

## The US footprint on European research

### American Hegemony and the Postwar Reconstruction of Science in Europe

**John Krige**  
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Reviewed by Michael D. Gordin

One of the most striking features of contemporary science is that it appears to be more or less the same no matter where one goes. A laboratory in Zürich looks like a lab in Tokyo, which looks like a lab in Chicago. The homology has generated much acclaim for the internationalism and universality of science—and that description is true as far as it goes. Yet a century ago, such affinities were far from evident. Of course, scientists were producing mutually intelligible work in Berlin, Germany, and Cambridge, England, but laboratories were organized differently; positions and practices of scientists were recognizably distinct, so much so that talk was widespread about “national styles” of science.

So what happened? Those national styles were not accidental results of evolutionary growth, contends John Krige in his new book, *American Hegemony and the Postwar Reconstruction of Science in Europe*. Krige is the Kranzberg Professor of the school of history, technology, and society at the Georgia Institute of Technology and the author of numerous studies on postwar European science. According to him, today’s homogeneity in science—at the very least in Europe, the focus of his striking and persuasive book—was produced by a deliberate Americanization of science policy around the world after

World War II and bears a strong affinity to US postwar foreign policy in Europe, as exemplified in the Marshall Plan.

At the end of the war, Western Europe lay in ruins, and its former scientific preeminence was one of the casualties: Personnel were lost due to war, famine, and emigration; infrastructure was bombed out and looted; and money was simply nowhere to be found. In that climate of scarcity, various organizations in the US stepped forward and offered to help rebuild European science—or, rather, reconstruct it along the organizational lines of US science. The political, military, and cultural power the US exerted, which Krige defines as “hegemony,” was exerted by European and US elites in the realm of science. That power was neither passively accepted nor actively resisted but was instead carefully negotiated in a process that yielded today’s striking uniformity of scientific institutions. To some extent, the reconstruction of science was driven by realpolitik in the dawning cold war, but it was also buttressed by a faith in science “having a key cultural role to play as a bearer of liberal democratic values,” as Krige puts it (page 12). After Hitler’s rampage through Europe, few missions were more vital.

In contemporary science studies, Krige is a pioneer in insisting that foreign policy be taken seriously. Although his book speaks mostly to scholars, it is easily accessible to anyone with an interest in foreign policy and contemporary science. Krige is especially good at focusing readers’ attention on the implications of science in politics, aside from its obvious application in atomic weaponry. In a series of case studies, he demonstrates the importance of government and private foundations, especially the Rockefeller and Ford foundations, in providing expertise and money to transform various European sciences. The book’s level of archival detail is impressive, as is Krige’s fluency in the history of physics, molecular biology, and operations research. The author’s dis-



cussion of how the Rockefeller Foundation’s Warren Weaver, the former director of its division of natural sciences, decentralized molecular biology in France because of his antipathy to the field’s domination by Paris is an excellent case in point. Of greater relevance to physicists is the role of US funds in creating CERN and

the Niels Bohr Institute, which was funded by the Ford Foundation, and in the deliberate choice to build them in chosen “neutral” sites such as Geneva and Copenhagen. Krige clearly establishes that those institutes were created in part to make European science apolitical, liberal, and decidedly Western-leaning (see Krige’s article “I. I. Rabi and the Birth of CERN” in *PHYSICS TODAY*, September 2004, page 44).

*American Hegemony and the Postwar Reconstruction of Science in Europe* opens a broad field of research and leaves one wanting more. Consider the surprising neglect of Japan, mentioned only twice even though the postwar reconstruction of science there, more tightly controlled by the US, was perhaps even more Americanized than in Europe. Likewise, Krige is casually brief about the US looting of European science during the same period, its cherry picking of strategically useful scientists for installation in federal institutions—often for defense work. Without ventures like Operation Paperclip to extract those specialists and further diminish European science, the course of reconstruction in Europe might have been different.

Nonetheless, Krige’s argument remains compelling and hard to ignore, especially in the face of the Large Hadron Collider at CERN, a project that illustrates the success of the venture he chronicles. His book is essential reading for anyone who is interested in the relationship of science and foreign policy, and in the mechanisms of postwar reconstruction. Krige is a forceful writer, and the implications of his research are sure to be provocative and long lasting.

**Michael D. Gordin** is an associate professor of the history of science at Princeton University in Princeton, New Jersey. He is the author of *Five Days in August: How World War II Became a Nuclear War* (Princeton U. Press, 2007).