BOOK REVIEW

Dogmatism in Science and Medicine: How Dominant Theories Monopolize Research and Stifle the Search for Truth by Henry H. Bauer. McFarland, 2012. 301 pp. \$24.99, Kindle \$14.74. ASIN B008AHNIGS.

While the ridiculing of new ideas and their consequent suppression is not a new phenomenon (as for example happened with Semmelweis's proposal that disease could be reduced if doctors who delivered babies washed their hands first), changes in the nature of scientific activity have introduced new and rather sinister aspects into the phenomenon. Bauer cites the case of a letter sent by Duesberg to the journal *JAIDS*, disputing the number of deaths due to AIDS in South Africa quoted in an article criticizing his stance on the subject, suggesting that in that article the number of deaths had been inflated by a factor 25 relative to the official statistics. Notwithstanding the fact that the appointed referees had made no attempt to dispute his analysis, the submission was refused publication. As Bauer points out, publication of a letter alleging serious inaccuracy in a journal article would normally be automatic, unless the allegation could be refuted, but that principle was disregarded in this case.

Subsequently, Duesberg's letter was accepted by the journal Medical Hypotheses and posted online. But soon afterward it was withdrawn, pending an 'investigation,' allegedly of claims such as the possibility of potentially libelous material. Months later Duesberg learned that external reviewers had recommended that the withdrawal of the paper be permanent. Publication of the reviewers' comments was forbidden, but Bauer summarizes their content, suggesting that the reasons provided for rejection were incompetent, giving the impression of having been hastily prepared with the aim simply of providing excuses for rejection. A paper by different authors, relating to the risk of HIV infection from dissection of cadavers, was withdrawn by Medical Hypotheses at about the same time, apparently by Elsevier's Vice-President in response to complaints, bypassing the Editor who was 'replaced' a month later. The new Editor changed the Journal's policies so it no longer freely accepted innovative ideas but made them subject to peer review, which many consider has significantly diminished the value of the journal for publishing controversial material.

How should one assess what was happening here? It seems that the real reason for rejection in this case was fear that publication might cause doubts in people's minds as to the connection between AIDS and HIV, which might have had public health consequences. But this would have been the case only if the official position were correct; if it were not correct then it would be valuable from the point of view of public health for this fact to be known. There would be benefit for the issues to be discussed in an attempt to determine the truth, rather than have discussion closed down.

But closing down discussion is what happens in highly controversial cases; as the author points out, in such cases orthodoxy behaves like a religious authority, treating dissent as heresy to be excommunicated. I have become aware of this myself on a couple of occasions, once when a conference invitation was withdrawn by an organizer on the grounds that he had become aware that I was interested in parapsychology. Another time, in a meeting on energy, the chairman in a discussion session got up and shouted "Stop! You can't talk about that!" when I made reference to cold fusion in a comment.

Cold fusion is an interesting case: As Bauer points out, the term "has become as iconic of nonsense as 'Loch Ness Monster'." That fact seems to have been due to the fact that if something is repeated often enough it becomes regarded as being true, regardless of whether it is true or not. Here Bauer states incorrectly that a committee set up by the US Department of Energy in 1989 concluded that the claim was mistaken: Rather, it is the fact that it is often summarized as such that has led to the belief that is what the conclusion was (the committee merely concluded that the evidence was not convincing, but also accepting that certain claims were difficult to explain away). Editors of journals such as *Nature* and *Science* then refused to publish papers on the subject and, in a vicious circle, the resulting non-publication in these journals is widely taken as proof that there is no good research on the subject.

This premature closing off of the field of cold fusion will almost certainly be seen as a serious failing of the scientific community some time in the future. The present state of development of the technology, where a number of companies have been able to generate substantial amounts of energy, practical application currently being held up mainly by the need to control the process sufficiently well that reactors can run reliably unattended, might have been achieved many years ago had the normal processes of science applied, with all the evidence having been made available in the main journals to make proper evaluation possible.

Bauer's emphasis is less on the question of whether heresies are correct or not than on the serious failure of the scientific community to address such issues appropriately. For example, in the context of climate change, computer models are taken to be correct despite the fact that in them there are many factors that are not taken into account. He suggests that people tend to read only summaries of reports and ignore the detail, and that these summaries may be the work of technical writers whose aim may be to put on the actual evidence and conclusions "the best possible spin to reinforce the bureaucracy's viewpoint, and emphasize the importance of the bureaucracy's activities." In cases such as these, however, it is impossible in the absence of fuller information to determine how accurate Bauer's own



analyses may be. Certainly I have found myself doubting some assertions in the book, such as the suggestion that "there is still no good treatment for any cancer." A related issue is that of passive smoking, where the author asserts that the evidence for it being dangerous is very weak, and that the belief that it is dangerous has come about as a result of factors relevant to knowledge monopolies generally. That may be so, but Bauer curiously does not mention the important point that absence of proof is not the same as proof of absence, a point that might have diluted his case had he pointed it out. Again, Bauer's account of "flaws in Special Relativity" would seem to point more to flaws in his own understanding of relativity than to any in the theory.

The media play their role because of the way they select news, preferring to publish "what they believe the public want to hear about," and also assuming (as do journal editors) that the prevailing scientific opinion is correct. Propaganda also plays a role in determining what people in general think, often disguised by official sounding names for the organizations concerned (readers of this journal will doubtless be familiar with the propagandizing Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP), whose clear bias caused one of its founding members, Marcello Truzzi, to leave the organization). Another factor is funding: If funding bodies take it that alternatives to the consensus can be ignored, then these alternatives will not get funded, to their detriment. Equally, if knowledge that a scientist believes in something heretical can be detrimental to his or her career, this can also be a barrier to proper evaluation of the subject of the belief. The movie *Expelled:*

No Intelligence Allowed (which can be viewed on YouTube) shows what has happened in the case of intelligent design, a topic not among those reviewed by Bauer but of great interest for the way it is simply assumed to be false by the scientific community, without any discussion being needed.

At the end of this fascinating book, Bauer asks the question: Can 21st century science become trustworthy again? He suggests that change must come from outside the existing institutions, which merely serve to perpetuate knowledge monopolies, but first the need for change must become generally recognized. Possibilities discussed include a Science Court; independent, publicly funded institutions that can assess scientific claims of public importance; and designated funds for non-mainstream research. Something of this nature is clearly needed.

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