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EDITORIALS

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When balance is bias

Sometimes the science is strong enough for the media to come down on one side of a debate

Trevor Jackson *magazine editor*

BMJ, London WC1H 9JP, UK

In his 2010 BBC television series *Wonders of the Solar System*, the physicist Brian Cox made a remark that offended some horoscope lovers. "Despite the fact that astrology is a load of rubbish, Jupiter can in fact have a profound influence on our planet. And it's through a force . . . gravity." The BBC received a number of complaints, including one from a viewer who said that Cox made his comment without an "alternative opinion being allowed." The complainant griped that the programme made no attempt to "consider such questions from the perspective of an astrologer, who draws upon a very different body of observation and knowledge built over thousands of years." Cox later gave the BBC a statement (which it declined to issue) saying, "I apologise to the astrology community for not making myself clear. I should have said that this new age drivel is undermining the very fabric of our civilisation."

This tale, which beautifully points up the ridiculousness of always demanding balance in science communication, is told by Steve Jones, emeritus professor of human genetics at University College London, in a report published this year.[1] The BBC Trust commissioned Jones to review the impartiality and accuracy of the BBC's coverage of science; and although Jones found much to praise, he expresses concern about the BBC's guidelines on "due impartiality." These, Jones found, had a distorting effect, creating a sense of equivalence where there was none, and privileging maverick and dissident views so that they appeared as valid as established scientific fact. (This is not to say that established facts cannot be disproved. But the onus is on the claimants to prove or disprove their case within the rigorous paradigms of modern scientific research—witness the current debates on the invariability of the speed of light.)

Jones found that BBC journalists, in their quest for objectivity and impartiality—entirely understandable aims in coverage of politics and arts—risked giving the impression in their science reporting that there were two equal sides to a story when clearly there were not. As Jones says, "There is widespread concern that [the BBC's] reporting of science sometimes gives an unbalanced view of particular issues because of its insistence on bringing in dissident voices into what are in effect settled debates."

The dangers of this approach are clear in journalistic coverage of subjects such as the MMR (measles, mumps, rubella) vaccine—as the *BMJ* has previously shown[2 3]—and climate change. A 2003 study into coverage of MMR showed that the media's insistence on giving equal weight to both the views of the anti-vaccine camp and to the overwhelming body of scientific evidence exonerating the vaccine from its alleged adverse effects made people think that scientists themselves were divided over the safety of the vaccine, when they were not.[4 5] The quest for balance created what Jones and others have called "false balance," and in the case of the MMR vaccine helped fuel a public health disaster.

The investigative journalist Nick Davies, in his 2008 book *Flat Earth News*—an examination of falsehood, distortion, and propaganda in the world's media—says that the insistence on balance is one of the factors that stops journalists getting at the truth. "Neutrality requires the packaging of conflicting claims, which is precisely the opposite of truth telling. If two men go to mow a meadow and one comes back and says 'The job's done' and the other comes back and says 'We never cut a single blade of grass,' neutrality requires the journalist to report a controversy surrounding the state of the meadow, to throw together both men's claims and shove it out to the world with an implicit sign over the top declaring, 'We don't know what's happening—you decide'."[6] Another seasoned UK journalist, Malcolm Dean, takes a similar line on balance in his 2011 book *Democracy Under Attack*,[7] as does the Science Media Centre, in its evidence to the ongoing Leveson inquiry into media ethics.[8] If journalists will not decide where the truth lies, this puts the onus on readers and viewers; and given that scientists are not always expert communicators, there is a real risk that the anti-science view will hold sway.

Davies's and Dean's position reflects that of the US academics Maxwell T Boykoff and Jules M Boykoff, who have researched the reporting of climate change. In two seminal papers, the Boykoffs identified the journalistic norm of balance—the refusal to privilege the high level consensus that anthropogenic climate change is a reality over the views of right wing mavericks and

tjackson@bmj.com

oil industry funded commentators—as one of the factors that has sown doubt and confusion among the public.[9 10]

In his recent book *Who Speaks for the Climate?*, Maxwell Boykoff shows that the journalistic norm of balance in news reporting "has served to amplify outlier views on anthropogenic climate change, and concurrently engendered an appearance of increased uncertainty regarding anthropogenic climate science. This, in turn, has entered into an already highly contested arena where it has permeated climate policy discourse and decision-making."[11]

Part of the problem is that it takes time for a scientific consensus to emerge, and the media are impatient. Few scientists would nowadays argue that smoking does not cause lung cancer, that the world was created in six days, or that the earth is flat, but that wasn't always the case. Davies shows how the oil industry began mobilising its public relations campaign against the notion of anthropogenic climate change in 1989, years before any scientific consensus could emerge on global warming.[6]

So what is to be done? In the current climate, as media outlets have to produce ever more copy with fewer resources, the outlook is bleak. The BBC hopes that a new stipulation in its editorial guidelines—"due weight," the recognition that, for example, minority views should not necessarily be given equal weight to the prevailing consensus[12]—and an online training module on the specific demands of science reporting will help. Steve Jones says he is yet to see any evidence of the difference this can make, but it is a start. Also, researchers themselves should hone their communication skills.

Meanwhile, some science journalism will continue to be weighed in the balance and found wanting.

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