

Politics and peer review

Akira O'Connor writes from the US

Earlier this year I moved to St. Louis to take a postdoctoral research position at Washington University. Located in the heart of the US, St. Louis is often referred to as the 'Gateway to the West', owing to the 19th century pioneers who moved through the city on wagon trails. As they came and went, St. Louis' commerce and industries grew, contributing to (amongst other things) the development of a proud popular media. Nikola Tesla demonstrated the possibilities of radio communication here, and it was home to the founder of Pulitzer Prize.

These days the St. Louis media has less to brag about. As a case in point, Pulitzer's once-great newspaper, the *St. Louis Post-Dispatch*, is now owned by an Iowa-based media corporation and has been criticised for its increasing reliance on advertising and news agency stories. As with all but the most rigorously controlled media, in the US, money talks. This is no less apparent on the national scale than on the local scale.

Those holding the purse strings are increasingly dictating the overall stance that the news media should take on the stories they cover. The need for consistency within each individual news brand is in many cases endangering the veracity of the reported facts. For instance, Rupert Murdoch's Fox News television channel was earlier this year forced to apologise to Democratic presidential candidate Barack Obama three times in two weeks for misreporting stories about both him and his wife. Regardless of Murdoch's leanings or his actual influence over his staff (his newspaper, the *New York Post*, endorsed Obama in January), the convergence of news and editorial opinion presents a problem for our traditional understanding of the media as conduits of verified fact.

The need for news brand consistency becomes particularly problematic when editors decide that their reporters should not only be responsible for relaying news, but also for creating it. Whilst news can be created to effect entirely sinister outcomes, such as the manipulation of public opinion for financial or political gain, it can also be done for more innocuous reasons, such as to exclusively report psychological findings of high public interest. In terms of human suffering caused, the latter is usually not comparable to the former. However, for a field like psychology, which is so often misrepresented in the media, I believe that it is especially harmful.

In late 2007 a team of neuroscientists published a scientific report as a *New York Times* op-ed (tinyurl.com/5k49r5). This report was considered especially newsworthy by the editors, as it dealt with undecided voters' brain responses to the numerous presidential candidates still in the race at the time. Using fMRI scanning during the presentation of political terms and images and video of the candidates, the authors reported, amongst other things, that the names of political parties provoked anxiety, as demonstrated by increased activation in the amygdala. Worryingly, this report was not a summary of a peer-reviewed journal article, but the first outing for the findings in any form.

Three days later, a letter of response from 17 neuroscientists not involved in the op-ed was published in the *New York Times* (tinyurl.com/62z3y8). In the letter, they raised concerns about the research, including their objection to the characterisation of the amygdala as an area of the brain responsible only for anxiety. A final point was to state their distress at the 'publication of research in the press that has not undergone peer review'. It is the bypassing of the peer-review process in favour of the far less scientifically rigorous editor review process which they, and I, found worrying.

Psychological research, particularly in the domain of cognitive neuroscience, can be based on a number of arguable inferences. Nevertheless, these inferences are not simply an author's opinion on a subjective question. They are

inferences made following reasoned debate, the precedent set by previously published research and a full understanding of the related literature. Newspaper editors cannot be expected to be experts in the field of neuroscience and therefore cannot be expected to review a report as rigorously as if they were. A neuroscientific report published in the *New York Times* cannot have been examined to the same standards as the same report in a peer-reviewed journal.

Getting back to the troublesome issue of news brand consistency, in this situation another problem presents itself. How can we expect the media to be critical of scientific findings that they themselves promote? Our expectation is that journalists should check facts and expose inaccuracy in that on which they report. Indeed, Ben Goldacre does exactly that for science in the media in his column, *Bad Science*, in *The Guardian*. But how could journalists like Goldacre maintain their integrity if they were asked to protect the science promoted by their employers? With great difficulty.

The publication of psychological reports in the popular news media sets a dangerous precedent for the dissemination of research findings. We understand why the peer-review process has developed, to protect scientists, their fields and the public, and we understand the way in which the modern media has developed, in a way that imposes its scrutiny selectively, sometimes based on disreputable agenda. It is therefore irresponsible to assume that peer review is, in some situations, unnecessary. Of course, it is the responsibility of psychologists to speak to the media when required. However, I believe that this should only be once we have subjected the same idea to the scrutiny of our colleagues.