication and science communication researchers and their work.

This special issue of *Science Communication: Linking Theory and Practice* honors Sharon Dunwoody (1947–2022), a colleague, friend, and mentor to many of us and a key figure in the evolution of science communication research and practice. Sharon died on February 4, 2022, just about a year prior to the publication of this issue. The three authors of this article collaborated this past year to produce this editorial project, a special issue of the journal intended to commemorate Sharon’s science communication research contribution and its influence by providing a glimpse at some of the recent work she helped inspire others to do, as well as document some of the history of Sharon’s research trajectories.

Sharon’s dedication to science communication helped shift it from a niche interest pursued by a handful of scholars to a broad and influential body of work that has been created and utilized by researchers and practitioners around the globe. Many of these folks are working to address the world’s most pressing issues, including climate change, natural resource depletion, and global public health. Indeed, a single journal issue cannot include a nearly wide enough range of material to fully reflect Sharon’s deep impact on our field. However, in these pages, we share what we think are a few especially excellent examples of the ongoing work she helped inspire.

# Who Was Sharon Dunwoody?

Sharon was one of the pillars of the academic community concerned with science communication, but she was a science writer and reporter before getting into academia. “I stumbled into science writing,” she once said, “became passionate about it, had the good sense to go on for a Ph.D., and have since enjoyed an academic career filled with training both young writers and young scholars” (Dunwoody, n.d.). She was a professor in the School of Journalism and Mass Communication at the University of Wisconsin–Madison from 1981 until her retirement in 2013 as Evjue-Bascom Professor Emerita, making her one of the longest-serving faculty members in the school’s history. Among her list of accomplishments during that time these stand out:

* Won the Deutschmann Award from the Association for Education in Journalism and Mass Communication (AEJMC), for those who produce a significant body of research over a career. She was only the second woman to win the award.
* Directed the UW-Madison School of Journalism and Mass Communication for 5 years, the first woman to hold that position. She also served as an associate dean of the UW-Madison graduate school.
* Served as president of AEJMC and the Midwest Association for Public Opinion Research (MAPOR).
* Served on the governance faculty of the UW-Madison Gaylord Nelson Institute for Environmental Studies and as head of the university’s Center for Environmental Communication and Education Studies.
* Served as board member and chair of the Aldo Leopold Foundation, the mission of which is to foster Leopold’s Land Ethic, awakening an ecological conscience in people throughout the world.
* Served as a Fulbright lecturer in Brazil, a visiting Journalism Fellow at Deakin University in Australia, and a guest professor at Stockholm University.
* Elected fellow of the American Association for the Advancement of Science, the International Communication Association, the Society for Risk Analysis, and MAPOR.
* Helped found the UW-Madison Sharon Dunwoody Science Journalist in Residence Program, which brings notable reporters to campus to interact with leading researchers. Sharon continued to lead the program even after she retired in 2013.

In 2019, the UW-Madison School of Journalism and Mass Communication created the Sharon Dunwoody Early Career Award to honor PhD graduates of the school for their research and teaching.

Despite this array of accomplishments and honors that brought her well-deserved national and international acclaim and recognition, Sharon was quite down to earth. She would at times refer to her career whimsically, describing herself as “being in the professor business.” Someone could chat with her at length about a variety of topics, academic or not, and not get a single clue about her achievements. She was humble, incisive, thoughtful, generous, humorous, and kind, a person with exemplary judgment and high integrity. One of her long-time colleagues, Debra Blum, once summed it up nicely:

Sharon was so kind, so soft-spoken, so generous in her manner that it was sometimes easy for people to forget that she was an internationally known star in the field of science communication, a researcher whose studies of communicating uncertainty and scientific ethics were among the best in the world.

Sharon often said that one of her specialties was “explaining complicated stuff in writing” (Dunwoody, n.d.). She accomplished that with grace and clarity, in her teaching and mentoring, and in an extraordinary number of publications that included more than 60 refereed journal articles, more than 50 other reports and professional publications, six books, 38 book chapters, and at least a hundred conference papers and presentations. Sharon continued producing works even after she retired. Those who coauthored works with Sharon often found ourselves learning from her. “Let me fiddle a little more with the wording,” she would say when finalizing a draft with collaborators, and then work her alchemy to turn some staid academic phrases into pure, golden prose.

Sharon’s research explored a variety of topics, including the teaching of statistical reasoning to journalism students, but the bulk of her research illuminated how scientists use their interactions with media in their scientific work, how mediated science and environmental messages are produced, and how people seek and process information from media to help inform their judgments about health and environmental risks.

It was in collaborating with Sharon and others on a series of studies of risk communication, starting in 1990 and continuing time and again over three decades, that one of us (Griffin) learned to admire one of Sharon’s superpowers: She could be chatting about birding, your latest trip, the UW Arboretum, or even the weather, and then when the discussion shifted to research, she continued in such a casual tone that ideas just flowed back and forth with ease.

# The RISP Model

Griffin recalls that Sharon set such a conversational tone in the mid-1990s when she, Kurt Neuwirth (now retired from the University of Cincinnati), and he met repeatedly to plan a complex, three-wave panel design survey research project. The three had just received a 3-year grant from the federal Agency for Toxic Substances and Disease Registry to explore how people use information to make judgments about the risk of eating sport-caught fish from the Great Lakes and how to minimize those risks. The survey sampled many hundreds of adults in the Milwaukee area (on Lake Michigan) and the Cleveland area (on Lake Erie). Those who did not qualify to be asked about eating the fish were asked instead about risks from drinking local tap water or environmental risks to the Great Lakes ecosystem.

Their journalism backgrounds made this team curious about how and why people learn scientific and risk information informally, and what they do with the knowledge. Again and again they wrote and erased several theoretical perspectives on blackboards, eventually arriving at a blend of the Heuristic Systematic Model of Information Processing (Chaiken & Ledgerwood, 2012; Eagly & Chaiken, 1993) and the Theory of Planned Behavior (Ajzen, 2005; Ajzen & Schmidt, 2020). The approach and measures were tested and evaluated multiple times, in surveys and focus groups, before going into the field.

The result was the Risk Information Seeking and Processing (RISP) Model (Dunwoody & Griffin, 2015; Griffin et al., 1999). RISP has since generated more than a hundred empirical studies in communication and interdisciplinary journals (Liu et al., 2022). Sharon once said that she was delighted that the RISP model had been adopted and tested by other scholars so many times, including internationally. RISP certainly is part of her legacy and contribution.

# Sharon Dunwoody as a Mentor

Lee Ann Kahlor (our journal’s incoming editor), speaking from her perspective as one of Sharon’s many mentees, confides that when she enrolled at the University of Wisconsin–Madison for her PhD in mass communication in the late 1990s, she was a little lost. She felt she had joined an impressive cohort of confident students who seemingly knew exactly what they wanted to study; they all seemed to be productive researchers immediately. She, on the other hand, was self-funded and may have suffered from what is now recognized as the “imposter phenomenon.” She recounts that her parents did not have college degrees and only one of her siblings out of four had graduated from a 4-year university, so she felt she was not as savvy as she could have been, walking into one of the best mass communication PhD programs in the world. But she feels she got very lucky.

During her first semester, Kahlor applied for a research assistantship with Sharon and was selected from a small pool of applicants. She still remembers the phone call when she was told she was hired—it felt like the proverbial “big break.” She also felt it was a risky decision on Sharon’s part because it was still unknown what Kahlor could do research-wise. Kahlor reports feeling forever grateful that Sharon must have seen something in her. She held the position for several years and her main role was to support theory and scale development Sharon had undertaken with Bob Griffin and Kurt Neuwirth. Having studied under Griffin when she earned her master’s degree at Marquette, Kahlor felt her work as a research assistant was especially meaningful because she was able to witness the birth and the evolution of the RISP model, described above. The model—and seeing what it took to build it—still influences her research today.

Her affiliation with Sharon, Kahlor reports, taught her how theory and research grow from seeds gathered in collaboration with others. She also learned that germinating those seeds and nurturing what grew was a joyful, albeit sometimes tedious, process. She learned to enjoy the never-ending growth that comes with an open and curious mind, rather than getting bogged down by what she didn’t know or couldn’t yet do. Almost 25 years later, she adds that she can still say that Sharon was the most generous and influential mentor she has ever known and feels as though all of her teaching and research is in some way imbued with Sharon’s presence.

She is also reminded of Sharon when she laughs with students in her classes, often at herself or something she said, because she learned from Sharon not to take herself so seriously. Kahlor added,

I am reminded of her when I work in my office with the local public radio station playing softly in the background, just as she worked in her office. I am reminded of her when I edit collaborative research papers. Sharon taught me to edit—“fiddle” as Bob recalls—rather than just make vague suggestions for improvements. This is something coauthors either love or hate. I get it, though.

She says that the first time Sharon edited her work she was taken aback, until she saw how much better her writing had become through active collaboration with a generous mentor. And she feels she is reminded of her now, daily, as she begins her role as editor of this journal, which Sharon introduced her to years ago, when they co-wrote Kahlor’s first peer-reviewed journal article. She adds, “It is not hyperbole to say that everything that I do in my career is in some way influenced by Sharon’s mentorship.”

As Kahlor puts it, Sharon always treated her, and anyone else with whom she worked, as though they had something valuable to offer. People are interesting, they are smart, and they deserve our faith—that seemed to be Sharon’s motto. She was also an eternal optimist: she never looked at the occasional failure or journal rejection as some kind of “sign.” No drama. Dust yourself off and move on.

Kahlor, now a full professor, notes that Sharon’s gift to her, and to all of us, was eternal curiosity and wonder, optimism, and above all the belief that every scholar, every colleague, everybody has something important to add to the ongoing conversation that is science communication research.

# In This Issue

In the remaining pages of this introduction, we describe the specific works presented in this special issue. Sharon’s collaborators and students came from almost everywhere and from multiple academic disciplines. The call for papers for this issue invited all scholars who felt they were influenced by Sharon Dunwoody’s work to contribute. We received many more submissions than we were able to include here. We had to make choices. Decisions on which submissions to include for publication rested primarily on suitability for our journal, relevance to Sharon’s work, and recommendations from peer reviewers. This helped us narrow down the content of this issue to a manageable selection of work that we thought Sharon would have appreciated and that would give readers at least some sense of the breadth and depth of her influence. We regret that we could not include every submission we received, and we sincerely thank all of the submitting authors, whether we were able to include their work here or not.

The issue includes three full-length research articles, one shorter Research Note, and two commentaries. Our three research articles—serendipitously—concern scientists, journalists, and audiences, respectively.

The first research article in this issue addresses the so-called “Sagan effect” (named after scientist and prolific science popularizer Carl Sagan) on public outreach efforts by scientists. This idea suggests that pressure from the academic community might have a damping effect on scientists’ outreach activity. Sharon Dunwoody was actively interested in getting scientific information out to non-scientists. This article, based on survey research, came from a multi-national team and was one of the first submissions we received for this special issue. The authors write that they are able to “demonstrate the differing mechanisms through which various types of positive social norms . . . and rewards . . . affect outreach participation intentions.” Most prior research in this area has been done in Western contexts. Some findings from this large Chinese sample tend to echo what has been found in those contexts; others extend that work in nuanced directions, while some could be distinct to the specific national context of this particular study.

We follow this with a research paper focused on what its authors call a “view from the trenches,” based on quite a different method: 19 semi-structured interviews with practicing science journalists, mostly in the United States. The authors first summarize the deep changes in science journalism in the social media era, including social media’s role in the proliferation of misinformation. The discussion draws in part from a recent article by Sharon Dunwoody, a large share of whose career was devoted to documenting just how science journalism actually works. That has changed considerably. The interview data confirm that contemporary changes have been profound, as more and more science is covered by freelancers or non-specialists, in contrast to the “inner circle” of elite specialist journalists that Sharon and her colleagues documented early on. These interviews describe quite a difficult situation requiring more labor for less compensation. The erosion of trust and of credibility among audience members looms large here as additional barriers to doing good work.

Our third full research article involves a “rethinking” of the influence of user comments on audience interpretations of medical science news. These authors’ experimental results suggest that “comments may have a deleterious impact on audience perception of journalistic stories and scientific issues.” They cite Sharon Dunwoody’s prescient thoughts on this issue from over 20 years ago, at a point when many others held onto the rosy view that online comments would foster only healthy democratic deliberation. Yet the reality has sometimes been that what ends up being fostered can be the dissemination of misinformation, sowing unwarranted uncertainty with respect to actual science. (This is not to insist that social media have no role in democratic discussions, but we now recognize that this is not always a purely benign one.) Controversial topics having been considered in numerous prior studies, these authors used a relatively non-controversial topic (antibiotic resistance) as the basis for their experiment. The authors conclude that dissenting comments can indeed cause negative reader reactions to the story content itself, depending on a variety of factors.

Our Research Note in this issue concerns recommendations for the teaching of “essential data skills” for journalism and strategic communication students in higher education. In addition to her other scholarly interests, Sharon Dunwoody was a great champion of research on educational practices related to science communication, and while this journal does not routinely publish education-oriented papers (given the many education journals available), we made an exception in this case. The authors recommend a curriculum based on the concept of data literacy. These skills are important for all mass communication students, but are particularly important for science communication students. The authors present a Data Project Lifecycle model that they suggest other instructors working in this area will find useful.

We round out the issue with two commentary articles by additional long-time collaborators of Sharon. The first, on scientists, journalists, and uncertainty, discusses (among other things) the development of two milestone books by Sharon and her coauthors: *Scientists and Journalists* and *Communicating Uncertainty*. Arguably, these books represent some of Sharon’s most enduring work. It is not by chance that themes from these books (published in 1986 and 1999, respectively) continue to arise anew in the research work we are publishing in this issue. The second commentary included here was contributed by yet another long-time collaborator of Sharon’s and sketches out three themes the author sees in her work: the importance of substance over showmanship, the need to improve (rather than abandon) one-way communication, and respect for the audience. That this author is based in Europe further underscores the global nature of Sharon’s work and influence.

Few scholars, if any, have had so great an influence on our field as Sharon Dunwoody—and on so many of its current scholars, directly or indirectly. We will continue to miss her, but her legacy certainly carries on, as illustrated by the articles in this issue.

# Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

# Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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