in the refereed literature, and attacking the integrity of genuine experts (I). In frighteningly Orwellian fashion, these actions are carried out in the name of “sound science.”

Much of this will be familiar to those who read the 2003 report prepared for California Congressman Henry Waxman, “Politics and Science in the Bush Administration” (2), or the 2004 report of the Union of Concerned Scientists, “Scientific Integrity in Policy-making: An Investigation into the Bush Administration’s Misuse of Science” (3). But Mooney goes further, documenting the roots of these abuses in the Reagan administration and the Congress of Newt Gingrich. Historically, Republicans have often been more sympathetic to scientific elites than populist-oriented Democrats, but the animus growing over the past 20 years has culminated in the present administration, which, being unable to control science, seems determined to undermine it.

Mooney points out that in many cases, the same groups and individuals have been involved in multiple misinformation campaigns. Consider global warming and ozone depletion. Two leading deniers of the reality or severity of anthropogenic global warming—S. Fred Singer and Sally Baliunas—previously vociferously denied the link between chlorofluorocarbons (CFCs) and depletion of stratospheric ozone. Although his views lie well outside the mainstream of expert scientific opinion and it has been a long time since he regularly published in the refereed literature, Singer has been repeatedly invited to testify in Congress. Both he and Baliunas have links to the George C. Marshall Institute, founded in 1984 to defend Ronald Reagan’s Strategic Defense Initiative against the majority opinion of expert physicists that it was ill-conceived. Since then, the institute has claimed to support “sound science” in public policy while promoting positions that run against the mainstream of scientific opinion but are consistent with an uncompromisingly anti-regulatory ideology. In recent years, it has received funding from ExxonMobil, presumably not coincidentally linked to its efforts to deny global warming (4). The plot thickens further. One of the institute’s founders and its current chairman of the board, Robert Jastrow, has written books promoting intelligent design (5–7). Frederick Seitz, its chair emeritus, is well known in the scientific community as a past president of the National Academy of Sciences. Less well known is his role in the 1980s as a principal adviser to the R. J. Reynolds Tobacco Company in its support of biomedical research that might cast doubt on the links between tobacco and cancer (8).

How are denials of global warming, the impact of CFCs on stratospheric ozone, and the link between tobacco and cancer; support of missile defense; and advocacy of creationism related? On the face of it, scarcely. But they all involve the promotion of a right-wing political agenda, and they all involve grotesque misrepresentations of scientific evidence. “Doubt is our product” was the slogan of an internal memorandum from the Brown and Williamson Corporation as it set out to deny the scientific evidence linking smoking to cancer well after the epidemiological evidence was clear, and the same strategy underlies anti-scientific campaigns today (9, 10). The connections Mooney discusses are crucial, because they provide proof that these actions are politically and economically motivated, rather than based on principled scientific worries.

The same people are repeatedly involved in the same obfuscations. Scientists have traditionally been loath to foray into politics for fear of politicizing science, but Mooney’s book makes it clear that when sensible people stand on the sidelines, a great deal of nonsense can be spread. Scientists and scientific societies have tried in recent years to correct misrepresentations and clarify misunderstandings, but the efforts have been too few and far between. Those who would attack science for political gain are organized, persistent, and well-financed. The Republican War on Science makes clear that scientists need to do more to present their knowledge to the rest of society, because there is no shortage of people willing to misrepresent it.

References and Notes
1. To these activities documented by Mooney, add the harassment of researchers by punitive demands for documentation of work already published in peer-reviewed journals. See Donald Kennedy’s Editorial, Science 309, 1301 (26 August 2005).

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The Republican War on Science
by Chris Mooney
Anti-realism in science

Anti-realism in mathematics

See also

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Anti-realism in the sense that Dummett uses the term is also often called semantic anti-realism. Hilary Putnam’s “internal realism”. Despite being at one time a defender of metaphysical realism, Hilary Putnam later abandoned this view in favor of a position he termed “internal realism”. Precursors. Funding for USA.gov and content contributors is made possible from the U.S. Congress, E-Government Act of 2002. Crowd sourced content that is contributed to World Heritage Encyclopedia is peer reviewed and edited by our editorial staff to ensure quality scholarly research articles. By using this site, you agree to the Terms of Use and Privacy Policy. Realism in international relations is largely centered on realist assumptions of human behavior. The realists believe that human behavior is often related concerns about ego and individual passions and desires, and more specifically, the presence of evil in human beings. They believe that given the conditions of the world, humans themselves, if left to do what they could, would carry out evil actions against others. As Donnelly writes (2000), “realists characteristically give primary emphasis to egoistic passions and the tragic presence of evil in all political action” (Morgenthau, 1946: 203).