BOOKS: STRATEGIC POLICY

Selling a Dream Defense

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How could "Star Wars," a concept with the patently impossible goal of shielding the entire population of the United States against a barrage of Soviet missiles, have been sold to the hard-headed Joint Chiefs of Staff, the cost-conscious Congress, the skeptical general public, and the cautious administrations of many other nations? How could a system that would violate the 1972 Anti-Ballistic Missile (ABM) Treaty (the cornerstone of many arms-control agreements) and overthrow the concept of mutually assured destruction (MAD) (which had prevented nuclear war for 30 years) even have been contemplated? How could $60 billion have been spent without producing a functional weapon?

Way Out There in the Blue
Reagan, Star Wars and the End of the Cold War
by Frances FitzGerald
Simon and Schuster, New York, 2000. 592 pp. $30, C$43.50. ISBN 0-684-84416-8.

Looking back at the history of Star Wars, officially the Strategic Defense Initiative (SDI), is fascinating, insightful, and ultimately very sad. Frances FitzGerald's *Way Out There in the Blue* provides an excellent overview of the SDI saga, one that answers the above questions and many others. FitzGerald's previous books have garnered numerous awards, including a Pulitzer Prize, a National Book Award, and the Bancroft Prize for history. Her new book is both well-written and authoritative, and her 1743 notes and a biography covering nearly 300 books, articles, films, and documents and 41 personal interviews are testimony to her careful scholarship. The author's conclusions may be controversial. For example, she finds that SDI had no influence whatsoever on the breakup of the Soviet Union. Her arguments, however, are compelling and well supported. I strongly recommend reading FitzGerald's account.

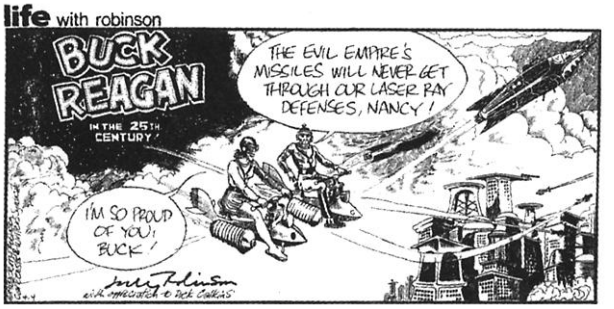
The topics FitzGerald examines are more than fascinating; they are relevant to the present. President Clinton will soon decide whether or not to launch a National Missile Defense (NMD). Following the reasoning used by those who designed the Maginot Line, the United States proposes to build a defense against weapons of mass destruction delivered by intercontinental ballistic missiles while ignoring potential delivery by submarines, low-flying air planes, cruise missiles, cargo ships steaming into ports, or simple smuggling. Of course, the proposed system violates the ABM Treaty, but as in the times of Star Wars, the U.S. government hopes to get the Russians to agree to changes. Presidential candidate Al Gore is in favor of the proposed NMD, and his opponent George W. Bush has called for a system that goes further and also protects U.S. allies by sharing technology with them. Where have I heard that thought before? Upon reflection, FitzGerald's book should be elevated to the required-reading list.

Scientists, beyond their general concerns as citizens, will be particularly interested in the role science played in the initiation of Star Wars. As FitzGerald shows, that role was very small. She reviews the parts played by the few scientists who were involved in conceiving SDI, and she discusses the larger roles scientists played in advancing and, finally, in attempting to stop the program.

SDI probably grew out of a 1979 visit that Reagan made to the North American Aerospace Defense Command, where he was impressed by the inability of the United States to stop an incoming ballistic missile. A protracted effort to initiate a space-based missile defense was mounted by Senator Malcolm Wallop (a conservative Republican from Wyoming), retired Lieutenant General Daniel Graham (the former head of the Defense Intelligence Agency), Karl Bendetsen (the retired chief executive of a forest-products company), Angelo Codevilla (Wallop's aide), and Livermore scientists Edward Teller and Lowell Wood. In early 1983, a White House Science Council panel headed by Edward Frieman reported that directed energy technologies "were not likely to have any military utility for the foreseeable future." Nonetheless, Admiral James Watkins (the chief of naval operations) pushed for SDI because Teller had persuaded Watkins of the wisdom and possibility of using space weapons. Armed with the support of Teller and his allies, Watkins convinced his fellow chiefs of staff. Thus Reagan was able to initiate Star Wars, which he did in a March 1983 speech written and supported by his science advisor George Keyworth.

By early 1984, a study team of scientists and engineers chaired by James Fletcher had mapped out, in seven highly classified volumes, a five-year research and development plan. With strong Congressional support, SDI was soon off and running. Many of us know of those times, but it is useful to relive them through FitzGerald's book. It is fascinating to review the important roles played by Caspar Weinberger (secretary of defense), Richard Perle (assistant secretary of defense), and Kenneth Adelman (head of the Arms Control and Disarmament Agency) in increasing defense spending (8% per year under Reagan), advancing SDI, and preventing any arms control agreements despite repeated offers, and even unilateral actions, by Mikhail Gorbachev.

Many organizations, such as the Union of Concerned Scientists, the Federation of American Scientists, and the American Physical Society, as well as many individual scientists including Nobel laureate Hans Bethe, Richard Garwin, Kurt Gottfried, and Henry Kendall, acted to stop Star Wars. Critics attempted to show SDI for what it was: at best many years off and a point defense system that might add to U.S. retaliatory ability under the MAD doctrine, but certainly not a means of shielding cities. Despite their opposition, Star Wars continued well beyond the Reagan administration and parts remain alive today.



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Perhaps the saddest part of FitzGerald's book—a must-read section—is her description of how Star Wars stood in the way of, and ultimately destroyed, the chances for major arms control agreements. At the October 1986 Reykjavik summit with Gorbachev, Reagan was unwilling to compromise his dream, even to the small extent of agreeing not to violate the ABM Treaty for ten years. As the meeting ended, Secretary of State George Schultz noted "we missed a historic chance" and arms negotiator Max Kampelman was fighting back tears. And Reykjavik was only an extreme case, the same hard-line attitude towards arms control predominated throughout the Reagan years.

In sum, FitzGerald's book describes how Reagan's political skills created and nurtured SDI despite the seemingly critical flaw that the required technology was not remotely feasible. Her account is an informative reminder of the ability of politics to trump science.

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