TECHNOLOGY AND CULTURE

clear that while there was most definitely a Green impulse under the Nazis, concrete action was often sacrificed to other Nazi goals.

Other parts of the book focus on leading figures during the Nazi period who are often looked upon as "early greens." Chapters on Richard Walther Darré, Alwin Seifert, and Martin Heidegger all suggest that either their influence on environmental policy in the Third Reich was more limited than is often argued, or that their ideas fit uncomfortably into a modern Green box. Still, the chapters demonstrate that it is impossible to simply dismiss these thinkers' environmental credentials—or convictions.

JANUARY 2007 VOL. 48

Many committed National Socialists—although certainly not all, and among those that did, in an often inconsistent way—articulated what could be called an extreme right version of ecological politics. All of the chapters in this volume bring this out, in particular the last two, by Mark Bassin on the concept of "blood and soil" and Joachim Wolschke-Bulmahn on land-scape architecture in Nazi-conquered territories. A nationalistic, particularistic environmentalism was easily harnessed to racist ideology. The result was a worldview that equated the exclusion (and later, extermination) of the foreign and racially distinct with the protection of native ecosystems from invasive species. Perhaps one of the greatest values of this book, then, is to underscore once again the fact that environmentalism as a political-belief system has never been value-free and thus has been able to take vastly different political forms.

JONATHAN OLSEN

Dr. Olsen, associate professor of political science at the University of Wisconsin–Parkside, is the author of *Nature and Nationalism: Right-Wing Ecology and the Politics of Identity in Contemporary Germany* (1997). He is presently working on a book about the German Left Party/PDS.

Kampfstoff-Forschung im Nationalsozialismus: Zur Kooperation von Kaiser-Wilhelm-Instituten, Militär und Industrie.

By Florian Schmaltz. Göttingen: Wallstein, 2005. Pp. 676. €39.

One question debated by historians of World War II Germany is why the Nazi dictatorship did not deploy chemical weapons. The birthplace of chemical warfare during World War I, Germany had continued development at the "forefront" of this chilling area in secret throughout the interwar period. By late 1936, the first known nerve agent, tabun, was developed in a laboratory of the I.G. Farben chemical firm, while the even more lethal soman was developed in 1944 by Richard Kuhn in one of Germany's Kaiser Wilhelm institutes. Neither can German reluctance to deploy such weapons be explained by supply shortages: sufficient stockpiles existed of all but the most recently developed substances. And the idea that Hitler's personal experiences of gas warfare in World War I may have caused reluctance to

order German forces to deploy such weapons is simply not consistent with his ruthlessness in other respects.

In a book based on extensive archival and secondary research, Florian Schmaltz provides a convincing set of answers to the question, one that emphasizes the German situation at particular points during the war. Throughout, the German military developed contingency plans for, and had access to, stockpiles of chemical weapons. But early on, the successful Blitzkrieg offensive did not require—indeed would have been impeded by—chemical weapons. In the middle part of the war, Germany appeared to be winning without deploying them; in the later stages, raw-materials shortages, Allied air superiority, and, crucially, a mistaken belief that the Allies also possessed nerve agents combined to eliminate chemical weapons from the list of military-strategic options for Germany.

Fascinating as these conclusions are, they represent only one small aspect of this impressive study. Schmaltz is actually much more interested in the organization and practice of poison-gas research in Nazi Germany, about which much less is known. His vantage point is the Kaiser Wilhelm Society (KWS) and its institutes, for two good reasons. First, the society was arguably the most prestigious and important scientific-research organization in the world at the time, and several of its institutes were involved in research relating to chemical warfare; two of them had specialist chemical-warfare sections. Second, Schmaltz's focus is informed by his study's origins in an ambitious long-term project funded by the successor organization to the KWS, the Max Planck Society, on the history of the KWS during National Socialism. This is in fact the eleventh volume generated by the project.

Schmaltz's book is no mere institutional history though. Using a staggering array of archival sources from several countries, the author portrays the institutes he investigates quite convincingly as nodal points in networks of scientific communities, involving cooperation not just between institutes, but also with universities, and more importantly still, with industrial and military-research establishments. He does much more than simply examine the contexts within which scientific knowledge is generated and communicated, being also keenly interested in the biographies of key figures who linked the various subcommunities. Finally, he uses the institutes as a means to explore issues relating not just to weapons research, but also to the use of concentration-camp inmates in the construction of facilities, experimentation on human subjects, and knowledge transfer to the Allied countries after the end of the war.

This is an ambitious effort, although its impact would have been greater still had the author focused more closely, consistently, and concisely on the most essential aspects of his subject. There is no question that the two institutes with dedicated chemical-warfare sections deserve greater consideration than the others, and, to be fair, this is what Schmaltz does. The question is whether the others—which did short-term contract research—

TECHNOLOGY AND CULTURE

deserve as much space as they get. And is it necessary to focus on all aspects of the activities of the two institutes with dedicated research establishments? Just to take one example: why include a three-page table (pp. 135–37) detailing eighteen research contracts at the institute for physical chemistry that between 1939 and 1944 attracted contracts totaling 40,380 marks? This is, however, a relatively minor flaw in a well-researched and clearly organized monograph. Schmaltz's insights will be of considerable value to scholars from a range of disciplines.

JANUARY 2007

VOL. 48 RAYMOND STOKES

Dr. Stokes is director of the Centre for Business History in Scotland at the University of Glasgow and co-author of a history of the BASF Corporation, *German Industry and Global Enter- prise* (2004).

Deep Water: The Epic Struggle over Dams, Displaced People, and the Environment.

By Jacques Leslie. New York: Farrar, Straus, and Giroux, 2005. Pp. 368. \$25.

In *Deep Water*, Jacques Leslie, a journalist, offers an account of his visits to dams on river systems in India, South Africa, and Australia. In each setting, he relates his discussions with an individual central to the dams: in India, the antidam activist Medha Patkar; in South Africa, the American anthropologist Thayer Scudder; and in Australia, the water-resources manager Donald Blackmore. Leslie became involved in the study of dams because of a heartfelt worry about growing water shortages, about the disproportionate impact of such water-melioration technologies as dams, irrigation systems, and hydroelectricity stations on the poor and very poor—including the loss of lands, lifestyle, and culture—and about their seemingly irreversible negative environmental impacts.

Medha Patkar has devoted her life to fighting dam projects on the Narmada River, notably the Sardar Sarovar Dam, because of its displacement of indigenous people and its environmental impacts. She has threatened to drown herself in the waters rising behind the dam as protest against the inequities of the project, especially its disproportionate effect on the tribal people who are one-tenth of India's population, but half of those displaced by dams. Leslie discusses the role of the World Bank and other international organizations in pushing for dams as solutions to poverty. Indian engineers and planners view dams and irrigation systems as the way to solve India's serious problem of water demand. But for Medha Patkar, the dams are a symbol of patriarchy and globalization, with devastating consequences for tribal people who are forced out of their homes to lands less fertile. Paradoxically though expectedly, the engineers for the Sardar Sarovar live in spacious, clean, air-conditioned quarters, and more funds may have been devoted to these facilities than for resettlement.