

'argumentative'. So as soon as a blog piece is up in India, you can expect comments of various hues – some objective and rational, some angry, some offensive and some totally off the mark. Many blog pieces run the risk of being sabotaged into parallel discussions on absolutely unrelated issues. It is frustrating for a blog owner to press the 'moderate' button more often than the 'approve comment' button.

Another nightmare for serious bloggers is spam. 'Fake passports and driving licenses', 'excellent quality branded shoes' and 'cheapest honeymoon packages'. Spammers are relentless. You might block them regularly, but there is a spammer lurking somewhere around to pop right in. A good spam-blocker is as

much a pre-requisite to start blogging as an anti-virus used to be when we all started using laptop computers about a decade back.

Science blogging in India

Science bloggers in India are a nascent tribe. Recently, a list compiling science bloggers from India on Twitter found a handful of serious ones, mostly scientists, some journalists, mostly outside India and just a few in the country⁴.

Since the space is by and large unexplored, the scope is enormous. Anyone with good science-blogging skills has a chance of standing up and getting noticed.

1. Dutt, B. *et al.*, Science and Technology 2008, p. 119; <http://www.nistads.res.in/indiasnt2008/india-S&T-2008-Full.pdf>
2. *Public Understand. Sci.*, 2000, **9**, 123–140; doi: 10.1088/0963-6625/9/2/303.
3. Salwi, D. M., *Science in Indian Media: A Blueprint for the New Millennium*, Vigyan Prasar, New Delhi, 2002, p. 174.
4. Twitter list of Indian science bloggers; <https://twitter.com/NeuroWhoa/india-science>

Subhra Priyadarshini, The writer is the Editor of *Nature India* (www.nature.com/natureindia) and blogs at Indigenus (<http://blogs.nature.com/indigenus/>). e-mail: s.priyadarshini@nature.com

Science reporting in Hindi



Sopian Joshi

'Have you studied science? No? Not even a B Sc?' Not an uncommon eventuality for a reporter who needs a scientist's help. It is followed by a look of disapproval on the scientist's face, telling the reporter the discussion is not going to last too long or provide the answers he needs.

A lot of scientists do not like to discuss science with non-scientists, which is not at all surprising. The world of science is built around peer review and empirical experimentation. Journalists and storytellers are external to it. Besides, some well-known science reporters have an education in science and a great familiarity with that world. That is how the latest developments get reported in the media.

The real tragedy in Indian journalism, though, is the absence of science in reporting the non-scientific world. For example, sports reporters seldom talk about aerodynamics of a swinging cricket ball, or the swerve of a football after a free kick. Reports on drought seldom move the focus away from the human tragedy to the hydrology of the region. Travel writing does not bring us up to speed on the geology of a tourism hotspot that makes it unique.

Which is a shame, because science can help us better understand everything; throw sharp beams of light in the dark corners of our imagination. The Indian media, though, has relegated science to the weekly science supplement, or to the reporting of the latest technological innovations. The tyranny of technology is rampant, because it places the world of innovation in the everyday world. Even if it is not the immediate world of the reader, it is often a world the reader aspires to, and hence, can imagine it.

Technology is sexy, its impact immediate. A better gadget, a new health treatment, an environment-friendly car, a robot that can cook. The products of technology – no matter how outlandish – are guaranteed human interest. In a media environment heavily tilted in favour of circulation numbers and TRP statis-

tics, technology is a low-hanging fruit that is accessed regularly.

Science, in contrast, is abstract. It is knowledge that has no immediate use to the reader. The annual summer rush to vacation in the Himalaya has nothing to do with plate tectonics. The Indian plate colliding with the Asian plate to create the world's tallest mountains, sending the ocean floor 3 km up in the sky to form the highest plateau called Tibet, may all seem very dramatic. But it does not create the packaged happiness that consumers need in their summer vacations.

Advertisers know this better than anybody else. They do not advertise in publications that do not make the story immediate to the readers (more accurate to call them consumers). With a glut of publications and TV news channels, there is severe competition of the limited advertising budgets in the corporate world. Science is a casualty in this race to the bottom.

The Hindi media is the leader in this race. There is virtually no writing on science in Hindi publications, or programming in Hindi TV news channels. Science gets eliminated by design. There is a great emphasis on short write-ups and programmes. But to make the abstract knowledge of science relevant to the readers requires explanation. The material typically does not have ready refer-

ences in the everyday world. It takes a while to bring the narrative to the science, even if a writer uses everyday idiom. Which by itself is not an easy task.

The world of science has developed a great bias towards English. The research comes from the English-speaking world, so the idiom is culturally English. The Hindi readership is not familiar with this idiom. For example, imagine the words required to explain plate tectonics in Hindi. For most scientific terms, there are translations in Hindi. But those translations mean nothing to the average reader. In fact, they mean very little to even the students of science. Because they are never used outside the classroom.

Each writer has to negotiate this problem on his terms, given his limitations. In my experience, using the metaphor of labour is useful. So, in a Hindi article on the world of computers, I have used the metaphor of carpentry to explain the nuance of a graphical user interface. To talk about the relationship between an operat-

ing system and computing software, I have found myself using the image of railway tracks and trains running on them. To talk about climate change and its impact on the monsoon, I have drawn from Hindu customs and mythology.

While this makes the material more accessible to a wider readership, it also dumbs down the narrative. One gets the feeling that there is no room for the beauty of complexity. Since there is very little written on science in the Hindi media, one also regrets the absence of a peer group. When you are struggling with a choice of words, because you cannot think of words and phrases that can convey the meaning accurately *and* interestingly, you need peers to bounce off ideas, get feedback.

Then there is the search for editors who are willing to humour science – given the media atmosphere, indulge is a closer term. How do you convince a copy-editor to not chop out a critical explanation because he/she needs ever shorter pieces? I have had an editor pub-

lish a badly cut article because of an advertisement that arrived late at night. Such problems are not that frequent in the English media, in which editors still have a little more say in the running of the publication than their Hindi counterparts.

The real reason to write in Hindi, though, is the reader. If one manages to put together good material into a good narrative, the readers respond with the kind of love one never gets from the English readership. Just like abuses hurt more when delivered in the mother tongue, appreciation is sweeter too in the first language. The Hindi reader does want more in what he reads. Will the writers and editors show some imagination and courage?

Sopan Joshi, Reporter, Writer and Editor for 17 years, Sopan Joshi has trained his eyes to see the world with the eyes of science. His recent work is available at <http://mansampark.in>
e-mail: sopanjoshi@hotmail.com

Lessons for a climate change scribe!



Archita Bhatta

It was December 2008. I was checking the rush of e-mails on my laptop trying to mine a story from the pile, when I found a research paper which showed that incidences of extreme rainfall were increasing in central India. What was more striking was that, written by a senior scientist from within the Government firmament, the paper established a connection between these increased incidences with the increase of sea-surface temperature (SST) in the Indian Ocean.

My editor and I had a good look: ‘Can you make a cover story on climate

change out of this?’ he asked. I knew why he said that.

You see, it was perhaps the first time that such a connection on climate change linkages had been made in the Indian context. For till then, the scientists who were ‘authorized’ to comment on the effect of climate change on weather systems were solely from the India Meteorological Department (IMD). And IMD had been vigorous in its denial of climate change. So this new finding indeed merited a cover story. I set about doing it.

Scientists: ‘connection’ cagey

First, how did the paper make the connection? Fifty years of rainfall data collected from IMD had been compiled and set out as a graph. Parallely, data of rise in SST over 50 years had been collected and also made into another graph. This was not an easy task – given that 50 years ago, the volume and quality of data available did not match the current requirements. So a lot of extrapolation and averaging had to be done; a strenuous process vulnerable to ‘inquisition’ during peer review.

This is one of the problems in climate change research, and the real reason behind any scientist’s reservations about making connections between local observations and global changes.

While studying to do this tough cover story, I learnt that a lot of research on climate change has been taking place in institutions like the Central Research Institute for Dryland Agriculture, and the Indira Gandhi Agriculture University, but scientists were still wary of making the connection between their findings and global climate change. A lot of hardwork and two weeks later, the cover story was published, and I was not overtly criticized by anyone; in fact, there were some kudos too.

Fast forward to 2011. I was then working with another Indian non-governmental organization (NGO) engaging itself on environmental issues, a key player at the global conventions and negotiations on climate change. I was asked to write about a climate change awareness programme that the organization was undertaking among school children.

I started the article with reference to cyclone *Aila*, which was one of the ex-