

Taken together, *Target Hiroshima* and *Fallout* provide good descriptions of the complexities inherent in the production of nuclear weapons and the complex effects of the bombing on American thought and culture. The picture of Deak Parsons completing final assembly of “Little Boy” in the cramped bomb bay of the *Enola Gay* while en route to Hiroshima is a fascinating one—almost as fascinating as the unforeseen political and cultural consequences of the bombing itself.

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American Science in an Age of Anxiety: Scientists, Anticommunism, and the Cold War.

By Jessica Wang. Chapel Hill: University of North Carolina Press, 1998.
Pp. xii+375; illustrations, notes/references, bibliography, index.
\$49.95 (cloth); \$19.95 (paper).

How did domestic anticommunism influence American scientists during the Cold War? Jessica Wang tackles this topic by focusing on the half decade following World War II. During this period, Wang argues, American scientists “both challenged and perpetuated the development of the Cold War political order” (p. 7). Liberal and progressive Left scientists plunged into public policy in the wake of the atomic bombing of Hiroshima and Nagasaki by promoting civilian control of research, internationalism, and research guided by ideas of the broad public good. However, they retreated from these positions (at least publicly) because anticommunism narrowed the range of acceptable ideas. Scientists felt the hand of anticommunism in the shape of the Federal Bureau of Investigation, the House Un-American Activities Committee, and the Atomic Energy Commission. Security and loyalty investigations, many out of the public eye, reached across the country and far down into the ranks of scientists. By 1949 scientists had learned their lesson: no longer would they promote broad social change. Instead, they would focus on narrow bargaining over procedures and individual cases within bureaucracies to try to fend off threats from the federal government.

At the heart of the book lie five case studies of individual encounters with security and loyalty investigations. One chapter focuses on three relatively unknown scientists who found their careers hindered by security investigations for the Atomic Energy Commission. Another explores the experiences of two higher profile scientists, Harlow Shapley and Edward Condon, with the House Un-American Activities Committee. Unlike their less famous colleagues, these two figures were able to use their fame and

connections at least initially to stand up for themselves and their principles. (After further rounds of security investigations, Condon left government service in 1954). Through these cases, Wang shows that the famous Oppenheimer loyalty case of the 1950s was one piece of a far larger puzzle.

Scholars interested in science, politics, and the cold war are likely to find this book of interest. Like Brian Balogh, Paul Forman, Daniel Kevles, Peter Kuznick, Stuart Leslie, and Rebecca Lowen, Wang demonstrates the profound impact of politics and the state on scientists, especially during the Cold War. She sees little to celebrate in this impact. In her concluding paragraph, she urges scholars to frame the American experience of the cold war not as a triumph, but as a “grim, tragic necessity” (p. 295).

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Fundable Knowledge: The Marketing of Defense Technology.

By A. D. Van Nostrand. Mahwah, N.J.: Lawrence Erlbaum, 1997. Pp. xix+241; figures, tables, notes, index. \$49.95 (cloth); \$22.50 (paper).

In this slim volume, A. D. Van Nostrand offers a sophisticated and well-documented account of how most new research and development has been generated in the United States since the early cold war. He describes how new technologies were conceived, codified, and institutionalized in a “vast knowledge factory” (p. xi) financed by the Department of Defense and extending across America’s R&D community. His overview of military “knowledge production” (p. xii) since the mid-1940s is most welcome, since this era is rarely synthesized within the growing historical literature on the military dimensions of America’s state-society relationship.

Van Nostrand focuses on the 1980s and 1990s. He uses the Strategic Defense Initiative (Star Wars) as a case study and outlines the current infrastructure for “knowledge production” and what it might look like if ever it became genuinely dislodged from its cold war moorings and converted to civilian purposes. “Reconversion” is an active concern of many critics of America’s “Gunbelt” and military-industrial complex. Their research often stresses mismanagement, waste, and corruption. Van Nostrand duly notes the convolutions, inertia, and cross-purposes, especially Congress’s role. He regards defense spending as a generally negative burden but is impressed by how innovative, resourceful, and effective defense R&D has been over the long term. This book also sets itself apart by its unique compositional clarity and lightness of prose, making a complex and important subject now much more widely accessible.

The Pentagon’s “presence is as continuous as the dial tone in a telephone” (p. xii). On behalf of national security, it has funded 60 percent of