



Oppenheimer, testifying before the Senate military affairs committee in October 1945, voiced his fears about the destructive potential of the atomic bomb.

OPPENHEIMER INVESTIGATED

BY ROBERT ERWIN

Thirty-eight years old when appointed head of the Los Alamos Laboratory, J. Robert Oppenheimer (1904–67) became one of the more astute strategic thinkers about the nuclear age he helped to create. After facing charges of disloyalty—charges as groundless as ones recently made in the much-publicized memoirs of a former KGB general—Oppenheimer lost influence in the highest circles of government. But as Robert Erwin shows, this was far less a tragedy for the brilliant “outsider” than it was for the nation he served.

Special Tasks, the recently published memoirs of Pavel Anatolievich Sudoplatov, has once again brought into question the reputation of J. Robert Oppenheimer. The author, an 87-year-old former Stalinist “spymaster,” alleges that not only Oppenheimer but also physicists Niels Bohr, Enrico Fermi, George Gamow, and Leo Szilard passed the “secrets” of the atom bomb to Moscow in the 1940s, purportedly in hopes of creating a balance of power that would discourage nuclear war. No proof is offered in the book. Shortly after its publication, two historians queried by the *New York Times* described the “revelations”—reprinted in *Time* last April with no cautionary words from the editors—as hearsay laced with error. More or less the same has since been said by a host of specialists knowledgeable about the period.

If the accusations leveled against Oppenheimer in *Special Tasks* were the most sensational ever made, they were certainly not the first. Oppenheimer was called many things during his career—pinko, egghead, rule-breaker, brilliant, special breed. Just about the only thing no one ever called him was average. That would have been preposterous.

To begin with, he was born into an enclave set apart from ordinary American values and tastes. His father, Julius, came to New York from Germany in 1888, a gawky 17-year-old who spoke little English. By age 30 he had become a prosperous cloth importer and had married a talented painter, Ella Friedman, from the Baltimore Jewish gentry. Julius’s good fortune—he had further increased his wealth through wise investments—exemplified one kind of American success story, but, once established, he modeled himself on the liberal, cultivated wing of the European bourgeoisie, who took it for granted that poets and scientists should be depicted on postage stamps in a civilized country. Unlike American patricians such as Theodore Roosevelt, he had no intention of roughing it. Neither was he inclined to carouse, with the Newport set or anybody else. His son’s friends remembered him as immaculately dressed, and his

employees characterized him as a proper gentleman.

Robert grew up insulated by money from a good deal of ordinary experience and at ease with high culture. At the country house on Long Island a yacht with a captain was kept for the parents, while Robert and his younger brother, Frank, were given a sloop of their own to sail. Cézannes hung on the walls at home in Manhattan, dusted by servants. From his mother, who taught painting in her own studio, Robert acquired an un-American attitude toward the arts. Art was not a classroom frill or an uplifting pastime, but instead something to be relished and absorbed as preparation for works of one’s own.

Jewishness likewise put the Oppenheims at an angle to mainstream America. The parents were not deeply interested in Jewish tradition. They sent Robert to the Ethical Culture School, on whose board Julius sat for several years. Yet they could hardly overlook anti-Semitism, quite open and virulent among much of the populace at that time and more discreet but virtually official among the genteel. The physicist Percy Bridgman, who respected Robert’s outstanding record at Harvard and who pushed hard to get him admitted to Cambridge University for graduate study, deemed it necessary in a letter of recommendation to say: “As appears from his name, Oppenheimer is a Jew, but entirely without the usual qualifications of his race. He is a tall, well set-up young man with a rather engaging diffidence of manner. . . .” In other words, don’t worry, chaps, this one is not obnoxious.

Oppenheimer’s first crossings of the border between his enclave and the rest of the world produced a certain comedy and light pathos. Initially driven everywhere on his father’s orders, he arrived at the Ethical Culture School at the last minute each morning and waited as long as it took for the chronically slow and overtaxed elevator to arrive at the ground floor. An exasperated headmaster wrote to his parents: “Please teach your son to

walk upstairs; he is holding up class." As a graduate student in Europe in the late 1920s Oppenheimer was embarrassed when fellow students noticed the expensive clothes and fine luggage he took for granted. He sometimes offered his possessions to those who remarked favorably on them.

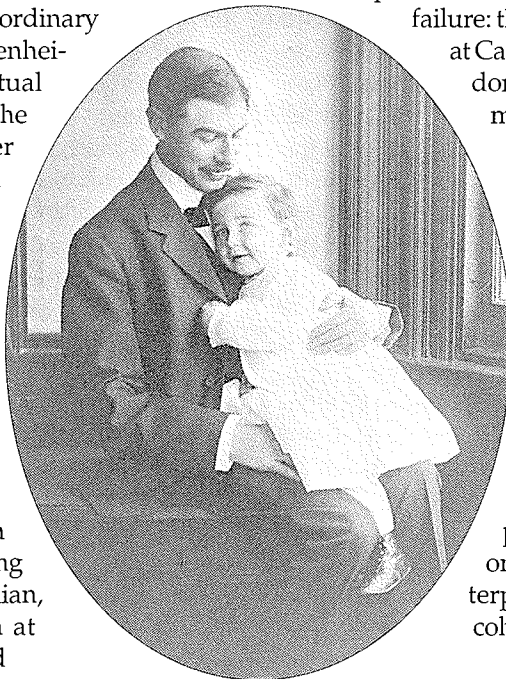
Studiousness in the ordinary sense understates Oppenheimer's bravura intellectual performance. By far the youngest member ever admitted, he presented a paper to the New York Mineralogical Club at the age of 12. Upon entering Harvard in 1922, he made it a habit to carry four or five courses per semester for credit and audit two or three more for stimulation. In terms of effort, he made little distinction between the two—teaching himself rudiments of Italian, for example, to drop in at lectures on Dante—and afterwards without a transcript before him could not remember which courses counted toward a degree. At first a chemistry major, he caught wind of the revolution in atomic theory and started reading physics on the side. Satisfied that he had mastered the reading list he showed them, the physics department permitted him to skip the elementary course and enroll at an advanced level.

Before Oppenheimer completed graduate work at the University of Göttingen he was writing to Professor Bridgman as though this former Harvard mentor were a country cousin who had to be brought abreast. Your theory of metallic conduction, he told Bridgman, might

benefit from Niels Bohr's conjecture—which he explained at length—that "when an electron jumps from one atom to another the two atoms exchange momentum."

Between second grade and the Ph.D., Oppenheimer apparently experienced only one period of sustained unhappiness and failure: the 1925–26 academic year at Cambridge University. If the dons noticed him at all, they marked him down as an obscure American of no particular promise. By midyear some fellow students felt he was close to cracking up from self-doubts and sexual frustration. Three acquaintances who traveled in Sardinia with him on holiday were baffled by his allusions to preparing a poisoned apple for someone, unsure whether to interpret his remarks as an incoherent metaphor, a sign of delusion, or a veiled reference to some actual harm he meant to do.

The ultimate cause of Oppenheimer's floundering may never be known, but there is a clue as to what put him back on stride when in 1927 he transferred to Göttingen. In his own words, "Something which for me more than most people is important began to take place: namely I began to have some conversations." By this he meant that world-class physicists such as Werner Heisenberg and Wolfgang Pauli had started taking him seriously. When he finished at Göttingen in 1929, Oppenheimer in the opinion of the faculty had done more than meet requirements. (Or less—he was careless about



Julius and Robert Oppenheimer

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filling out enrollment forms and such.) By virtue of improving the method for calculating the opacity of a star's surface in relation to its internal radiation, his principal project in Germany, he became a practicing scientist.

Oppenheimer's next step in making his own way was to head for California, psychologically remote for many Americans then. To preserve his newly acquired identity as a physicist in that distant outpost, he arranged for a dual appointment. As a faculty member at the University of California at Berkeley he organized the teaching of nuclear theory from scratch. Simultaneously he held a faculty position at the California Institute of Technology, where advanced work was under way and he would rub against minds as sharp as his own.

He did indeed flourish as a physicist during the 12-year California period. He and one of his students identified what is still known as the Oppenheimer-Phillips process: When a deuteron (formed from a proton and a neutron) bombards an atomic nucleus, the proton goes its separate way while the nucleus captures the neutron and becomes a new radioactive atom. Among physicists his own age or a little older, there was a fair amount of agreement that during the 1930s he showed a great gift for seeing fruitful connections between theoretical insights and experimental projects that had not yet occurred to those doing the work.

Giving courses was a new venture for Oppenheimer, in spite of the prodigious number he had taken. Reportedly he was stiff and ineffectual for the first two or three years, then got the hang of it. According to Robert Serber, an early protégé, "Oppie occasionally had difficulty in dissuading students from coming a third or fourth time" to his Berkeley course on quantum mechanics. Glenn Seaborg, the eventual discoverer of plutonium, remembered Oppenheimer answering questions faster than students could articulate them: "In this respect, I recall taking great pains in formulating my questions to him in such a way that I could put the main thrust of my thoughts as

early as possible into every sentence."

In this period, too, Oppenheimer flourished as an outdoorsman on a small ranch he had acquired in the Pecos Valley of New Mexico, an area he had enjoyed on vacations as a teenager. Katherine Page, a New Mexico friend, christened the ranch Perro Caliente because when she telephoned Oppenheimer to tell him it was available, he responded, "Hot dog!" At Perro Caliente, which in the beginning had no plumbing, he converted from his father's European taste to the American model of the intellectual who is also "rugged." The same values in effect had sent Francis Parkman to camp with the Sioux, Theodore Roosevelt to ride with the cowboys, and William James to climb Mount Chocorua. By several accounts Oppenheimer became an excellent horseman who made long loops through the high desert without getting lost. He also came to fancy himself a prime chili cook.

Evidently during the California period Oppenheimer rid himself of his juvenile awkwardness toward women. He was engaged for a while to Jean Tatlock, an ardent leftist, and in 1941 he married Kitty Harrison, a biologist and the widow of a communist killed in Spain. (He and Harrison would have two children.)

Not everything changed. He kept his autodidactic habits: read Sanskrit classics in translation and Plato in Greek, delved into psychoanalytic theory, and sampled avant-garde fiction. One evening shortly before World War II, listening to Mozart recordings with Kitty and a couple who shared their concern for the cause of the Spanish loyalists, Oppenheimer suddenly proposed that the 24th Piano Concerto "would make a wonderful revolutionary song." He continued to strive for the right attitude about having money and sharing it—frequently treating students to dinner at expensive restaurants in the spirit of a party rather than a handout. He quietly contributed to a fund for the relocation of Jewish professors thrown out by the Nazis.

Possibly the best thing California did for

Oppenheimer was to broaden his interest in social and political affairs. The idea of basing a society on cooperation rather than competition struck him as a fresh approach. He explored the proletarian novel, joined a teachers union, spoke on behalf of the Spanish loyalists. It could be argued that this came too easily at the time and cost him too dearly later. When, for example, he wrote a contemptuous letter about sanctimonious equivocation and Red-baiting to one F. R. Coudert, Jr., member of a prewar "loyalty" committee, the press, the public, and the politicians took no notice. They had never heard of Oppenheimer, did not know a neutron from a fig newton. At the same time his gesture was automatically applauded by the only circle that mattered to him then. But when those who favored an arms race set out to pull him down in the 1950s, his California record was doubly useful to them—to impugn him personally and to divert attention from his ideas on national policy. In his own mind he was sure that the California experience had been permanently good for him. Certainly it was relaxed and benign compared with what came next.

From 1942 to 1946, Oppenheimer directed the Los Alamos Laboratory, which drew upon hypotheses and experiments within the Manhattan Project as a whole to create an actual weapon. Los Alamos constructed the atomic bombs dropped on Japan—deliverable, reliable as a machine, more destructive than anything humans had ever made. In an isolated encampment 60 miles from the nearest railhead, Oppenheimer kept 1,500 anxious people at work on this unnerving task. For a long time the people in this bizarre setting were not sure the devastating weapon they believed they needed to save themselves in a world war could be built; but perhaps so much the worse for them if it could, because the Nazis might build it first. Some who at first feared failure came to dread success, when the deadly work continued *after* Germany surrendered.

Los Alamos cast Oppenheimer in yet an-

other new role. Though he was not naive enough to think that a rigid line separated academia and disinterested rationality on the one side from politics and power struggles on the other, his position at Los Alamos pushed him a long way toward the latter concerns. As before, however, a change of venue did not change his mind about the primacy of intellect. He did not wish to become someone else (exposure to California and now to executive privilege notwithstanding), and he did not believe that words such as "practical" and "realistic" exempted any part of human experience from moral reasoning. While the army clamored to get rolling, he had taken time to estimate the odds of accidentally starting a chain reaction that would burn the earth's atmosphere. Later, in 1948, a year before the Soviet Union successfully tested a fission bomb, while a good many Americans assumed their country had the power and moral superiority to police the world indefinitely, he wrote one of the defining statements of the nuclear age: "In some sort of crude sense which no vulgarity, no humor, no overstatement can quite extinguish, the physicists have known sin."

Nothing displays Oppenheimer's intellectual breadth better than setting the above quotation next to the government's reasons for choosing him to run Los Alamos. His reputation for bridging theoretical and experimental physics appealed to the can-do spirit of the armed forces. For example, he had moved readily from Niels Bohr's purely scientific conjecture in the 1930s that U-235 is the fissile isotope of uranium to his own problem-solving estimate in 1941 of the amount of U-235 necessary for an effective weapon. Yet military types did not understand how many bridges he maintained and how frequently he passed back and forth across them in everything he undertook. No problematics and no question of moral cost and error should ever be shirked, he believed.

Another factor that made Oppenheimer a plausible candidate to run Los Alamos was his familiarity with the peculiarly American kind

of organization promoted by James Conant of Harvard and Vannevar Bush of the Massachusetts Institute of Technology. McGeorge Bundy recently explained the appeal of this model in a society with very limited experience in collective intellectual effort:

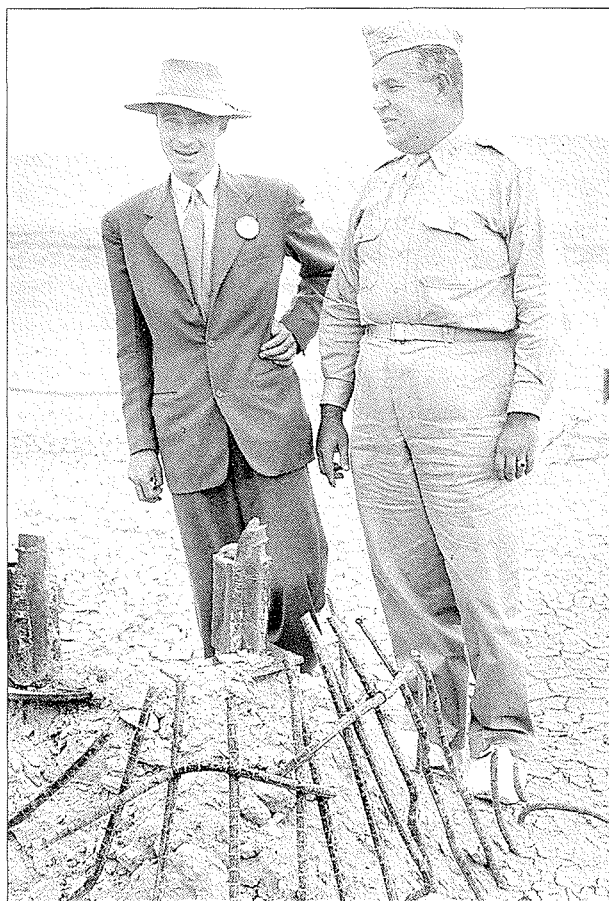
Instead of working toward the establishment of government laboratories or the mobilization of scientists in uniform [Bush] established a pattern of contract work at universities and research centers; the contracts were not with individuals but with institutions, and they thus allowed for activity at any desired level of magnitude and complexity.

Although located in New Mexico, Los Alamos Laboratory technically was set up as a unit of the University of California.

Having picked Oppenheimer for their own reasons, the authorities got their money's worth. In 1943, because the War Department was now paying him \$10,000 a year, he asked the university to cut his salary by \$200 per month. Work done "for the Government of the United States in time of war," he wrote, should not be "the occasion for any essential increase in income." American scientists, sought by competing agencies all claiming their programs were vital, had a wide choice as to how they would contribute to the war effort. In recruiting staff, Oppenheimer competed successfully with one hand tied behind his back. He was allowed to tell them they would have to leave home and friends and live indefinitely at an isolated installation, but he was not permitted to tell them what they would be working on. After the war, a writer who analyzed Los Alamos (originally planned to be a tenth the size it actually attained) remarked on the director's success at soothing frustrations and correcting errors.

By his own standards, too, Oppen-

heimer performed well at Los Alamos. Without shirking a heavy administrative load, he managed to attend most of the seminars from which promising ideas emerged, as well as be present in the labs when crucial measurements were made. Over the objections of a series of security officers, he insisted that all colloquia at Los Alamos be open to every staff member with academic credentials. His reasoning, according to the physicist Victor Weisskopf, was "that each one must know the whole thing . . . to be creative." The army would have been satisfied to make Oppenheimer chief scientist and put overall management in other hands, but he wished to manage. Not only did he do well at recruiting and at giving way on lesser issues so as to win big ones, he



Oppenheimer and Major General Leslie Groves at Ground Zero

also quickly learned how to take care of his people. In the midst of scientific, organizational, and logistical quandaries while Los Alamos arose, he saw to it that fireplaces and large closets went into the plans for staff housing.

Unfortunately for his future effectiveness, he did not observe carefully how high-stakes politics are played. Leo Szilard, who with Enrico Fermi at the University of Chicago had developed the first self-sustained nuclear reactor based on uranium fission, collected signatures from 67 prominent scientists on a petition asking President Truman not to drop the bomb before warning the Japanese and offering them a last chance to surrender. What happened next should have forewarned Oppenheimer of the slick tricks that would be pulled on him in the years ahead. General Leslie Groves, military overseer of the Manhattan Project routed the document so that it would reach Washington after Truman left for the Potsdam Conference. The president never saw the petition.

From 1946 until illness forced him to resign shortly before his death in 1967, Oppenheimer directed the Institute for Advanced Study in Princeton, N.J. Because he spent a great deal of time counseling the government on nuclear weapons and world politics, facing insinuations of disloyalty, and appealing to the public not to support an arms race, some writers presume that he was an absentee director as far as the institute was concerned. After Cold War zealots excluded him from policymaking circles in 1954, he supposedly contributed a tweedy, forlorn, and mainly ceremonial presence in Princeton. Because of these alleged circumstances and because he wrote no physics papers after the war, a misconception lingers that he left science to become a Public Man and ended as a Broken Man.

Yet to mope or to give up old interests just because he was cultivating new ones would have been foreign to Oppenheimer. His way was to expand and consolidate, not to hop from one rock to another.

In science he kept up well enough. From 1948 to 1950 he personally participated in research on detecting nuclear explosions. With his old feel for where the next advance in physics would occur, he brought to the Institute for Advanced Study T. D. Lee and C. N. Yang, Nobel laureates in 1957 for their work in quantum mechanics. As theoretical particle physics separated itself as a subdiscipline from theoretical nuclear physics, the pioneering work was done at the institute. He considered Edward Teller, who had worked under him at Los Alamos, to be a desperate egomaniac. He thought the making of a fusion bomb (Teller's obsession) would be disastrous from the viewpoint of foreign policy, and was glad that for years Teller failed to come up with satisfactory design calculations. Instantly upon scrutinizing the mathematician Stan Ulam's solution to problems that had stymied Teller, however, he reacted as a passionate physicist. "That's it," he said. "Sweet and lovely and beautiful." Nor did he lose his Los Alamos gusto for taking care of his people. Deciding that the institute needed a new library, he hustled up the funds and saw to it that an ample facility was built.

During the Princeton period he did throw himself into advising policymakers. He sat on numerous government boards and committees, wrote a stack of memoranda, and met with generals, senators, cabinet officers, and a few times with presidents. This was indeed different from managing a laboratory, cooking chili, doing physics, or sailing a sloop in Long Island Sound. But it was no departure from his lifelong pattern of moving outward when a vista opened before him. Initially the wiser policymakers sought him. In 1945 he encouraged Secretary of War Henry Stimson to think less about hardware and more about the nature of international politics in a world of atomic weapons. In the opening days of the Cold War, Dean Acheson once observed, "the most stimulating and creative mind among us was Robert Oppenheimer's."

"Inside scientist" better represents Oppenheimer's position than the term "insider." For insiders, policies are negotiable or expendable.

Staying in the loop and lining up with the winning side may count more than any policy. By contrast, Oppenheimer spoke the truth or named the most reasonable option as best he could perceive. Gradually he learned that some insiders despised him for this. Harry Truman called him a “crybaby scientist.” By reorganizing boards to which he had belonged, Secretary of Defense Charles E. Wilson undercut Oppenheimer’s “need to know” in 1953. Like settlers encroaching on Indians, opponents seized some things from him, destroyed the rest, and felt doubly good about it—because now they had what they wanted, and he didn’t deserve to have anything.

The first skirmishes were fought over the issue of knowledge versus secrecy. Oppenheimer explained why on the basis of information already available to scientists everywhere the U.S. screen of secrecy would not stop the Soviet Union from making its own atom bomb soon. (It is now known that Stalin had already assigned hundreds to the project, a team headed by Igor Kurchatov, a physicist about Oppenheimer’s age.) When the Soviets exploded such a bomb in the fall of 1949, the Americans installed more locks and phone taps. Oppenheimer and other inside scientists forecast the Soviet hydrogen bomb—developed by 1953—with equal accuracy. During his six years as chair of the General Advisory Committee of the Atomic Energy Commission, he repeatedly argued that policies affecting the whole of humankind should not be decided in secrecy by a tiny elite. It was morally wrong, he felt, and would fuel protest movements.

Oppenheimer’s opinion appalled insiders such as Senator Tom Connally (D.-Texas). In the first place, American cultural rules forbade experts from making moral judgments without prior permission. Their job was to supply techniques and apparatus. More important, as an adjunct to policymakers operating in secret, Oppenheimer was objecting to a privilege they revered and for which they thought he should be grateful.

In Washington, Oppenheimer had his first prolonged encounter with expedient thinking. If you have no solution, deplore the problem:

—What should be done about Russian aggression in Eastern Europe, Senator?

—I am absolutely against Communism.

If a possible solution occurs to you, especially one that brings immediate career benefits, stop looking and identify purpose with results. Huge military appropriations could conceivably advance U.S. interests. Hence procurement is the same as an effective foreign policy.

More logical policymakers, Oppenheimer thought, would appeal to the self-interest of rivals. International control of the production of uranium and thorium, for example, might appeal to the Soviet government not because of its commitment to peace but because of its hope that something might thereby survive a war. Moreover, if the “realists” were wise, they would think about what it would actually take to fight with nuclear weapons. He was among the first, in 1945, to point out that “no military countermeasures will be found which will be adequately effective in preventing the delivery of atomic weapons” and that maximum destructiveness does not always make military sense. On this latter point President Eisenhower, an old soldier skeptical of one-weapon armies, agreed.

Ideas akin to these eventually crept into the consciousness of policymakers: limited war and tactical weapons, strategic deterrence and the balance of terror, overkill, and arms limitation rather than disarmament. They came not through Oppenheimer but from “policy intellectuals” such as Henry Kissinger, less intelligent and more fawning than he.

Even while he was still in a possible position to affect decisions on the inside, Oppenheimer believed that government was never going to accept certain fundamental responsibilities. His reasons were fourfold. First, no national forum would be devised to air the big

questions of the nuclear era in a collective rather than delegated way. What do we seek? What direction do we take? Politicians and bureaucrats would go on competing for power in the usual way through deals and slogans. To the extent that they controlled funds, laws, manpower, and publicity, they would continue to act as secretly as possible. Second, people were stunned by having won World War II partly through science, which they equated with nearsighted figures in white coats and "facts" certified forever in textbooks—a kind of science, moreover, that seemed to come from some alien realm outside the solid Newtonian world. Government had neither the ability nor the desire to make the new science comprehensible to them. Third, no warning would be given of the enormous side effects of an arms race on the economy. Fourth, powerlessness, ignorance, and unpleasant surprises would cause anxiety and wild suspicion. No remedy for social jitters was planned, and indeed no admission of the problem would be made by the authorities until the harm was done (as it turned out, till McCarthyism had ruined lives and divided the country).

Holding this view, Oppenheimer both before and after he lost his advisory status took it upon himself to educate the country. He was ill suited for a Socratic role, but he tried. During the 1950s and '60s he wrote six books and numerous magazine articles. He lectured. Politely if not gladly, he sometimes suffered journalists.

Oppenheimer assured the public that radiation in general is as natural a process as gravitational pull or condensation. Quantum physics, he was at pains to say, does not nullify the regular motion of visible bodies that everyone is used to. Atoms change from state to state within a range of statistical probability, not by "individually invariable mechanism." In the case of entities significantly larger than atoms, acting over distances great in comparison with the size of atoms, the averaging out of atomic flux stabilizes objects in conformity with Newtonian physics. Oppen-

heimer in particular sought to break the mental and circumstantial association of atomic energy with weapons. Start research for constructive applications, he urged. Push money and talent in that direction. Deliberately undercapitalize weapons research. (The State Department retaliated by omitting Oppenheimer's name and photograph from the Atoms for Peace Exhibit displayed around the world by the United States in 1955.)

Writing in *Foreign Affairs* in 1953, Oppenheimer nearly groaned in frustration over government secrecy: "I must tell [about the arms race] without revealing anything. I must reveal its nature without revealing anything." His position hindered his ability to talk openly about using an arms race as an excuse for imposing a garrison state in peacetime, replete with loyalty oaths, spy networks, and the large standing army that Americans had traditionally rejected. Participants in an arms race, he believed, design ever more destructive weapons, install them at a faster rate, and stockpile them in greater quantities than the national interest requires. The U.S. economy was bound to be skewed by an arms race—public finance, distribution of income, and allocation of plant, resources, and technical talent. "Security" would be used as a grand cover-up for machinations, blunders, payoffs, and high-handed actions. Finally, in his opinion, the combination of secrecy and fear, technological exuberance and hate, would cloud judgment and keep the public in a jumpy state of mind approaching wartime panic. As the result of an arms race, the world would be more dangerous and American society more oppressive than either had to be.

For this game but futile effort to reason with his fellow citizens Oppenheimer deserves everlasting moral credit. Instead, passionate feelings for and against him were misdirected into a legend about his showdown with the U.S. Atomic Energy Commission (AEC) in 1954. Sympathizers awarded him the glory of martyrdom—an angel of peace ruined

by the forces of evil. To those who chose the negative version, a foolish and wicked egg-head had been prevented in the nick of time from jeopardizing the survival of the Free World. In truth, Oppenheimer's AEC hearing was a case of dirty politics.

Upon becoming chair of the AEC in 1953, Lewis Strauss arranged for William L. Burden, former executive director of the Congressional Joint Committee on Atomic Energy, to send a letter expressing doubts about Oppenheimer's loyalty to J. Edgar Hoover at the Federal Bureau of Investigation. Once the letter was in the pipeline, Strauss reported to President Eisenhower that "charges of disloyalty" had been leveled, and he received an okay to cancel Oppenheimer's access to classified information until the matter was resolved. Then, in a letter dated December 23, 1953, the AEC notified Oppenheimer that his clearance would be withdrawn permanently in 30 days unless he requested a hearing before the agency's Personnel Security Board. "Undesirable" prewar associations and "influencing" some scientists not to work on the hydrogen bomb were mentioned, but these items were left vague, not alleged to be unlawful offenses. Strauss probably hoped there were skeletons in the closet that would make Oppenheimer take fright and leave quietly. Since the "accused" insisted on a hearing, however, which opened April 12, 1954, Strauss hired a tough prosecutor, Roger Robb, as the board's counsel. Yet Robb was handicapped by Oppenheimer's reputation and candor. A parade of top scientists, including Enrico Fermi, I. I. Rabi, and John von Neumann, testified to Oppenheimer's loyalty and outstanding service to the United States. It was hard to insinuate an impression of guilty secrets against a man who on a security questionnaire in 1942 had written that he belonged to "just about every Communist Front organization on the West Coast." When asked why he had lied in the 1940s about a conversation with his friend Haakon Chevalier, the leftist French professor at Berkeley, Oppenheimer replied, "Because I was an idiot."

The incident was the main card the AEC had

to play, but it wasn't very strong. Acting at the suggestion of a pro-Soviet engineer named George Elenton, Chevalier in 1943 approached Oppenheimer at a party about letting the Russian "allies" know what was going on at Los Alamos. Oppenheimer reported the overture to the government but altered the story to conceal his friend's identity. Later, when this altered version failed to hold up, he confessed to lying, gave his friend's name, and admitted to socializing with Chevalier during a visit to Paris after the war. Strauss played this card poorly. The government's own investigation confirmed that Oppenheimer had said no to Chevalier. That he voluntarily reported the approach in the first place, even in a distorted form, implied that he wanted the government to be vigilant. The AEC never determined whether Chevalier belonged to the Communist Party, and board members were nonplused by what Oppenheimer said the two men talked about in Paris—the current state of fiction. In their minds this was a tale so strange that it had to reflect a monstrous conspiracy for which there was no evidence, or it opened a peephole onto a realm of existence they did not know existed, where literature mattered.

Since nothing conclusive could be made to stick as the hearing ended on May 4, 1954, Strauss simply pushed Oppenheimer out the door by authorizing the security board to issue a statement on June 29 as arbitrary as a child's dislike of green beans: "We . . . have been unable to arrive at the conclusion that it would be clearly consistent with the security interests of the United States to reinstate Dr. Oppenheimer's clearance, and, therefore, we do not so recommend."

Thin as it was, this ruling succeeded because Eisenhower made no objection. Strauss, who had wangled an appointment as the president's special adviser on atomic energy affairs, saw to it that Ike did not talk to Oppenheimer or see the record of proceedings. Otherwise the president might have learned that a policy difference—over the size and character of the nuclear arsenal—and mutual personal ani-



Oppenheimer received the Fermi Award from Lyndon Johnson in 1963, shortly after John F. Kennedy's assassination. Oppenheimer died four years later.

mosity divided Strauss and Oppenheimer. Strauss led Eisenhower to think loyalty was the only issue.

Contrary to legend, Oppenheimer was not badly hurt by the board's decision. He continued to write and to direct the Institute for Advanced Study. He remained involved in the Rochester high-energy physics conferences he had helped to initiate. He kept most of his friends and admirers, including General Groves, and added a few who sympathized with his position. When a writer named Heimar Kipphardt based a very somber play on the transcript of the 1954 hearing, the real-life protagonist quipped that the author had "tried to convert a farce into a tragedy."

The notion that Lewis Strauss and his confederates were profoundly evil is indeed farcical. Strauss, whose idea of a lofty goal was to move up a notch or two in the Washington pecking order, hated Oppenheimer above all for joking in public about Strauss's ignorance of science. Evidently cooler players of the Washington game considered that Strauss's petty egotism and vindictiveness made him

unsuitable for the club. The Senate rejected his nomination for secretary of commerce in 1958, and he rapidly sank into obscurity. Pork-barrel politics and bureaucratic angling largely motivated the rest of Oppenheimer's enemies. Senator Brien McMahon (D.-Conn.) and other superpatriotic legislators liked brokering the many transactions generated by a gigantic military establishment. Defense contractors and hustling scientists naturally welcomed an arms buildup. Bureaucrats in and out of uniform coveted bigger appropriations and prestigious missions for their organizations. General Roscoe Wil-

son of the air force was particularly furious at Oppenheimer for opposing development of a nuclear-powered airplane, a project abandoned in 1960 after the expense of \$1 billion. Though perhaps J. Edgar Hoover truly believed in the Red Menace he was always conjuring up, what lesser employees in the security business found in a person such as Oppenheimer was raw material for steady work at good wages. Out of 4.7 million government workers screened between 1947 and 1952, 562 were dismissed on suspicion and no proven traitors were uncovered. Oppenheimer's case exemplified this white-collar featherbedding. The equivalent of all the federal taxes paid by roughly 200 prosperous American families for 13 years was spent on surveillance of him: for phone taps, field agents, record processing, and the like.

Handling the conflict as a whole, Strauss was like a drunken brawler, flailing about with fists, elbows, and knees but doing only moderate damage. Specifically with respect to the press, however, Strauss knew what he was doing. Editorial writers rejoiced in the security board's action as though a nasty child had received a well-deserved whipping. *Business*

Week, for example, approved of punishing "scientists like Oppenheimer who feel competent enough to write their own rules of security behavior." *Newsweek* smugly quoted Edward Teller: "The person who makes the bombs is not quite the proper person to know what to do with them." The *Los Angeles Times* pronounced itself content with the humiliation of a man "who willfully broke the rules . . . as if they were not made for the special breed of which he is a member."

Oppenheimer never quite succeeded in turning popular opinion around in his favor or in coming fully to understand why he was scowled at. In part he misjudged the distance between himself and ordinary Americans who rejoiced at his comeuppance. Perhaps the strongest indicator of that distance was the fact that it never occurred to Oppenheimer to take to the airwaves or the tabloids. High cheekbones, classroom theatrics, and the floppy prospector's hat he affected during the California years suggested star potential. Yet he did not hire agents or image makers. Incredibly, he attempted to reach regular Americans through *books*.

Just as his opponents could not imagine what he and Chevalier would talk about if not treason, so Oppenheimer wondered why anyone should think of him as a reckless or sinister oddball. He could scarcely grasp the cultural prohibition against eggheads, as Strauss put it, "raising ethical rules." But whatever may be said about the need for rules and the need to break them, Oppenheimer's fate was supremely ironic. By most measures, he was an outsider. For the first 20 years of his adult life he read no newspapers or popular magazines, had no telephone in

his home. He was probably 40 years old before he realized that people meant it when they called his kind eggheads. Whereupon this outsider did something so important—build the atom bomb—that he entered the highest policymaking circles of what was then the most powerful nation on earth.

That was only for starters. The outsider proved to be smarter about realpolitik than the insiders. Of course take a strong stand against the Soviet Union, he agreed, but don't be stupid about it. Guard the national interest with a thousand fewer nuclear weapons in each camp. Don't tie up so much U.S. scientific and managerial talent unproductively. Don't waste resources competing in corners of the world where the United States has no vital interest. Don't imagine you are hurting our enemies by making schoolteachers sign loyalty oaths.

And then a final irony. Oppenheimer was shoved toward the outside again at a dangerous moment. All that is now lumped under the rubric of McCarthyism cost a number of people dearly. His brother Frank Oppenheimer, for instance, was fired by the University of Minnesota as a former Communist, and it took him 10 years to find another job teaching physics. In less time than that—in 1963, to be exact—Oppenheimer himself was invited back to the White House to receive a Fermi Award. His habit of making rules better than those handed out, a habit in which he persisted, infuriated some people. Others it charmed, because he assumed that everybody was like him, incessantly thinking.