



Scientist-versus-activist debates mislead the public

The UK floods show the need to address the risks of climate change, but news teams still insist on pitching experts against sceptics, says **Simon L. Lewis**.

The British are famous for conversations about the weather, and this winter there has been much to talk about. The United Kingdom's December–February rainfall was the highest since records began in 1910. Tracts of southern England have been flooded for weeks. The army has been deployed to build flood defences. Once again, climate change has floated to the top of the UK political agenda.

Extreme weather tends to do that — a similar dynamic has been seen across the world. After Hurricane Sandy hit the United States in 2012, climate change became a presidential election issue. In Australia, floods, droughts and heatwaves have pushed the topic in a way that reports from climate scientists could not.

As a scientist who has been on the wrong end of climate change misreporting (see *Nature* **468**, 7; 2010), this surge of interest begs the question: has the often dysfunctional relationship between science and the media improved this time around?

Certainly, the question posed by journalists in response to an extreme weather event — “Is this caused by climate change?” — is sensible and good news. Such questioning implicitly accepts the basic science that the climate is changing and that human activity has a central role. It moves the discussion on to the severity of the impacts, rather than the existence of a problem.

It is a promising question, but too often we hear that no single weather event can be attributed to climate change. Although that used to be the case, research has moved on. Last September, the *Bulletin of the American Meteorological Society* published analyses from 18 research groups examining 12 extreme weather events from 2012 (hurricanes, droughts, severe cold, floods and heatwaves) and concluded that anthropogenic climate change was a contributing factor to half of the extremes examined. The answer to “Is it caused by climate change?” is now: “I’ll tell you after the analyses are complete and the results have been published.”

Yet the people directly affected — the public — have a different question for scientists: “Will this happen to me again?” In other words, is the current event in line with what we expect to be happening? Will this type of event occur with increased frequency or magnitude in the future? For the UK floods, the answer is an uncontroversial “yes”. A 2004 report by the then government chief scientist David King identified flooding as a serious impact of climate change for the United Kingdom.

By approaching questions about extreme weather and climate change in this way, scientists can avoid a common trap set by ‘climate sceptics’ and the media: drawing us into a refusal to say definitively whether a given event is caused by climate change. Furthermore, this approach separates scientists from such sceptics because focusing on past predictions and model

projections — even if uncertain — highlights that climate contrarians have not produced alternative predictive models, and therefore have little to contribute.

Some things have not improved this time around, however. The reporting on the UK floods again shows that scientists must be more vocal if the public are to receive more-accurate information from the media. Extreme events that are consistent with climate-change projections should open public debate about risk and societal responses. Images of flooded homes illustrate the danger to long-term investments that really matter to people. The demand is there for a valuable discussion, first on the science — the past projections and the results of attribution studies — and then on the possible political responses. Instead, the United Kingdom was again treated to a series of scientist-versus-climate-contrarian debates that conflate the two.

Most controversially, BBC Radio 4’s news programme *Today* broadcast a debate between leading climatologist Brian Hoskins of Imperial College London and Britain’s most influential climate contrarian, and former Chancellor of the Exchequer, Nigel Lawson. Unsurprisingly, Lawson mangled the science, incorrectly stating that there had been no recent global increase in air temperature and that measurements of ocean temperature were “pure speculation”. BBC editorial guidelines state: “The BBC must not knowingly and materially mislead its audiences. We should not distort known facts.” Clearly, the BBC failed.

Why does this happen? In short, producers do not want an inbox of complaints, and climate sceptics complain if they are not represented.

And executives might feel they need to ‘be fair’ by bringing in sceptics. Of course, accuracy is in conflict with this notion of balance. So scientists should debate science with other scientists — there is enough disagreement about the details of climate change to give the BBC their desired conflict. If Lawson is to be wheeled out to debate climate change, then let him argue on policy responses with another activist who promotes a different plan of action. Lawson leads a policy-advocate organization, so put him up against the head of Greenpeace. It would be a lively debate. Separating the science from the policy response in this way is crucial to avoid mismatching interviewees as the BBC has done, with inevitably misleading consequences.

When this separation does not happen, scientists of all stripes should kick up a fuss. As a starting point, here is Lawson’s BBC interview transcript: go.nature.com/nvrhar. And here is the complaint form: go.nature.com/boofqk. ■

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