

Taking science out of the margins.

For journalism to succeed in the 21st century, professional journalists must shake off the idea that events and personalities exist in a vacuum. The profession must cover environmental issues specifically, and science generally, with the same seriousness, passion, curiosity and standards generally afforded to coverage of political campaigns, government institutions, economic exchanges, social dynamics and international relations.

This is in some sense an extension of Jon Franklin's argument that science and technology "comprise a force that is at least equally important — and possibly more so" than "political and administrative processes."¹

Natural science more directly affects our lives than the econo-sociopolitical constructions journalists tend to prioritize. Each of the more traditionally favored coverage areas are defined and altered by the physical forces acting upon humanity. Weather systems directly impact public health and economic decision making; geography and topography determine urban growth and military strategy; and climate and geology influence cultural and religious traditions.

These are only a few generalized examples of complex, interconnected topics. That complexity may be impossible to fully illustrate. However, the point should be clear that natural forces have helped steer development of society, even as society has now begun to reshape those natural forces.

If journalists in the 21st Century are to provide information to help audiences make sense of this world, they mustn't shy away from trying to deepen their understanding of it. The more journalists find it difficult to come to this understanding, the more likely they will be to reinforce the idea that the natural world is not worth the attention other topics deserve. We need to overcome the schism between scientists and "like thinkers" and the "humanistic majority" discussed by Franklin².

For example, as I dried off from a shower Aug. 15 I took note of announcer Alex Chadwick's promotion of a story on NPR's *Day to Day* about the growing field of mechatronics. This was a field which, Chadwick said, "combines all the courses I didn't take in college."³ Joining Chadwick's bemused introduction of students who make an interdisciplinary approach to science the focus of their lives was co-host Madeleine Brand.

"It's like ultimate fighting, but science," Brand joked. "At the University of Virginia kids actually compete for a spot in the advanced mechatronics course."

Reporter Susan Hausman's story relayed the idea that science had more of an impact on our daily existence than we might imagine, if only in the form of consumer gadgets. Nonetheless, the announcers' joking "isn't this cute" introduction exemplified their position among Franklin's humanist majority. They showed why there's a need for a new direction for journalism's relationship with science and, by extension, environmental studies. If journalists are supposed to facilitate understanding of the world then we must stop treating science at the best as an elective, an amusement to round out our lives, and, at the worst, as sorcery, as a danger to our way of life.

Why is it important that we avoid marginalizing science as a coverage topic?

The more we take away our attention from a given topic, the less authority audiences will perceive in further discussions of it. The less attention a story is given, the more likely it is to be seen

1 Franklin, Jon. "The Extraordinary Adventure That is Science Writing," *Nieman Reports*, Fall 2002. p. 9

2 Franklin, p. 8

3 "The People Behind Your Electronic Toothbrush," Sandy Hausman, *Day to Day*, National Public Radio, KPCC, Pasadena, 15 August 2008. <<http://www.npr.org/templates/story/story.php?storyId=93632999>>

as suspect. Thus if environmental science is discussed less, or only discussed in certain circumstances (as a niche issue, a leftist issue, a treehugger issue, etc.) the more it will become disconnected from the public's priorities.

On Aug. 17 I caught up with two friends of mine, Hadley and Max Porter, a video game artist at Santa Monica-based Activision. Max took interest in my description of this essay. He was frustrated that an announcement out of the Massachusetts Institute of Technology about a new solar storage technology wasn't getting attention in mainstream news outlets⁴, despite a description from the school of it as “a revolutionary leap that could transform solar power from a marginal, boutique alternative into a mainstream energy source.”

“Why wasn't this a lead story?” Max asked. “After I'd read about it I'd expect to hear about it everywhere in mainstream sources. Instead, I hear about some cops with some kind of sasquatch.” (Max was referring to numerous news stories circulating over the weekend about a purported discovery of the mythical creature in Georgia).

As stories of MIT's solar discovery are relegated to science blogs and specialty news outlets, they begin to lose their public legitimacy. The more sasquatch stories are published in mainstream outlets, the more those articles become the “real” news, or at least the news audiences begin to expect. The action reinforces the idea that science stories are for scientists and those closely associated with them. Fewer publicly trusted sources carry those stories, and thus fewer people who don't actively seek them will be exposed to them.

In his Aug. 14 discussion “Communication: A 21st Century Discipline,” Annenberg School for Communication Professor G. Thomas Goodnight explored communication shifts as they relate to modern institutions. Goodnight's segment on bubbles in economic markets is applicable to this idea of how science coverage is being relegated to the margins.

“Bubbles may be a metaphor for knowledge circulation,” Goodnight wrote on page 4 of the handout accompanying his talk. “A particular field builds up interests, broadens; it becomes reflexively prudent to do so because it's popular, and then values collapse.”

When news stories aren't inflated like the sasquatch story was, it's less prudent, to use Goodnight's phrase, to broaden them. The science of solar storage may be important, but how does it build up its interest? How does it become inflated?

\ On Aug. 15 I volunteered at Santa Monica-based public radio station KCRW. There, I met a musician and music writer, Anne-Marie Vignola. We exchanged customary introductions over lunch and the conversation meandered into a broader discussion about the state of contemporary journalism.

Vignola offered her own perspective as a writer and a consumer of news. What she said was illuminating, even though we didn't directly discuss science or environmental journalism. We discussed Tunejar, a blog filled with music information and reviews (www.tunejar.com) she was interested in writing for. Pop culture is one of the more obvious venues for the bubble phenomenon. The discussion also brought to mind some of the tangents our group took in our first discussions Aug. 11, when we debated the practice of relying on audience metrics to plan coverage versus an emphasis on narrative.

I asked Vignola how, with myriad Web sites devoted to music criticism and discussion, Tunejar would succeed and gain an audience. Credibility was crucial. Audiences, she believed, were more likely to be interested in particular content if a friend whose knowledge of the subject matter they trusted suggested it. They would be more likely to read music Web sites compiled or recommended by their music-loving acquaintances.

This example evokes our exploration of social networks with Francis Pisani on Aug. 13 and 14. Social networks aren't just important tools with which to do journalism, they help spread journalism. Pisani's focus on the recommendation engine at www.delicious.com showed how journalists could use social networks to understand how stories are gaining traction with audiences and which online

⁴Trafton, Anne, “Major discovery' from MIT primed to unleash solar revolution,” *MIT News*, MIT News Office, 31 July 2008. Accessed 17 Aug. 2008. <<http://web.mit.edu/newsoffice/2008/oxygen-0731.html>>

personae are considered credible for certain topics.

However, raising the prominence of science and environmental journalism won't come through distribution via recommendation engines and well connected-hubs in social networks alone. Relying on those models would further ghettoize science reporting, as perhaps my friend Max's frustration with the dissemination of the MIT solar storage story illustrates. Rather, professionals who can mine the chatter of tastemakers — perhaps the biggest point Pisani was trying to make — explore their topics in further depth, examine the scientific claims being made, ask, as Michael Parks has already oft-repeated in class, “the right questions of the right people” and relay the results to readers in a compelling manner are the most likely to refocus attention on this specialized field.

The problem of relying on metrics alone to determine allocation of news resources and the architecture of news holes was underscored by an Aug. 12 post to *Buzzblog*, a feature of the Web site for the information technology trade publication *NetworkWorld*. Paul McNamara, the publication's news editor, explored the flaws of Google News.⁵ As reported by the Project for Excellence in Journalism in its 2008 executive report “the topic selection of the human editors at Yahoo is strikingly different than the computer algorithms at Google”⁶ which uses the company's computer algorithms to make selections. McNamara explores this problem — admitting to his bias as a human editor himself — and the software's inability to discern between actual news stories and fake ones “especially when both the real news and the spoof are ostensibly about the same topic.”

McNamara concocted a spoof story to test Google News' system. In an hour the story had become the most prominent of 332 featured by Google about MIT students.

“Yet every time it happens I can't help but feel just a little bit more secure in the notion that there will always be a place in the news distribution business for human beings. ... At least until software gets a sense of humor,” McNamara concludes.

Humans aren't obsolete yet. Only human editors who understand why scientific stories are relevant to society, why the science within them matters and that it is credible will be able to lobby for those stories to be presented on a par with other ostensibly important news stories.

Science reporting must still be compelling. There must still be a reason to read (or watch, or listen to) it. There must be a “hook.”

Vignola, for example, hasn't abandoned traditional media.

“I still get the *New Yorker*,” she said. “I need the depth.”

She doesn't read every story in that publication, she said. She'll read a story no matter what it's about, as long as it's compelling, and she will value that reading. Science journalists need to be compelling. It's difficult to be so if anchors like Chadwick and Brand keep suggesting the subject is quaint and peripheral.

Journalists are translators. The challenge for a translator is always how well they understand the language, perspective, and mindset of both ends of a conversation, how well they can serve as a bridge between a speaker and a listener. Science journalists must form similar connections to avoid a problem described by Franklin: “Our sources often despised the media for its many excesses and oversimplifications, and our editors often dismissed us and our news as too complex and too specialized.”⁷

This dilemma will persist as we continue to cover our changing environment. To illustrate the relevance of natural science to sociopolitical developments we'll need to do so convincingly, we'll need to prove to our audiences that our coverage choices are as interesting as sasquatch stories. We'll also have to do so in a way that keeps their attention, in a construction they can understand. If we do so, the

5 McNamara, Paul “Fooling Google News is this easy,” Weblog Entry, *Buzzblog*. 12 Aug. 2008. Accessed 15 Aug. 2008. <<http://www.networkworld.com/community/node/30979>>

6 “The State of the News Media 2008,” Executive Summary, The Project for Excellence in Journalism. 2008. Accessed 10 Aug. 2008 and 17 Aug. 2008 at <<http://www.stateofthenewsmedia.com/2008/>>

7 Franklin, p. 8

interest will begin to expand like Goodnight's bubble. It will begin to serve itself.

Will it pop? Perhaps, but we will have learned that we can in fact still direct where and how those bubbles form.