Science under siege

By Michael Ruse in the November 15, 2005 issue

In Review



The Republican War on Science

Chris Mooney Basic Books

Chris Mooney has written a stinging indictment of the Republican Party's attitudes toward science, focusing particularly on the manipulative and dismissive thinking and policies of the current administration. Even if only a part of what he says is true, he documents an appalling state of affairs. Although in terms of scientific know-how and capability the United States surpasses all other nations, it seems that its leaders come close to having contempt for—and often are ignorant about—science.

In chapter after chapter, Mooney details the ways in which powerful Republicans of the past 10 to 15 years have trashed scientific ideas, persecuted outstanding scientists, and avoided or otherwise downplayed one important scientific finding after another. Stem cell research, cancer research, environmental questions—these topics have found their way into the sights of the political right and been picked off one by one.

And yet I put the volume down feeling somewhat dissatisfied. Part of the problem is structural. You can read only so many cases of wrongheadedness before your eyes start to glaze over. The book is relentless—one failing after another is recounted, until even the most rabid Democrat is going to start nodding off. This points not simply to a lack of skill by the author, but to an underlying weakness in the book. One wants a bit more than accounts of deeds and misdeeds. One longs for an analysis that digs into the reasons why we have the kind of politicians that we do and why science is in their sights.

Mooney does offer some causal discussion. One of the biggest sources of trouble is big business. Many business leaders paid to get the Republicans elected, and for them it's been payback time. If a coal company pours thousands of dollars into the successful campaign of a member of Congress or a senator, that company later does not want any nonsense about restrictions on the production of atmosphere-fouling mercury.

At one level this is surely true and obvious—the aim of big business is to make money for shareholders, not to help society. But at another level it is not obvious. Surely there are businesses that take social responsibility seriously. The chap who fixes my car could rob me blind if he wanted to. As it is, he charges me a fair (not overly cheap) price, he does the work, and he is pleased not just that I am pleased but that he has done a good job. He is in it for the money, but not just for the money. Is there no big business whose CEO feels the same way, if only out of enlightened self-interest and the fact that the employees might work better if they feel they are doing a good job? I want to know a bit more about business, especially about the businesses that support the Republicans. The other cause of trouble pinpointed by Mooney is religion. He argues that a lot of the Republican trashing of science is due to the power of evangelical Christians and their allies (which these days include an increasing number of Roman Catholics) who give their votes to Republicans and expect payoffs of their own. President Bush has put severe restrictions on the use of federal money for stem cell research, ordering that only certain preexisting lines be used for such work. There is ongoing controversy about such things as needle exchanges (for addicts), which clearly cut down on the transmission of diseases such as hepatitis and AIDS, but seem at some level to condone if not encourage drug use. Too recent to be discussed in Mooney's book is the battle over the nonprescription sale of "morning after" pills. Above all, there is the huge row about what is to be taught in the biology classes of public schools. Should creation science, or its most recent morph, intelligent-design theory, be taught alongside Darwinian evolutionary theory?

Again, Mooney does no real digging into causes and connections—something surely essential if one wants to see change come about. Prima facie one would think that big business and evangelical Christianity make strange bedfellows. After all, Jesus' advice to the rich young man was to give all of his wealth to the poor and follow him. And if the big businesses that are supporting the Republicans are basically the types of businesses that are concerned simply with making money, then there can be no genuine alliance with evangelicals. In fact, in the past presidential election many Americans voted Republican against their own economic interests. They voted along with those who are outsourcing as fast as they can and taking jobs from Ohio and Indiana and relocating them in India or Taiwan or China or elsewhere if costs are thereby reduced. These Americans voted on the basis of "moral values"—regarding abortion, capital punishment, gun control—rather than on the basis of their pocketbooks.

The point is that there seem to be major differences between the different groups supporting the Republican attack on science. Should we always expect these groups to work in tandem? Is it possible that those of us who deplore the attack on science might find some way to drive a wedge between the two groups?

As it is, a wedge *is* opening up. An increasing number of evangelicals are starting to worry about the environment. Their reading of the book of Genesis tells them that God wants us to care for God's creation. We are not absolute owners, to do with the world as we please. We are God's stewards, and that gives us responsibilities toward the land and all of its inhabitants. And that means caring about mercury pollution and similar phenomena.

I can see more conflicts down the road. Suppose stem cell research really does take off and provides avenues for major medical advances—the use of designer drugs, for instance, to treat various illnesses that today can be treated only partially, if at all. Suppose that there really is a breakthrough in treating Parkinson's disease. Are the drug companies going to sit back and let the evangelicals restrict their research and the products of this research? I think not.

These are the kinds of issues that must be dealt with if we are to think seriously about the place of science in society. These issues are not going to vanish if Democrats return to power. Now that Mooney has drawn attention to the problem, we need a much more comprehensive analysis.

Those who do not vote Republican need to ask if they are not contributing to the problem. I have spent the past 30 years fighting creationism in its various guises. One thing that has become apparent to me is that in some ways the creationists and intelligent-design theorists have a very good point. Science, or at least its leading spokespeople, tends to be strongly antireligious. No subgroup of scientists is more vocal than the biologists, including the evolutionists. Francis Crick, codiscoverer of the double helix, declares: "If revealed religions have revealed anything it is that they are usually wrong." Richard Dawkins, best-selling author of The Selfish Gene and other books, says: "It is fashionable to wax apocalyptic about the threat to humanity posed by the AIDS virus, mad cow disease, and many others, but I think a case can be made that faith is one of the world's great evils, comparable to the smallpox virus but harder to eradicate." Stephen Jay Gould, who until his death a couple of years ago was even more popular than Dawkins, describes humanity thus: "We are here because one odd group of fishes had a peculiar fin anatomy that could transform into legs for terrestrial creatures; because the earth never froze entirely during an ice age; because a small and tenuous species, arising in Africa a quarter of a million years ago, has managed, so far, to survive by hook and by crook. We may yearn for a higher answer—but none exists."

I am not surprised, then, that many American Christians do not much care for science. Not that they are necessarily opposed to the fruits of science; often they are quite good with computers, internal combustion engines and the like. But they feel belittled by science. Those who love science (and I am one), including those of us who are nonbelievers (and I am one), should quit sneeringly giving religion the backs of our hands and start to look seriously at the limits of science and whether it is appropriate for religion to fill the gaps. We should look at how that space-filling should take place, at how those of us who do not want to use religion to fill the spaces should do their work, and at how science should respond to religious people as they do their filling. Perhaps this effort will lead to an even greater divide between science and religion. But we should try.