by Walter McDougall in . . . *the Heavens and the Earth* (Basic, 1985), by John Logsden in *The Decision to Go the Moon: Project Apollo and the National Interest* (Chicago, 1970), and, more recently, in *Spaceflight and the Myth of Presidential Leadership*, a volume edited by Roger D. Launius and Howard E. McCurdy (Illinois, 1997). As these historians have argued, the Cold War brought NASA into being and shaped the early years of the space program. President Dwight Eisenhower resisted characterizing the American response to *Sputnik* as a race, but the press—and almost everyone else—cast the early Soviet achievements as a threat to U.S. national security. Kay points out that, as a senator, Lyndon Johnson went so far as to present space exploration as an issue of national survival; but he withdrew presidential support of the space program when it was no longer politically expedient.

From the mid 1960s to the present, NASA had difficulty justifying the federal support that it seemed to require. The agency's lack of political clout in the 1970s forced it to pitch the development of a reusable Space Transportation System (STS) as the means to provide the United States with routine and low-cost access to space. But the shuttle turned out to be both expensive and incapable of flying more than a handful of missions per year.

Kay's most original contribution to NASA history is his discussion of policy decisions made during the 1980s. When President Ronald Reagan appointed George A. Keyworth his science advisor in 1981, he charged him with reviewing the nation's entire space program. Keyworth recommended an increase in the Department of Defense space budget, giving classified projects such as the Space Defense Initiative (SDI) and antisatellite systems priority over civilian programs run by NASA. By the end of the 1980s the military, not the civilian agency, was receiving the greatest part of the nation's funding for space programs. Kay believes that dominance of the nation's space initiatives by the Department of Defense continues today—for example, in the military use of satellites for the war on terror. At the same time, Keyworth advocated space commercialization—turning over management of expendable rocket launches to private industry. This is another example, in Kay's view, of NASA's increasing marginalization.

Though Kay's points are well argued, his focus is admittedly narrow. Aeronautics, the second "A" in the NASA acronym, and certainly part of NASA's original mission, is barely mentioned. I found his style off-putting because of his extensive use of parenthetical statements, which often seem to impede the flow of the narrative. The editing of the book seems idiosyncratic. For example, block quotations are not always introduced in the text. This makes it necessary to consult the endnotes to find the source for a particular long passage—for example, on page 46. Also, on pages 99 and 132 the use of curious bull's-eye marks between paragraphs left me wondering whether something had been deleted. Nevertheless, *Defining NASA* is a valuable and interesting contribution to NASA history that deserves serious consideration by the agency's current policymakers.

VIRGINIA P. DAWSON

Chris Mooney. *The Republican War on Science*. ix + 342 pp., index. New York: Basic Books, 2005. (Cloth.)

Chris Mooney has written a well-documented and timely book about the politicization of science under the most recent Republican administrations. His argument is not just that George W. Bush and the Republican Congress have ignored or misunderstood science, but that they have deliberately and systematically distorted, twisted, and abused science and the scientific process to further a political, economic, and moral agenda. Mooney's most disturbing charge is that over the past two decades a strategy has developed in the far right wing of the Republican Party whereby operatives have successfully turned science against itself: "Where religious conservatives may once have advanced their pro-life and socially traditionalist views through moral arguments, they now increasingly adopt the veneer of scientific and technical expertise" (p. 208).

If Mooney is correct, what he is describing is nothing less than a conspiracy against the American people, who rely on their elected representatives to make careful and judicious considerations of scientific evidence when making policy decisions. One has a right to demand significant evidence for Mooney's claim, and he does not disappoint. The real strength of the book is its careful, meticulously researched documentation, over more than a dozen chapters, of the abuses and misuses of science by Republican operatives, appointees, and legislators and even President Bush himself. While many of the cases Mooney discusses involve familiar and well-publicized issues (stem-cell research, global warming, abortion, and contraception), Mooney has a reporter's knack for tracking down threads

that lead from public policy statements through the maze of advisory committees and regulatory bodies, often ultimately to their sources in the highly politicized think-tanks funded by industry.

To take just one example Mooney offers, Chapter 8 tells the story of Jim Tozzi, a Republican operative who began his career in the administrations of Nixon and Reagan but now works as a lobbyist for clients in big industry (especially tobacco and chemical companies). Tozzi's most successful initiative has been the Data Quality Act, a misleadingly named piece of legislation activated in 2002 that allows corporations to challenge unfriendly findings of federal regulatory bodies (such as the Environmental Protection Agency) under the pretext of seeking adequate "peer review." This legislation has the potential to allow industry to clog the regulatory process with corporate lawsuits and distorts scientific consensus by providing a legalistic platform for contrarian industry "experts." The kicker in this story is that Tozzi, who has used the Data Quality Act to challenge the EPA's restriction of the herbicide atrazine on behalf of industry clients, actually drafted much of the Data Quality Act several years earlier while lobbying Republican senator Richard Shelby for Philip Morris!

Mooney is a reporter, not a historian, and in many respects *The Republican War on Science* is a work of political activism and not disinterested scholarship. Nonetheless, he evidences an awareness of issues in history and sociology of science relevant to his critique and develops a reasonably nuanced characterization of science and its practice. Much of Chapter 2 is devoted to laying out a definition of science and scientific methodology, and Chapters 3 and 4 offer a brief but satisfactory survey of science politicization from the FDR through Reagan administrations. In short, while Mooney does not consistently adopt the methodology of a historian, much of what he has to say is relevant to historians of science and policy, and the bulk of the book may be considered a kind of history of very recent science policy.

The book is not perfect, but it is a commendable effort. At times the litany of names and acronyms Mooney tosses at the reader can be overwhelming, and some of his claims are repeated more than is perhaps strictly necessary. But Mooney writes well, and overall it is a fast-paced and enjoyable read. My most serious criticism of the book's content is its chapter on intelligent design, which fails to make the strong links between advocacy groups and legislators presented when dealing with other issues. The book's real strength is its documentation of other, often less visible abuses of science that can have even more pernicious consequences for health and environmental policy decisions. Many of the issues and events discussed here will doubtless be written about by historians, who will benefit from Mooney's diligence. It is also worth noting that the book's accessible style and controversial subject matter make it an ideal text for teaching—and, with a trade paperback edition presumably in the offing, an affordable one, too.

DAVID SEPKOSKI

J. Samuel Walker. *Three Mile Island: A Nuclear Crisis in Historical Perspective*. 314 pp., illus. Berkeley: University of California Press, 2004. $16.95 (paper).

When the Atomic Energy Commission (AEC) created its history program in the late 1950s, the members could not have foreseen that one of its volumes would focus on a crisis that shattered the dreams of power too cheap to meter. After the Atomic Energy Act of 1955 opened research in nuclear energy to the world and, more significantly, to private enterprise, the peacetime nuclear power industry gained considerable momentum. By 1979 the industry had acquired a 12 percent share of electrical power generation in the United States and seemed to offer safe and clean energy. The nuclear accident at Three Mile Island drew attention to previously unknown dangers posed by the complex nuclear systems. It stopped the development of nuclear power in the United States.

Gallons of ink and acres of paper have been devoted to analyses of what went wrong at Three Mile Island, not to mention miles of film and videotape. One might question the necessity of yet another history. Given the renewed interest of the federal government in nuclear power, however, it is instructive to reexamine the history of one of America's technological disasters, especially since recent events suggest that we have not yet perfected our response to them. J. Samuel Walker is in an enviable position to do this, since he has unparalleled access to the records of the National Research Council (NRC). The historical perspective offered in *Three Mile Island: A Nuclear Crisis in Historical Perspective*, however, is limited largely to that of the agency.

Walker argues that the coincidence of the nuclear accident with the appearance of the film *The China Syndrome*, starring Jane Fonda, cast public opinion on the side of antinuclear activists