lead to a nuclear war. To Mao's chagrin, Khrushchev would not extend the Soviet nuclear umbrella beyond the China coastline to cover a Beijing effort to seize Taiwan by armed force; but he would and did extend that umbrella over Cuba. To Khrushchev's horror, in July 1963 Mao threatened to demand revision of the Sino-Soviet border formed since 1689. A split became inevitable.

This volume, the first in a series planned by the Cold War History project, marks an auspicious beginning. The age of real Cold War history is now at long last opening.

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The mantra throughout academia today is “accountability.” Legislatures and governing boards of universities, whether in Europe or the Americas, are being told to take a more active role in ensuring that state-supported research and education appropriately contributes to the state’s economic development. Josephson in this compelling work demonstrates how that very idea, “accountability,” killed the experiment in free science in post-World War II Soviet Union and prevented the Soviet Union from making the achievements in either basic or applied science that it so desperately needed and inherently was capable of producing.

Josephson focuses on Akademgorodok, the Siberian city of science created under Nikita Khrushchev, in a rehabilitation of the urban planning beliefs of the Constructivists from the 1920s and 1930s who argued that a properly engineered, “socialist” built environment could release human creativity. In particular, scientists, led by the mathematician Mikhail Alekseevich Lavrentev, believed that working in a democratic community, one freed from ideological and economic constraints, they could lift the Soviet Union beyond the West and help establish true communism in place of the authoritarianism of Stalinism. But this study is more than a history of a particular utopian community; it is an analysis of the failure of the entire Soviet political, economic, and intellectual systems. Josephson’s thesis is simple: the freedom that the scientists initially enjoyed, and that offered great promise for Soviet science and society, came under assault from a military-industrial-party complex that depreciated fundamental research and “viewed science and Akademgorodok merely as tools to increase industrial and agricultural production” (p. 289) and from an increasingly conservative Brezhnevian system which sought to impose ever greater ideological controls over the social and cultural life of the Akademgorodok scientific community.

This is not a story entirely of failure. The Khrushchev thaw initially allowed young scientists working in Akademgorodok in such diverse areas as physics, genetics, computer science, and sociology to make significant strides in removing the hands of Stalinist hacks from control over Soviet science. This was particularly slow in genetics where Khrushchev remained entranced by Lysenko’s biological mumbo jumbo, but the successes in, for example, nuclear physics were impressive. However,
even here, “Denied additional funding by the realities of budget appropriations and the relative poverty of Soviet science, the physicists turned to their production facilities for additional revenue . . . . Fundamental research had to take a second seat, and never again would [Akademgorodok] physicists rival their western counterparts as they had when the institute was first founded” (p. 67). Similarly “the Brezhnevite emphasis on applied agricultural research necessary for what in the West is called ‘agribusiness’ stifled fundamental research” (p. 83). The Party’s narrow vision of computer applications as all but exclusively to manage the economy also retarded research in such promising fields as artificial intelligence.

The greatest successes in the social sciences were in ecology and the revitalization of sociology. But these very successes, in limiting somewhat the environmental degradation of Lake Baikal and in demonstrating, through the work especially of Tatiana Zaslavskia, the social dysfunctions occasioned by Stalinist economic policies, helped bring down the wrath of the conservatives on Akademgorodok. “Akademgorodok represented generational, ideological, cultural, and academic freedoms, all anathemas to the conservative leadership of the Brezhnev regime. These freedoms were curtailed starting in 1968 in response to three events: the open protest over the show trials of the writers Sinyavsky and Daniel, the appearance of singing bards whose lyrics challenged Communist Party dogma, and the Soviet invasion of Czechoslovakia” (p. 265).

To his credit, Josephson recognizes that the effort to make government-funded research more accountable to the whims of politicians and the greed of industrialists is the norm in the West as well. He argues that three factors distinguished the Soviet case: “a unidirectional devotion to applications that shook the historically strong tradition of reverence for fundamental research”; “the disproportionate share of resources allocated to military research and development”; and the fact that “fundamental research in the USSR was subordinated to big science projects, such as BAM [the Baikal-Amur Mainline railroad across Siberia] and ‘Siberia’ [the study of the entire productive forces and labor resources of Siberia and the Far East]” (p. 281). The similarities with the call for “accountability” in the West, however, remain far stronger than these differences.

By the 1980s Akademgorodok’s laboratories were required constantly to prove that science contributed to economic growth. Under these pressures, enthusiasm for work all but disappeared. The stress on accountability “weakened the fundamental basis that had been the strength of Akademgorodok science” (p. 304). And with the party’s crackdown the creative social environment of the city, with its social clubs where science and society were debated freely, with its concerts by irreverent bards, its galleries for avant-garde art, and its academic round tables where junior scientists could speak along with, and even against their elders, all disappeared. With the Gorbachev collapse, the situation worsened with funding drying up, bureaucracies responsible for science policy disappearing, and young scientists either abandoning their calling for the business world or emigrating to the West.

There are things to quibble about in the work: Cost overruns and technical failures in nuclear physics are not particularly a Soviet problem; controlled nuclear fusion has bedeviled scientists everywhere; and research in artificial intelligence has not been without its serious failures in the West as well. But these are matters about which one