

abroad. During the war, however, he was able to rehabilitate himself politically, in part through his leading role in Germany's "uranium club" and in part through lending himself and his international renown to Germany's program of cultural domination of the countries it had conquered. By the later years of the war he had become a sought-after and politically well accepted "good-will ambassador" of the Reich. In this role Heisenberg sought good relations with his colleagues in occupied countries, to whom he was frequently of help because of his high standing with the German authorities. But those same colleagues deeply resented his easy acceptance of his role as official representative of the occupation authorities and their program of cultural imperialism, and "Heisenberg was either unable to understand or unwilling to confront the cause and effect of this alienation" (p. 179). Certainly not an ardent Nazi, Heisenberg had fought for recognition and gained his position by collaboration with the political authorities—a "fellow traveler" indeed.

Following his two chapters on Heisenberg the traveler, Walker sets out to attack the central myths: (i) the "polemic" legend, created primarily by the Dutch-American physicist Samuel Goudsmit, that only incompetence prevented Heisenberg and his colleagues from having built a bomb for Hitler; and (ii) the opposing "apologetic" legend, created by Heisenberg and his colleagues (preeminently, theoretical physicist Carl Friedrich von Weizsäcker), that it was their own morally inspired resistance that prevented Hitler from having the bomb. Walker carefully follows the creation and transformation of these myths and also shows the changing functions they served as historical circumstances changed.

Walker is attacking a mythology at the core of which lies the "purity" of science. In this mythology the name "Heisenberg" stands for great and true science, and the purity of science requires that this bright name not be tarnished: Heisenberg could not have served Hitler and must not be described as "fellow traveler." Yet this label does apply, and, Walker maintains, the "overwhelming majority of German scientists" were "fellow travelers" of the Nazi regime. In so contending, Walker sees himself as violating a "taboo." Is he really? Certainly for two generations, that of those who as adults lived through the Nazi era and that of their immediate students, any non-ideological, open-minded and critical consideration of the nature and extent of scientists' collaboration with that regime was indeed taboo. Some 25 years ago, when I began to do research on mathematics in Nazi Germany, I was warned: If you do not tell the story simply and clearly in the accepted terms—good versus evil—you will

have no academic career. I have told another story, and still I have had a career. But others did not. Thus I very much like Walker's dedication of his book "to all those critical voices who have tried to illuminate this ambivalent chapter of history, but were unappreciated, ignored, and discouraged."

But today? Is hero-worship still so ascendant that younger physicists could not bear a historical narrative in which Hitler and Heisenberg play their actual historical roles, one that admits all the intermediate shades of gray, and not only black-and-white contrasts? Even if in the popular mind such polar idealizations still have a strong hold—as we have recently seen once again with the publication and reception of Thomas Powers's *Heisenberg's War*—has not the self-image of science changed significantly in the meanwhile, now being such that not-so-pure involvement with politics, salesmanship, and simple human weakness are allowed, even for the heroes?

There is another object of implicit attack in Walker's book: historiography of science that does not take notice of the vast and sophisticated literature on Nazism produced by general historians. This has indeed been a deficiency in historiography, but here too the case has altered in the last decade, as the contributions to the collection edited by Walker and Renneberg two years ago well illustrate. In this new book—which largely collects and reworks papers Walker has previously published—he also provides excellent historiography in this sense. Notwithstanding some questions that might be raised regarding particulars, these studies are carefully researched, well written, and give well-informed interpretations.

All this conceded, the book remains, in the view of this reviewer, misconceived. Walker's topics are dictated by the politics of symbols. But if we want to understand "Nazi science," or the relation of science with politics, and with destruction, in the 20th century, we must go beyond symbolic oppositions. It is, I think, of little interest to evaluate once again Heisenberg's conduct in the face of Hitler. We should rather be examining the actual integration of scientists, in their work and its results, with this political regime—as Walker himself did so effectively in his previous book. Walker's historical analysis now of the myths around the "German atomic bomb" is certainly an important achievement. But if the historian himself finds the siren of symbols irresistible, that very circumstance should remind him that merely to confront myths and symbols with historical reality is likely to avail little. Indeed, such a tactic can also contribute to the revitalization of the very myths he is targeting. Rather, we should approach such myths and symbols on a different level of analysis, posing the ques-

tion why such legends are so persistent and why those words are still so fascinating. Tell, to be sure, revealing stories opposing the myths with reality, but at the same time explain how and why the myths and symbols work as they do.

Herbert Mehrtens
Historisches Seminar,

Technische Universität Carolo-Wilhelmina,
D-38023 Braunschweig, Germany

Books Received

Adhesion of Microbial Pathogens. Ron J. Doyle and Itzhak Ofek, Eds. Academic Press, San Diego, 1995. xxx, 600 pp., illus. \$89. *Methods in Enzymology*, vol. 253.

Biochemistry of Cell Membranes. A Compendium of Selected Topics. S. Papa and J. M. Tager, Eds. Birkhäuser, Cambridge, MA, 1995. x, 365 pp., illus. \$149. *Molecular and Cell Biology Updates*.

Calcium Regulation by Calcium-Binding Proteins in Neurodegenerative Disorders. Claus W. Heizmann and Katharina Braun. Springer-Verlag, New York, and Landes, Austin, TX, 1995 (distributor, CRC Press, Boca Raton, FL). xii, 133 pp., illus. \$69. *Neuroscience Intelligence Unit*.

The Dying of the Trees. The Pandemic in America's Forests. Charles E. Little. Viking Penguin, New York, 1995. xii, 275 pp. \$22.95.

Ecodemia. Campus Environmental Stewardship at the Turn of the 21st Century. Julian Kenry. National Wildlife Federation, Washington, DC, 1995. xvi, 224 pp., illus. Paper, \$14.95.

Fungus Diseases of Tropical Crops. Paul Holliday. Dover, New York, 1995. xvi, 606 pp. \$22.95. Reprint, 1980 ed.

Galileo and the Church. Political Inquisition or Critical Dialogue? Rivka Feldhay. Cambridge University Press, New York, 1995. viii, 303 pp., \$54.95.

HIV Infection in Children. A Guide to Practical Management. Jacqueline Y. Q. Mok and Marie-Louise Newell, Eds. Cambridge University Press, New York, 1995. xiv, 313 pp., illus. \$59.95.

The International Assessment of Health-Related Quality of Life. Theory, Translation, Measurement and Analysis. Sally A. Shumaker and Richard A. Berzon, Eds. Rapid Science, New York, 1995. vi, 275 pp., illus. Paper, \$125 or £80.

Local Order in Condensed Matter Physics. S. D. Mahanti and P. Jena, Eds. Nova, Commack, NY, 1995. xii, 264 pp., illus. \$98. From a symposium, Jekyll Island, GA, June 1993.

The Making of Man-Midwifery. Childbirth in England, 1660–1770. Adrian Wilson. Harvard University Press, Cambridge, MA, 1995. xii, 239 pp., illus. \$35.

Number Theory. Séminaire de Théorie des Nombres de Paris. Sinnou David, Ed. Cambridge University Press, New York, 1995. x, 291 pp., illus. Paper, \$39.95. *London Mathematical Society Lecture Note Series*, 215.

Of Bicycles, Bakelites, and Bulbs. Toward a Theory of Sociotechnical Change. Wiebe E. Bijker. MIT Press, Cambridge, MA, 1995. x, 380 pp., illus. \$35. *Inside Technology*.

Publishers' Addresses

Below is information about how to direct orders for books reviewed in this issue. A fuller list of addresses of publishers represented in *Science* appears in the issue of 26 May 1995, page 1220.

Plenum Publishing Corp., 233 Spring St., New York, NY 10013-1578. Phone: 800-221-9369; 212-620-8000. Fax: 212-463-0742.

Simon and Schuster, 200 Old Tappan Rd., Old Tappan, NJ 07675. Phone: 800-223-2336; 201-767-5000. Fax: 800-445-6991.