The Private Oppenheimer

Robert Oppenheimer: Letters and Recollections. ALICE KIMBALL SMITH and CHARLES WEINER, Eds. Harvard University Press, Cambridge, Mass., 1980. xviii, 376 pp. + plates. $20.

The dawn invests our substance
with desire
And the slow light betrays us,
and our wistfulness:
When the celestial saffron
Is faded and grown colourless,
And the sun
Gone sterile, and the growing fire
Stirs us to waken,
We find ourselves again
Each in his separate prison
Ready, hopeless
For negotiation
With other men.
—J. ROBERT OPPENHEIMER, about 1923

Twenty years after graduating from Harvard University, where he majored in chemistry, studied physics, wrote stories, and composed poetry, including the stanza cited above, Robert Oppenheimer entered his "separate prison." It was on 16 July 1945, the day he and his colleagues successfully tested the first atomic bomb.

As a result of this achievement, and by virtue of his personality, his brilliance, and his adept directorship of the Los Alamos nuclear weapons laboratory during the war, Oppenheimer soon emerged as the towering charismatic figure of American science. Physicist and poet, policy adviser and humanist, he became a symbol of the effort to transcend the contradictions between the idealism of science and the exigencies of the cold war. "Father" of the atomic bomb and of the United States's proposal for the international control of atomic energy (the "Baruch plan"), chairman of the Atomic Energy Commission's General Advisory Committee (1946–1952) and of numerous other important ad hoc energy and defense strategy committees, he served as the grand interpreter of the role of atomic energy until 1953, when the AEC, acting upon direct orders from a president unwilling to run against the tide of McCarthyism, revoked his security clearance.

Though banished from government, he could not be exiled from society. Having carried into the political arena a sensibility, a moral posture not generally associated with politics, he was resurrected as a cultural symbol of repression by his admirers after being treated as a radical by his opponents. His life became a cause, his cause became a legend, and his legend became a myth.

In 1965 at a Unesco gathering in Paris honoring Einstein on the 50th anniversary of the general theory of relativity, Oppenheimer himself addressed the issue of mythification. The reaction to his remarks was critical, but his message—that myths rob men of their humanity—was appropriate there, as it is relevant here. "I thought that it might be useful," he said, "because I am sure that it is not too soon—and for our generation perhaps almost too late—to start to dispel the clouds of myth and to see the great mountain peak that these clouds hide. As always, the myth has its charms; but the truth is far more beautiful."

Robert Oppenheimer: Letters and Recollections is a demythologizing book and, as such, a monument to its subject's humanity. The first scholarly attempt to come to grips with the development of Oppenheimer's elusive personality, it is all the more impressive because its many revealing letters and candid commentary were gathered from those who knew him longest: his brother, Frank; his high school English teacher, Herbert Smith; and his boyhood friend Francis Fergusson, author of *The Idea of a Theater*, a brilliant study that Oppenheimer, as director of the Institute for Advanced Study, nurtured and admired.

This collection of letters and recollections, which could appropriately be subtitled "The Private and Formative Years," is composed of 167 letters (most of which were written by Robert Oppenheimer) covering the period from 1922 through 1945. In addition, there is a well-designed and gracefully written narrative based on reminiscences drawn from Thomas Kuhn's important oral history interviews with Oppenheimer in 1963 and subsequent interviews with numerous Oppenheimer acquaintances conducted by the knowledgeable and talented editors, historians Alice Kimball Smith and Charles Weiner of Radcliffe College and MIT respectively. All this is not only interesting, offering the reader a historian's-eye view of the intense intellectual and emotional experiences involved in Oppenheimer's development from "eighteen-year-old Harvard freshman to the weary forty-one-year-old administrator who tried briefly after the war to resume a quiet life of teaching and research," but important. Serious students of the history and sociology of American science will recognize that *Robert Oppenheimer* makes a mockery of the view that the social relations of scientists, their personal and political biographies, are not relevant to the history of science. The message implicit in this excellent publication is clear: Physicists neither live nor work by math alone.

The first sections of the book, the preface, introduction, and chapter 1, headed " 'Work . . . frantic, bad and graded A': Harvard 1922–1925," are in some respects the most intriguing. With admirable economy of language Smith and Weiner introduce Oppenheimer and begin to etch out his character, the aspects that made him so interesting and those that made him so vulnerable. We learn of his early persistent colitis and its likely psychosomatic origins, of "a basic unhappiness," and of his "bouts with melancholy" and depression. Brilliance, we suspect, was not an unmixed blessing but something of a handicap to personality development. Growing up a genius, "physically undeveloped," even in the nurturing Ethical Culture School environment, was a very painful experience. "His Jewishness and his wealth" troubled him too.

Reading the letters contained in this first chapter is occasionally tedious, but buried within the too self-consciously clever and often overstylized Harvard undergraduate prose are the kernels of Oppenheimer's mature style—an eye for the literary metaphor, a bent toward the philosophical, and, most characteristic of his writing, a sure sense of rhythm. Of politics there is little in these years beyond a reference to "the asinine pomposity of the Liberal club."

After graduating from Harvard in three years, A.B. summa cum laude in chemistry, Oppenheimer set off for England "making myself for a career." This began an occasionally crisis-ridden period that lasted from 1925 to 1929, the last three years of which were spent studying for his Ph.D. in Germany. Psychologically, the years abroad were more an extension of undergraduate days than a new beginning. He was still in the process of becoming, and his future was unclear. Even Percy Bridgman, his undergraduate mentor, had his doubts. "It seems to me," he wrote to Ernest Rutherford at the Cavendish Laboratory, after praising Oppenheimer's brilliant record at Harvard, "that it is a

bit of a gamble as to whether Oppenheimer will ever make any real contributions of an important character, but if he does make any at all, I believe that he will be an unusual success."

Oppenheimer knew he was brilliant, but that knowledge had burdensome consequences too. There are suggestions that he viewed himself as a perennial underachiever, a self-image that made him a restless voyager in search of accomplishments worthy of his gifts. Although recognition came to him easily, his "perfectly prodigious power of assimilation" (to borrow Bridgman's words once again) created expectations and self-doubts with respect to "the awful fact of excellence," a phrase he used in another context writing to Fergusson, in despair, in 1926, a year marked by social as well as professional crises.

With Ph.D. in hand Oppenheimer arrived in California in 1929. His next 11 years were qualitatively better than those that had gone before. Teaching physics at the University of California at Berkeley during the fall semester and at the California Institute of Technology in the spring offered him a congenial arrangement, though it too was not without its frustrations with respect to achievement and recognition. He raised this point in a letter to Ernest Lawrence in August 1945 discussing his indecision about returning to Berkeley: "I think it would not have seemed so odd [to you] . . . nor so hard to understand if you remembered how much more of an underdogger I have always been than you. That is a part of me that is unlikely to change, for I am not ashamed of it; it is responsible for such differences as we have had in the past, I think; I should have thought that after the long years it would not be new to you."

Underdogger or not, Oppenheimer flourished in California, as his letters reveal. He taught what he loved and, after a shaky beginning, developed into an inspiring graduate instructor and a mesmerizing lecturer. He gained recognition as a leading authority in quantum physics, attracted an increasing number of graduate students, broadened his interests, developed a wide circle of friends and acquaintances from many walks of life, and moved toward an awareness of larger, immediate human concerns.

"I think that the world in which we shall live these next 30 years will be a pretty restless and tormented place," he wrote to Frank in 1931. "I do not think that there will be much of a compromise possible between being of it, and being not of it." And, indeed, in the difficult years that lay ahead, neither Oppen-

Reviewed in This Issue

Robert Oppenheimer, I. I. Rabi, H. M. Mott-Smith, and Wolfgang Pauli sailing on Lake Zurich, 1929. [From *Robert Oppenheimer: Letters and Recollections*; photograph by Rudolf Peierls, courtesy of American Institute of Physics Niels Bohr Library]

heimer chose to compromise. As the American government passed neutrality legislation in the vain hope of isolating the nation from the consequences of the rise of fascism in Europe, Robert and Frank became involved in civil rights and anti-fascist politics. By 1936 Frank (who was studying toward a Ph.D. in physics at Caltech) was a member of the Communist Party and Robert, to borrow his description of his close friend Haakon Chevalier, "had very wide connections with all kinds of front organizations; he was interested in left-wing writers . . . he talked quite freely of his opinions."

These were the most genuinely free, intellectually exciting, and in a personal sense the most healthy and useful years of Robert Oppenheimer's immensely useful life. Bounded by the Depression, they were years of commitment, first to physics and then to the politics of idealism. The worst of times brought out the best in Oppenheimer, and it is one of the horrendous results of the domestic cold war that virtuous commitments prior to World War II could be condemned in the name of national security afterwards.

"You are probably the most famous man in the world today," Chevalier wrote to his old friend the day after Hiroshima was destroyed. "I know that with your love of men, it is no light thing to have had a part, and a great part, in a diabolical contrivance for destroying them. But in the possibilities of death are also the possibilities of life, and these I know have been uppermost in your mind."

Alas, there is no evidence to suggest that during the war Oppenheimer was primarily concerned with the larger postwar implications of the work of the laboratory he directed. On the contrary, it is clear that he was no more immune than other men to the exigencies of war, the temptations of ambition, and the influence of pressing responsibilities. In 1943 he wrote to I. I. Rabi, "To me [the effort to build an atomic bomb] is primarily the development in time of war of a military weapon of some consequence. I do not think that the Nazis allow us the option of carrying out that development." In September 1944, when Richard Tolman, chairman of the War Department's Committee on Postwar Recommendations, asked for the names of Los Alamos personnel who might offer useful advice, Oppenheimer doubted that any had very coherent thoughts about the subject, adding, "I can say this of certainty of myself."

Robert Oppenheimer in the 1950's. [From *Robert Oppenheimer: Letters and Recollections*; courtesy of Niels Bohr Institute, Copenhagen]

After Hiroshima Oppenheimer's vision broadened, and by his own lights the Los Alamos years began to take on a tragic hue. He was instinctively leery of the two-edged sword ("a peril and a hope," he called it) he had contributed so much to creating, and he became increasingly concerned by the tendency to think that an arsenal of nuclear weapons could contribute much good to resolving fundamental international problems.

"The reason why a bad philosophy leads to such hell," he had written years earlier, "is that it is what you think and want and treasure and foster in times of preparation that determines what you do in the pinch, and that it takes an error to father a sin." In later years he spoke of scientists' having known sin, and shortly after the war he confessed to President Truman his feeling that he had "blood on his hands." In a more tentative mode he delivered this remarkable message to an assembly of Los Alamos personnel on 16 October 1945, his last day as director: "If atomic bombs are to be added as new weapons to the arsenals of a warring world, or to the arsenals of nations preparing for war, then the time will come when mankind will curse the names of Los Alamos and of Hiroshima."

After leaving Los Alamos Oppenheimer returned for a brief period to Berkeley, but, as he told Kuhn, "I think that the charm went out of teaching after the great change of the war. . . . For one thing, I was always called away and distracted because I was thinking about other things." He therefore accepted the directorship of the Institute for Advanced Study when it was offered to him, and in the fall of 1947 he moved to Princeton. He was now a public figure, the most renowned of a new breed of academic, the defense intellectual. During the next several years he spent much of his time in Washington, a prisoner of both circumstance and ambition, wandering through the maze of power, "Ready, hopeless/ For negotiation/ With other men."

MARTIN J. SHERWIN
Department of History,
Princeton University,
Princeton, New Jersey 08540