One Path from the Manhattan District

Making Weapons, Talking Peace. A Physicist's Odyssey from Hiroshima to Geneva. HERBERT F. YORK. Basic Books, New York, 1987. xiv, 359 pp. + plates. $22.95. Alfred P. Sloan Foundation Series.

This engaging, straightforward, readable narrative takes its author from his first-year graduate studies in physics at the University of Rochester in 1942, when he was 21, to his present position as director of the University of California's Institute on Global Conflict and Cooperation, seated at San Diego. The title well describes the path of York's public life. From his recruitment in 1942 as a junior staff member of E. O. Lawrence's laboratory in Berkeley until the spring of 1961—save for the three years immediately after the end of World War II when he finished his graduate studies and taught at Berkeley—York worked as scientist and administrator in the weapons laboratories, at the White House, and in the Department of Defense. For the last 25 years he has been "talking peace" publicly and privately as academic, as government consultant, and, from 1978 to 1980, officially as the U.S. delegate to the tripartite negotiations on a comprehensive test-ban treaty in Geneva.

York has had an extraordinary career. The tone of his memoir is modest and conveys only by indirection the combination of scientific and personal gifts that made it possible. Like many physicists of his generation, he joined the Manhattan Project before finishing his formal training, and this certainly contributed to shaping his future. It was his good fortune to attract Lawrence's attention early on. In 1950 Lawrence sent him to "run" the fledgling laboratory at Livermore when it was still an annex to the Berkeley Radiation Laboratory, functioning as a contractor for Los Alamos. Shortly after Livermore's formal creation as the Atomic Energy Commission's second nuclear weapons laboratory a few months later, York became its director, a post he held for more than five years. He was not yet 31. York soon became involved in wider military applications of science and technology as a member first of the Scientific Advisory Board of the Air Force and later of the Scientific Advisory Committee on Ballistic Missiles (von Neumann Committee) and the Security Resources Panel (Gaither Committee).

In the post-Sputnik explosion of concern with the adequacy of American military strength and its scientific and technical base, York was drawn to Washington. He became an important member of President Eisenhower's newly formed Scientific Advisory Committee (PSAC), over which James Killian presided, and served as chairman of its panel on space and member of panels on ballistic missiles and nuclear testing. In early 1958 he became chief scientist of the newly created Advanced Research Projects Agency (ARPA) in the Defense Department and by the end of that year the first director of Defense Research and Engineering (DDR&E), the third-ranking position in the Department, another post newly created in response to the pressures of the time.

In 1961, the combination of a heart attack and a change in administration led York to leave the high-pressure world of military science in Washington. He returned to the University of California, serving two years as the first chancellor of the new San Diego campus. He has remained there since, as professor of physics, dean of the graduate school, acting chancellor, and now director of an institute that allows him to "talk peace" full time.

The later chapters reflect York's active role as a public exponent of arms control and disarmament and the futility of seeking increased security through more and better nuclear weapons, as well as his continued service as a government adviser in the Democratic administrations of 1961–68 and 1976–80. These chapters lack some of the intensity of the earlier ones; the account of the last 26 years occupies less than half of the book.

This memoir will appeal to both a general and a professional audience. For anyone interested in understanding the evolution of our national security policy, it provides both intellectual insight into the thought processes that have helped to shape it and the color and flavor of the steps of this evolution as life events. For the historian, the political scientist, and the arms-controller the book belongs on the shelf next to the memoirs of York's fellow participants, Killian, Kistiakowsky, and Wiesner, who, like him, were present at the creation. York tells a similar story, naturally giving more space to those events in which he participated directly. Like Killian and Kistiakowsky, he admired Eisenhower, whom he credits with shaping the basic framework of our security policy: maintaining a secure deterrent force and seeking political limitations on international competition in nuclear armaments. As do most memoirists, he finds the events in which he participated and the administrations he served good.

York tells us when and why he made the switch from making weapons to talking peace briefly but clearly. In early 1961 he was preparing to meet with John J. McCloy, President-elect Kennedy's newly selected adviser on arms control and disarmament:

> [This] led me to crystallize my thinking . . . around three basic principles, each derived from my experiences of the last several years: (1) defense of population is impossible in the nuclear era, (2) our national security dilemma has no technical solution, and (3) our only real hope for the long-run lies in working out a political solution [p. 198].

Or, as he put it a little more explicitly in congressional testimony two-and-a-half years later,

> The problem posed to both sides by this *dilemma of steadily increasing military power and steadily decreasing national security has no technical solution.* If we continue to look for solutions only in the area of science and technology the result will be a steady and inexorable worsening of the situation. I am optimistic that there is a solution to this dilemma; I am pessimistic only insofar as I believe there is no solution to be found within the areas of science and technology [p. 199].

York still holds these views; all that has happened since 1963 has only reinforced them.

York's explanation of his move from making weapons to talking peace presents us with a puzzle. Why did York (like Kistiakowsky, Killian, Wiesner, and many others) make the change, and not Teller or Lawrence (although York suggests that the latter may have been ready to just before his death) or many others who shared similar experiences? York does not engage this question. The memoir shows him to be reflective but not introspective. Perhaps an inevitably speculative discussion of why he came to different views from his early mentors is foreign to his style of thinking. Yet the question presses. Why many of those who confront the questions of weapons and peace in responsible government positions continue to choose making weapons over (seriously) talking peace is a central problem for our time.

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