

Science Writing - G54.1180.001

Science, Health, and Environmental Reporting Program

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Overview

One of the most brutal truths of science journalism is that *no one needs to read your article*. Scientists can learn about breaking science news from their professional journals and meetings; most members of the public don't see science as integral to their lives; and the science-interested members of the public have more media choices available to them than ever. As you have already learned, to prosper as a science journalist, you need the knack of composing stories that forcefully grab readers and hang onto them all the way to the stunning last line. But to truly prosper as a professional, you will also need to be able to work with editors at every stage of the process, from pitching the story to rewriting as needed to signing off on final proofs (and sometimes beyond).

SHERP has already helped start you on developing the necessary skills. This course is your opportunity to pull all of them to a higher level. Much of the class will be geared toward writing a 3,500-word feature article of publishable quality, but other assignments will call on the abilities you will need in other forms of writing, including books, reviews and essays, as well as in media beyond the printed page. We'll also emphasize how to *market* your work (and yourself) to top media outlets—an essential and underappreciated skill. In the process, you will be learning more about how to operate successfully as a professional journalist within a large, competitive, rapidly evolving field.

Course Structure

The class meets on Thursdays in Room 659, 20 Cooper Square, from 2:45 p.m. to 5:45 p.m., with a 15-minute break halfway through. The first weeks of the course will review and sharpen what you have already learned about how to lay the groundwork for solid, saleable feature articles: how to come up with fresh story ideas, how to identify appropriate markets for them, how to map a strategy for producing the story on time, how to interview sources professionally and so on. (One fundamental question we will often return to is, what makes an *idea* into a *story*?) We will dissect several national science publications to learn about their audiences and their editorial missions, and to see how those differences translate into distinct treatments that, say, *Popular Science*, *Scientific American* and *Technology Review* would give to the same story idea. Similarly, we will also look at how the same stories might be handled in TV, radio or new media.

Throughout the course we will critically read published articles from a variety of sources, and in the process explore the many genres, narrative structures and voices that features can take across diverse media. What can science writers learn from their colleagues working in very different areas of journalism (or even outside of journalism)? What are the pros and cons of writing about science for niche audiences rather than just mass audiences? Occasional guest speakers will include top editors and writers representing a range of publications and points of view.

One of the keys to improving as a writer and progressing through a career is learning how to edit. You will therefore get practical experience with editing not just your own work but also that of your fellow students. Along the way you will learn the absurdly simple, absolutely critical, widely disregarded rules for getting along with editors—rules that can help make or break your career.

Discussion

Writing is lonely, isolated work, best pursued in a protective vacuum, safely away from the jarring influence of editing and criticism.

—Surely you didn't think that was true, did you? No, the reality is that for professional journalists, feedback from editors and peers is indispensable. As a member of this class, you will be expected to actively participate in all discussions and exercises for the betterment of your own work and others. Come to class with opinions—and be prepared to defend them. Be generous in offering constructive criticism of others' work, and be equally gracious about accepting others' judgments of yours. Remember, as a journalist, listening and asking questions are fundamental to the job. I'll expect you to do a lot of both, particularly when we are lucky enough to have veteran journalists as guest speakers. Take advantage of their experience and knowledge.

Readings

Throughout the semester, we will track and consider what kinds of feature-length pieces are appearing in some of the major print outlets for science writing, such as *Discover*, *Wired*, *Popular Science* and *Scientific American*, as well as some online science news sites.

As journalists, you know that you need to be aware of what the media are already reporting: both the individual stories that have already been told and the trends emerging in that coverage. To that end, you should constantly be scanning a variety of news outlets and sources, including the NYT's *Science Times* section on Tuesdays, the news sections of publications such as *Nature* and *Science*, digital offerings such as www.sciencedaily.com, www.ksjtracker.com, www.newswise.com, www.slashdot.com, www.eurekalert.org—and www.scienceline.org, of course! Be prepared to bring your knowledge and observations of current science coverage into all our discussions.

Assignments and Grading

The principal focus of your work throughout this course will be to propose, research and write a 3,500-word feature article on a timely, substantive topic. Later, after receiving

editing comments, you will rewrite that feature. (Welcome to the world of professional writing.) In addition, you will write and edit a variety of other assignments on a weekly basis, sometimes in partnership with another member of the class. Overall, these written assignments will account for 75 percent of your class grade. The remaining 25 percent will be based on your classroom participation and discussion. I'm counting on you to bring your full critical, journalistic intelligence and enthusiasm to class—you'll be enriching the class for all of us! Here is a breakdown of how assignments will count toward your grade:

- 5% News story postmortems
- 5% Pitch letters for your feature
- 5% Preliminary lede & billboard paragraphs for feature
- 5% Updated Outline/Progress Report for feature
- 15% Feature (3,500 words)
- 10% Edit of fellow student's feature
- 20% Feature rewrite
- 5% Pitch letters for offshoot queries from your feature
- 5% Revised pitch letter for feature
- 25% Class participation

When giving out grades on assignment, I will be giving you both a letter grade and an equivalent numerical grade, so you will be able to calculate for yourself throughout the semester roughly how you are doing. (If you have misgivings about the state of your class participation, speak with me at any time.)

One of the most crucial keys to being a successful journalist can be summarized in three little words: *Don't miss deadlines*. I expect you to complete your assignments—brilliantly—by the due dates, *at the beginning of class*. If you miss a deadline, I will dock that assignment's grade one-third of a letter grade per day (i.e., an A would drop to an A minus). Serious, unavoidable reasons for delay do sometimes happen, of course. If one befalls you, you are responsible for telling me a reasonable amount of time before the deadline so that we can work out a mutually acceptable alternative—which is exactly what you would need to do as a professional working with an assigning editor at any publication.

Assignments should be submitted to me as Microsoft Word files (.doc format) sent to my email address, john@johnrennie.net. My comments back to you will appear as tracked, bracketed comments in line with your text. For the sake of uniformity, when you are editing or commenting on other students' work, please use the same system. Be aware of class assignments that involve discussing edits of one another's work: you will need to bring either a printout or an electronic copy that you can give to your fellow student. If you have questions about how to submit or bring assignments to class, please let me know.

Office hours: I will routinely be available 15 minutes before class and for an hour or so after we are done. To set up an appointment, either e-mail me or speak with me in class, or look for me in Room 659 during office hours—first come, first served.

Schedule

Week 1: Thursday, September 9

OVERVIEW

An introduction to the class, to professional science feature writing and to marketing your work appropriately. Student writer/editor teams will be named for future assignments. Brief review of the differences between news stories and features, and of some reliable, basic narrative structures that work in each form. What are shared challenges shared by news and features, what are challenges unique to each, and how do the defining characteristics of each relieve or compound the difficulties? Also, we will discuss what class members think they would most like to review or practice before embarking on their careers.

Assignments for next week:

- *News story postmortems*: Choose two news stories you've written in the past—one that you think turned out well, one that is (at least in your eyes) unsatisfactory. Submit those stories to me (links are sufficient) along with written commentary about what works and what could stand improvement with each. In particular, tell me what you would do differently if you were now turning this story into a longer, more feature-length story: what would you explore in more depth; what would you include that you left out previously for reasons of space or deadlines, etc.
- Begin researching ideas for your feature story (ideas due week 3).

Week 2: Thursday, September 16

NEWS VS. FEATURES; EDITORS VS. WRITERS

Hour I: How and why editors make assignments. What does an assigning editor need to tell a writer to get a good story? Conversely, what does a writer need to know from an editor to complete an assignment well?

Hour II: Working with (and working as) an editor. Which kinds of feedback to writers are helpful? Which kinds are unhelpful, or even counterproductive? What is the difference between editing and rewriting?

Assignments for next week:

- Prepare three story possibilities for your feature article; be ready to pitch them orally in class next time.

Week 3: Thursday, September 23

MAKE YOUR GOOD FEATURE GREAT

As a group, we will discuss your ideas for the feature article on which you will work on for most of the rest of the semester. Each student will *briefly* present his or her three feature ideas. Fellow students will offer reactions, critiques and suggestions that might strengthen your work.

Assignments for next week:

- Select one of your feature ideas for further development and revise it as seems appropriate, based on feedback you have received.

- Write a formal pitch letter for your feature, based on your own research to date and the feedback you received in class. Address it to a specific publication that seems like a plausible market for that story.

Week 4: Thursday, September 30

WRITING, EDITING AND REWRITING FOR STRUCTURE (PART I)

Hour I: Why is story structure so fundamental to powerful storytelling, whether in fiction or in journalism? How can the structure of a story—particularly in a longer narrative such as a feature or a book—improve on what the individual elements have to offer?

Hour II: Brief review of ledes, billboards (a.k.a. nut grafs), transitions, kickers and other structural elements useful for telling your story forcefully. When do anecdotes, description and similar elements help to advance the narrative and when do they hurt it? *In-class exercise:* Write the missing lede.

Assignment for next week:

- Assemble a source list for your approved feature idea and begin reporting; submit source list to Rennie.

Week 5: Thursday, October 7

WRITING, EDITING AND REWRITING FOR STRUCTURE (PART II)

Hour I: Case study of a *Scientific American* edit—focus on shaping a feature's structure.

Hour II: In class, we'll collectively critique current issues of two science magazines. Pay particular attention to how the stylistic and structural elements of features in each magazine improve (or fail to improve) the storytelling for the audiences they serve.

Assignments for next week:

- Continue reporting for your feature.
- If you will be attending the Society of Environmental Journalists meeting next week and would miss class, please let me know.

Week 6: Thursday, October 14

[NOTE: SOCIETY OF ENV. JOURNALISTS MTG. FALLS THIS WEEK.]

THE VIEW FROM THE OTHER SIDE OF THE DESK

Hour I: Top editors from several publications offer their perspectives on writing, editing and the science journalism profession. *Guest speakers:* Mariette DiChristina-Gerosa, editor in chief, *Scientific American*; Corey Powell, editor in chief, *Discover*.

Hour II: The top editors continue their discussion, with a particular focus on how to pitch and sell freelance stories.

Assignments for next week:

- Outline your feature story, with enough detail to convey the narrative structure and some of your relevant reporting to date.

Week 7: Thursday, October 21**WRITING ARGUMENTS, NOT OPINIONS**

Why should *anyone* care what you think? After all, opinions are cheap. Real, rigorous, well-informed arguments, however, are not—and that's what you need to prove you have to become a voice that audiences seek out. During both hours of this class, we will discuss how to assemble facts and marshal rhetoric to argue a point persuasively, with a focus on using those skills in book reviews and online essays.

Assignments for next week:

- Write a preliminary lede (including) a billboard paragraph) for your feature. This isn't binding on what you will finally write: the challenge is to see if you can lure readers into the story and compellingly suggest where you're going with it.
- Continue reporting for and begin writing (?) your feature.

Week 8: Thursday, October 28**PROGRESS REPORTS & BRAINSTORMING**

Hour I: In class, we will discuss how the various features are progressing and what problems we may be encountering along the way. Tap into the collective wisdom of your peers to get yourself out of blind alleys, and feel out their impressions about which paths open to your story you should follow.

Hour II: Critique your student partner's feature-article lede and billboard paragraphs as in-class exercise. Collectively, we can discuss some of the better examples.

Assignments for next week:

- Continue writing and reporting for your feature.

Week 9: Thursday, November 4**EDITING PUBLICATIONS**

Seeing the big editing picture: whole issues and covers, fact checking, graphics (informational and otherwise). Editors don't simply commission or revise articles in a vacuum: they are fitting individual articles into a larger scheme for a publication—and a publishing process with a relentless schedule. Even if you are just a contributor to a publication, a strong understanding of that vehicle as a whole can make you more valuable. *In-class exercise:* Teams of class members will rapidly invent and edit an issue of a hypothetical science magazine to demonstrate their grasp of the problems involved in developing an issue as a whole.

Assignments for next week:

- Submit an updated outline or progress report for your feature, with indications of how the reporting is progressing and any tweaks to the lede and billboard that now seem appropriate.
- Sign up for one-on-one meeting with Rennie during next week's class time, during which we will discuss your feature's progress. (May extend outside usual class hours.)
- Continue work on feature.

Week 10: Thursday, November 11**REPORTING AND INTERVIEWING****Note: Rebecca Skloot will be speaking to the Carter Institute from 2:00-3:00.**

Tips on some of journalism's essential skills from seasoned science-writing pros. How they grappled with difficult stories and found ways to tell stories that defied easy solutions. Guest speakers: Rebecca Skloot, author of *The Immortal Life of Henrietta Lacks*; Susan Hassler, editor in chief, IEEE Spectrum; Nicholas Thompson, senior editor, *The New Yorker*.

Assignments for next week:

- Continue work on feature.

Week 11: Thursday, November 18 [WILL RESCHEDULE INDIVIDUALLY]**ONE-ON-ONE MEETINGS**

Rennie meets individually with students to discuss their features-in-progress.

Assignment for NOV.23 [NOTE PRE-THANKSGIVING DATE!]:

- Submit polished draft of feature article. Although this is technically a draft, not finished copy (because you'll be doing a revision), you should treat this as though it is finished work: make the writing smooth; don't leave big TKs for future reporting to fix, etc.

Assignment for next class:

- Edit your fellow student's feature article (which you should receive by Nov. 23).

NO CLASS on Thursday, **November 25 (Thanksgiving)**

Week 12: Thursday, December 2**THE BOOK LIFE**

Writing and selling a book is not just quantitatively different from working on features or other shorter articles. In these two hours, the class will explore how successful book authors go about it; the pros and cons of working with agents; finding a publisher, and more. *Guest speakers:* Carl Zimmer, author of *The Tangled Bank*, *Microcosm*, *Soul Made Flesh* and other books; Amanda Moon, senior editor of the Scientific American Books series for Farrar, Straus and Giroux.

Assignments for next week:

- Finish and submit your revised feature article.

Week 13: Thursday, December 9**TELLING STORIES OUTSIDE OF PRINT**

Hour I: As you already know, the journalistic storytelling demands and opportunities of TV, radio and new media are distinctive. The group will discuss examples, good and bad, of how journalists have accommodated the needs of their media on specific stories, using examples provided by Rennie and students.

Hour II: A case study of one story and how it trekked through different media.

Assignments for next week:

- Select three magazines, online publications, radio/television producers or other media that are appropriate markets for some variant of the feature you wrote. Write three queries, tailored appropriately to each outlet.

Week 14: Tuesday, December 14 [NOTE THE CHANGE OF DAY]

THE END

Hour I: Discuss feature queries and modifications of them for other media.

Hour II: Tips on freelance contracts and other legal matters.