# Blogging & Meta-Blogging Science & Justice

*A Sketchy Primer on Finding, Reading, & Writing Science Blogs*

*What I've got here is just a sketch of what I find useful in thinking about blogging or "meta-blogging" science stories. It's rough and incomplete, but maybe a start. -- Rusten*

Science blogging is probably the most vital form of science journalism today. The loss of most newspaper science sections, the declining fortunes of printed science magazines, and the rapid rise of Web-based news have created a growing niche for science blogs.

There are lots of forms of science blogging, from one-liners to long-form reads, from text to video to audio formats, and from one-source stories and press releases to in-depth journalism. For a history of science blogging, read Bora Zivkovic's "Science Blogs – definition, and a history" on his A Blog Around the Clock blog on *Scientific American*'s blog network.

I'm going to focus mostly on mid-length science journalism blogs and on how to find and to "meta-blog" those effectively in a Science & Justice context.

## *Meta-blogging*

I'm using "meta-blogging" in a slightly idiosyncratic sense: not so much blogging about the process of blogging as blogging about science blog posts and other science stories you come across.

Why meta-blog? There are hundreds of high-quality science blogs. Finding bloggers you want to follow, and then finding your way to the stories that interest you, can be daunting. Meta-blogging – sharing the blogs (and articles, papers, videos, etc.) you find and providing a commentary on them – can help other readers navigate the huge world of science stories. It can be a collective project. It can help create a community. And it can help focus attention on perspectives that are missing or under-reported in the science stories you're reading.

## *Finding the Blogs*

The best bloggers are increasingly organized into networks. Many magazines and some newspapers host blog networks. Some networks are organized by bloggers themselves. Finding your way to those networks is probably the best way to find bloggers who focus on stories you care about or have perspectives you value.

## Science Story Aggregators

First, a quick note on science story aggregators like ScienceDaily.com, EurekaAlert.org, and Newswise.com. These can be useful to journalists for spotting stories (they often provide pre-embargo-date access to stories for accredited journalists), but don't rely on them as a meta-blogger. The stories collected on these sites are mostly press releases, occasionally slightly re-written. While there are some good writers working in the public information offices of universities, government agencies, and industrial labs, their job is not journalism. Their primary job is publicizing and promoting the work of the folks in their institutions. Science journalists generally follow up on press releases by going to the original papers, re-interviewing the investigators directly, getting comments from scientists not working on the study being written up, and independently evaluating the claims. That's what you should see in good science blogs.

There are other aggregators that are not primarily focused on press releases and the like. ScienceSeeker, a project of ScienceOnline, for example, tries to collect up all of the "thousands of science blogs and news sites around the world, written by active scientists, journalists, professors, students, and interested laypeople." It can be a useful site to search for recent stories on a topic.

## Blog Networks

So, what blog networks to look at? And how do you find them?

Many blog networks are hosted by magazines or newspapers. A magazine may host a blog network in addition to maintaining an in-house network of blogs written and edited by the editorial staff and their own science journalists. Hosted bloggers are invited to join the network. They are generally independent of editorial control or responsibility. And they are generally poorly to modestly paid. Some aren't paid at all.

Some magazines make it relatively easy not only to identify the blogs in their network(s) but to find out something about the bloggers. For example, *Scientific American* hosts an extensive Blog Network and maintains an About the Scientific American Blog Network page that describes the structure of their network and introduces both group and individual bloggers. On the other hand, *National Geographic Magazine* hosts a small, very high quality science blog network called Phenomena (which they call a "science salon") in addition to co-hosting the much larger Science Blogs network, but leaves it to the bloggers to make their own introductions.

Not all networks are hosted by newspapers or magazines. Some blog networks are completely controlled by the bloggers themselves. See, for example, the collective blog Scientopia or Last Word On Nothing (LWON), a wonderful collective blog maintained by 11 science writers. Scientific American blogger Bora Zivkovic did a nice Q&A "Scienceblogging" with LWON bloggers on their network and their writing.

And whole networks can shift from one hosting organization to another, as ScienceBlogs did when editorial and advertising control shifted from *Seed Media* to *National Geographic* in 2011.

Here is a far-from-exhaustive, not-in-rank-order list of blog networks worth browsing to get you started:

*Scientific American*: Blog Network (blog descriptions)
*National Geographic:* Phenomena (click on the name of a blog)
*National Geographic* and *Seed*: ScienceBlogs (choose a blog from dropdown menu)
*The Guardian*: Science Blog Network (click on the name of a blog)
*Spektrum* and *Nature*: SciLogs (browse >Blogs)
*Discover*: Latest Blog Posts (click on a blog name in the Blogs header)
*Wired:* Science Blogs (click on a blog in the Wired Science Blogs panel)
Scientopia (go to Our Members for descriptions of bloggers)
The Last Word On Nothing (follow links in About Us to bios of bloggers)
*Discover Magazine*: Blogs (click on the name of a blog in the banner)
*Science News*: Blogs (Explore > Blogs > pick a blog)
*PLOS* (Public Library of Science): Blogs (see List of PLOS Blogs)
*Popular Science*: Blogs (choose a blog in the dropdown in the right-hand column)

There are many more blog networks out there. There are also many independent bloggers not associated with networks (including folks newer to science blogging who have not yet been invited to join a network) who write good material. Some of the best science bloggers write or blog for magazine that are not primarily science magazines, like *The Atlantic*. You'll find them as you follow stories, often because other bloggers provide links to their stories. The science blogging world is remarkably cooperative.

Remember that here I'm focusing on science blogging. There are lots of other sources for science news, of course, including magazines, newspapers, and journals, as well as online-only science magazines like Nautilus that are well worth following, too. The more you read, the wider your net will become.

## *Following the Blogs*

I'm not going to say much here about how to find individual stories or how to follow blogs. Start with the media you're already comfortable with. If you spend your time on Facebook or Twitter, try following favorite bloggers or magazines. Add bloggers or blog networks to your RSS feed reader. Or get on email lists. If search engines are how you find stories, try using ScienceSeeker to get beyond generic Google searches. Somehow, anyhow, get into the world of science blogging.

Follow bloggers you trust, and they will lead you to others. When you find a post on a topic you're interested in, look for links to related stories by that blogger or others

s/he values enough to link to. (Many bloggers list other blogs they themselves follow on their blog homepage.) And at least glance at the comments and replies to blog entries that pique your interest. You'll sometimes find interesting conversations among bloggers, researchers, and other readers interested in the same story. And check your favorite blogs for an archive of past posts, occasionally even organized by topic.

> Just one note on email lists before you dismiss them as a hopeless waste of time: Three of the writers at *Scientific American*'s Phenomena blog network each send out an email every Friday. Carl Zimmer's "Friday's Elk" [sign-up link] highlights only his own writing and speaking for the week. But both Virginia Hughes's "Gray Matters" [sign-up link] and, especially, Ed Yong's "The Ed's Up" [sign-up link], range beyond their own writing to other writing they've found and recommend. Ed Yong's weekly email is a short preview of the best of the 100 or more (usually) links he publishes on his blog every Saturday as "I've Got Your Missing Links Right Here", which is the best weekly "linkfest" of science stories (including videos and photos, not all deadly serious) I know.

## *Reading the Blogs*

As with all writing, the best teacher is reading. How should you read the stories you'll be blogging?

### Read for Content and Context

What's the story they're blogging? What's their perspective? And what other stories and perspectives are they in conversation with?

This is probably what you already do, and it's the heart of meta-blogging these stories: Point folks to the stories. Point out the blogger's perspective and provide your own. Clue folks into the conversations happening around a story or topic. Enough said.

### Read for Structure

But also get in the habit of reading science journalism blogs for their structure. See what works and how it affects your reading. Notice that what works in one context may not work in another. Use what works in your own posts.

In particular, look for the following elements.

> *The Title and First Paragraph*
>
> These are where readers decide if they want to continue reading. One or both should give the reader some idea of what the story is about. A cute but

uninformative title and an obliquely narrative first paragraph can be fun to write but confusing to read.

News stories tend to have the kernel of the story in the first paragraph. This is the *lede*. In a news story, it shouldn't take the reader very long to know what the news is.

More narrative feature-style stories may begin with an anecdote or bit of descriptive writing that sets the scene or introduces the context or the central character in the story. Even then, unless the writing is so good that readers will go along for the ride no matter where they're going, letting the reader know pretty quickly what the story is about is a good idea.

*The Image(s)*

Occasionally an image will be the primary hook for your readers. Some images just catch your attention all on their own. But most of the time images illustrate rather than replace the information content of your title and first paragraph. Look at what image the blogger uses up top to represent the story. How many other images appear in the story?

Look for attribution of the image. Reputable bloggers don't steal images. You shouldn't either, particularly if your blog is public. There are lots of sources for images that can be used freely. Watch what your favorite bloggers do.

Images don't have to be photographs. Some bloggers illustrate their own blogs, which is an excellent way to avoid stealing images, of course. You don't have to be a great artist, and there are lots of drawing/painting apps for tablets and computers. NPR blogger (and radio host) Robert Krulwich is well-known for his drawings. (See, for example, the recent, rather lavishly illustrated "Plants Talk. Plants Listen. Here's How". Compare that with Ed Yong's use of an informant's photo pair and caption that requires some work to read in "The Most Versatile Impressionist in the Forest".

> *Remember that one image, the title, and some part of the first paragraph are all that can be seen in a shared link to a post on Facebook. Some bloggers are very conscious of that and construct their stories to make what appears as intriguing as possible.*

*Story-telling Style*

Look at how the story unfolds. What is the story? What's it's trajectory? Look beyond whether it's written as a news or feature-type story. How is the story framed to include some things and exclude others? How does it make you care about the story it wants to tell? Does it appeal to curiosity, outrage, what?

*The Sources*

The sources are typically research papers and interviews with researchers. Some bloggers may be scientists themselves and insert results from their own labs as sources. These sources should be clearly identified. Ideally, links to research papers should be provided.

Background material providing context and explanations of ideas that are generally known to all of the researchers generally don't need to be sourced.

*Conclusion*

How does the blogger get out of the story? Is there a trajectory that has a natural end point? In a news story, does the conclusion point to future research? In a feature story, does the conclusion lead back to the opening anecdote or scene setting? Once upon a time, newspaper stories nearly always ended with a pithy quotation. Watch how your favorite bloggers round off their stories.

## *Meta-Blogging*

I'll assume here that you're not doing science journalism in most of your blog posts. You're not interviewing primary sources, you're not blogging breaking news and trying to beat others to a story. Instead, you're blogging about stories you find on science blogs or in other places. And you're providing some kind of commentary that both indicates why the stories are interesting and provides a science and justice perspective on the stories.

That doesn't mean that you're not following the stories back to the original scientific papers or researchers. Sometimes you'll need to go behind the stories you find to provide your perspective. You may need to provide your readers more of the science to get at issues of justice. Certainly you'll do that in longer explorations of topics that interest you. You may need to do that in your blog posts, too.

### Decide What Kind of Post You're Writing

Are you just sharing a link to a story you think is worth other folks' time? Are you unpacking a story to suggest how it's framing does or doesn't contribute to a science and justice perspective? Are you comparing how different stories treat the same news? Are you following the posts back to the original science to provide a different take or to complicate the story?

*Sharing Links*

Contributing to a collective "linkfest" usually means just coming up with a one-liner that includes the link to the story you're recommending. You can do a little more by providing a thumbnail image and the title and a brief description of the

story (about as much as a shared Facebook link to the story does). Tell it in a way that lets folks know why you think it's worth their time.

*Commenting on a Story*

You can do yet a bit more in a commentary on a story. You can outline questions it raises or ways that it helps you to think about something. The point is not to demonstrate how smart you are, but to start or to move a conversation along.

*Unpacking a Story*

Unpacking a story requires laying out its structure, talking about its lacunae, and/or challenging its perspective. If this isn't just going to be critique in the narrow sense, you're going to have to go back to the science, see how the writer explains and uses it, and offer your own take. This can involve criticism of the science itself, or it may involve re-presenting the science from a different perspective or placing it in a different context. It might mean pointing out other actors in the story.

*Comparing Stories*

Science stories rarely appear in isolation. Several writers may cover the same story, but from different perspectives or using a different structure of story telling. Comparing stories can give you a sense of whether there are significantly different perspectives represented. Is there something everyone's missing? Comparing coverage can give you the opportunity to reframe a story without running the risk of ad hominem critique. You can unpack several stories at once.

I like comparison stories. They can be useful if, for example, you're trying to explore how a shared perspective diverts attention from what you think is an important aspect of a story. They're also useful for composing a more complete and complicated story when no one writer seems to have collected up all of the relevant bits. Give credit to the folks who have some of the bits. Suggest a bigger story.

Two of my favorite blogs that regularly do comparisons of stories covering the same issue are Knight Science Journalism Tracker (KSJT),written mostly by Paul Raeburn and Charlie Petit, and On Science Blogs by Tabitha Powledge.

Take a look at "Atlantic Etc: Was the Everest tragedy global warming's fault? Maybe. But it's the wrong question, again." by Petit at KSJT. I'm guessing that science and justice folks would pinpoint different questions as the right ones to ask, but look at how Petit frames his post, what he asserts as true, and where he finds fault. KSJT is mostly written for journalists to spot who's getting the science right and who's not, but the method works just as well to ask who, if anyone, is getting the bigger story right or asking the relevant justice questions.

Compare Petit's piece with Powledge's coverage of the new stories surrounding recent papers on obesity in the US, "Obesity on the decline?" Powledge often explores how different perspectives let writers see or miss seeing bits of a story or a bigger story behind the one they're covering.

Try out different kinds of posts. Don't get caught in a rut of writing everything in the same way, the same length, or to the same audience. Write out of your comfort zone now and again.

### Write for an Audience

Who are you writing for? What do they want from your blog post? How can you make it clear for them? How can you make it a pleasure for that audience to read?

Your choice of an audience affects the language you use, the jargon you need to avoid or explain, how narrative your story is, and even the images you use. But it needn't dumb you down.

I think it's good practice (and at least a good exercise) to try to write to an audience at least slightly larger than your primary audience. Bring other folks in. But if you find yourself writing down to an audience, start again.

### Write for your Target Platform(s)

The length of your posts will depend on your platform. So will the way you use images. And the way you use hyperlinks.

You may have more than one target platform. If readers will share your posts in addition to reading them on your website or blog, try to have a sense of how those shares look on other likely platforms. For example, if your posts may be linked on a Facebook page, remember that one image, the title, and the opening lines are what will show up. Make the share look interesting.

## *Sharing Meta-Blogging*

Have fun. Try different styles. Work with each other. Help each other. Write for each other. Read each other's blogs. Be generous. Listen to suggestions. Write more.