

## Forum: Crying wolf

**Forum** – a weekly column for contributors to air their opinions, expound their theories and generally let off steam!

**Disclaimer:** The opinions expressed in this column are not necessarily those of the editor or publisher. Submissions may be edited for length and clarity.

Scientific hoaxes have a long, inglorious history. Among the most infamous examples are the 1912 'discovery' of the Piltdown man that took until 1953 (more than 40 years) to be exposed as a forgery, and the 1999 'discovery' of Archaeoraptor, an assembly of genuine fossils from several species that was revealed as a fraud in 2000. Scientific hoaxes exploit the human propensity to jump to conclusions, especially when the evidence seems to support a popular theory. Sometimes people do not want the facts to get in the way of a good story. Despite this, the veracity of scientific evidence must be sacrosanct.

How can the public possibly sift through the current avalanche of scientific information to distinguish fact from fiction? The simple answer is that the average person cannot. Most people rely on the socially-accepted gatekeepers of credibility—the scientists themselves and those who report on science. Ultimately, it is a matter of trust. Scientists and scientific journalists are supposed to subscribe to an ethos of honesty and integrity regarding scientific work, and to provide fair and accurate reports. Scientific reports are the conduit between the laboratory and the public, but because these reports are mostly unappealing to non-scientists, an interesting scientific narrative is often constructed. If scientists and scientific reporters play by the rules, the public is provided with scientifically accurate stories. However, the fly in the ointment is often the media and its obsession with sensationalism and spin.

In a world filled with information white noise, how do important scientific stories compete with other news stories for attention? The answer, unfortunately, appears to be through the liberal use of hype and hyperbole. News needs to have the 'wow factor' necessary for abbreviated TV grabs. This leads to the worrying trend of increasingly extravagant claims made in order to get attention. Alarmist stories often receive greater publicity and this can lead to a situation where credibility is the main casualty.

Recent examples of hyperbole in scientific reporting underscore the dangers of using scientific evidence to frighten people into 'doing something.' Some people have claimed that the Pacific Ocean is blighted with a continent-sized mass of plastic waste. These claims have been challenged as grossly misleading by others. Another example is the paranoia surrounding a swine flu pandemic which was fuelled by saturation-level media reports filled with hyperbole.

In an age when it is possible to buy a scientific opinion, how long will the public be willing to accept 'expert evidence' in scientific stories before scepticism and information overload undermine the credibility of scientists? Are we experiencing a case of the little boy who cried wolf with the media's increasing use of hyperbole and the resulting desensitisation of the public? Has the quest for an ever more interesting metaphor, an ever more catchy angle and an ever more attention-grabbing headline forsaken scientific ethics? If it has, then the public is being duped by a form of mass hypnosis that may be the greatest scientific hoax of all.

*Barry Drew*

43. The word 'propensity', as it is used in the text, means
- (A) inclination.
  - (B) talent.
  - (C) capacity.
  - (D) expectation.
44. Which characteristics of the writing weaken Drew's argument?
- (A) biased opinion and overt aggression
  - (B) inappropriate humour and over-use of idiom
  - (C) emotive language and sweeping generalisation
  - (D) irrelevant examples and heavy sarcasm
45. The phrase 'The fly in the ointment', in the second paragraph, refers to
- (A) the need for more informed reporting of scientific news.
  - (B) the public's desire for less science news in the media.
  - (C) the media's attempts to make scientific reports more dramatic.
  - (D) the reporters' lack of scientific knowledge.
46. Drew uses the phrase 'In a world filled with information white noise' to suggest that
- (A) people should treat all media reports with suspicion.
  - (B) most scientific reports that people encounter are inaccurate.
  - (C) people are bombarded with contradictory scientific information.
  - (D) the volume of information available to people is overwhelming.
47. 'Some people have claimed that the Pacific Ocean is blighted with a continent-sized mass of plastic waste. These claims have been challenged as grossly misleading by others.'
- Which of the following could be inserted at the beginning of the second sentence?
- (A) Similarly
  - (B) However
  - (C) Despite this
  - (D) Even though
48. In the last paragraph, Drew uses a series of rhetorical questions to convey his opinion that the public is
- (A) depressed by negative reporting.
  - (B) frightened by alarmist reporting.
  - (C) frustrated by excessive reporting.
  - (D) jaded by exaggerated reporting.