

recording dynastic lineages and sequences. It was a major breakthrough in the study of the civilization of the ancient Maya and has affected virtually all work done since. In a later paper Proskouriakoff challenged the prevailing view that the Maya figures wearing robes were priests, showing rather that they were royal women.

Char Solomon is a musician who worked as Tatiana Proskouriakoff's assistant for a year as a volunteer at the Peabody Museum in 1972–1973. Her book is based largely on interviews with Proskouriakoff's family, colleagues, and friends, along with Proskouriakoff's unpublished letters and diaries, which provide particularly vivid descriptions of fieldwork conditions in the years they cover.

Solomon is interested in Proskouriakoff as a role model, as a woman of "strength, purpose, and commitment to excellence" (p. xi) who made a definite contribution. She charts Proskouriakoff's professional journey from opining to her early mentor Satterthwaite that, as he put it, "no woman could get a square deal in this field" (p. 152) to becoming the first woman to receive the highest honor in American archaeology, the Alfred V. Kidder Award, in 1962. The biography is gracefully written but cautious and succinct (as is understandable in a field that is both complex and famously contentious). One hungers for more information about what was going on generally in Maya studies and for analysis of the work of prominent Mayanists whose approaches were different from Proskouriakoff's. These include J. Eric S. Thompson, the Russian Yuri Knorosov, and particularly the studio art teacher turned Maya research scholar Linda Schele, toward whom Proskouriakoff was uncharacteristically hostile. That Proskouriakoff should have been so hard on another woman scholar is ironic, given her own journey. Perhaps it is only just, if also ironic, that the first recipient of the Tatiana Proskouriakoff Award, established at Harvard University in 1986, was Linda Schele.

JOAN MARK

**John Stachel.** *Einstein from "B" to "Z."* (Einstein Studies, 9.) xi + 556 pp., illus. Boston: Birkhäuser, 2002. \$69.95 (cloth).

Over the past two and a half decades, in numerous research papers and as editor of the Einstein Papers project (from 1976 to 1993) and the Boston University–sponsored Einstein Studies Series, the physicist, historian, and philosopher John Stachel has quietly provided the backbone

for much scholarly work on Einstein. We have a number of important biographies of Einstein, most often provided by physicists and journalists, and many detailed studies of particular facets of his work. More thoroughly than any other author, Stachel combines sensitivity to detail on the research front with an appreciation for the full span of Einstein's life and work. Now, thankfully, the "A" to "Y" of Stachel on Einstein is readily available in a single volume. Its chapters collectively reveal a deep familiarity with the documentary record, a strong appreciation for the subtle issues underlying Einstein's long search for a unified field theory, and (as fruit of Stachel's editorial work) an unparalleled synthetic overview of the development of Einstein's thinking over time. There is something here, then, for the general reader, historians of science, and research physicists, and the book's organization is intended to make it accessible to selective reading by this range of audiences. It opens and closes with general and thematic treatments, while in each of the major sections on Einstein's theoretical work introductory surveys offer a context for the technically detailed papers that follow. Stachel's writing is exceptionally clear and his thinking is subtle. His surveys—centered on Einstein rather than the broader community, and outlining formative phases and creative tensions rather than seeking singular philosophical keys—are both authoritative and potentially illuminating for any interested reader, but they are always presented in the terms of the field at hand, without any attempt to ease the way through an explicitly pedagogical approach.

The book opens with sections of interest to the broadest readership, devoted to Einstein's "human side," Stachel's work with the Einstein Papers project, and surveys of Einstein's scientific work. These chapters take up Einstein's relationship with Mileva Marić, his Jewishness, his views of civil liberty, and his attitudes toward research. In addition, they offer a fascinating portrait of Stachel's approach to editing the papers of the century's foremost scientist and the battles he faced as a consequence (myth busting is a familiar genre in Einstein scholarship). The final sections offer document-based explorations of Einstein's relationship to a number of key figures and book reviews of the biographies by Abraham Pais and Albert Fölsing. The heart of the book presents surveys and articles on special and general relativity and quantum theory. Stachel's most important research contributions have been to the history of general relativity (and have indeed stimulated much work in the field). Here we have his classic papers on the role of

the rigidly rotating disk in persuading Einstein that non-Euclidean geometry would be required in a relativistic treatment of the gravitational field and on the importance of the hole argument both in delaying Einstein's recourse to general covariance and in shaping his subsequent understanding of key issues facing field theories. Stachel is always well aware of the communal environment in which Einstein's research developed, but rather than focusing on contrasts between Einstein and others, he offers a particularly fine sense of Einstein's eye for the future of physics. This is evident in his discussion of the tensions throughout Einstein's career between his appreciation for both principle and constructive theories, and for and against field theory. Alongside a stress on understanding correctly Einstein's understanding of the equivalence principle and general covariance (offered as a corrective to some tendencies in working physicists), these discussions constitute Stachel's most important conceptual and philosophical contribution to the literature. They further Einstein's own conviction that the generalized theory is far more important than special relativity. The scholarship represented here spans a quarter century in which we can see Stachel's consistency of purpose, his continuing fidelity to the expanding documentary record, and—especially in more recent articles on the Einstein-Hilbert priority question and the quantum—his ever more active role in shaping research directions.

RICHARD STALEY

**David J. Tietge.** *Flash Effect: Science and the Rhetorical Origins of Cold War America.* xviii + 199 pp., illus., bibl., index. Athens: Ohio University Press, 2002.

The title of David Tietge's book is misleading. It encourages a belief that the book deals directly with science rather than merely with representations of science in the popular press. It promises a primary focus on nuclear weapons. It implies an emphasis on rhetorical analysis rather than simple description. It does not hint that one of the book's five chapters is about Kenneth Burke or that another centers on Galileo, Bacon, Descartes, and Darwin.

The first chapter purports to find in Burke's writings a theoretical basis for Tietge's argument. His primary points are that "religious symbolism still permeates scientific concepts" (p. 3), that "science dominates our way of thinking" (p. 16), and that science is a form of symbolic action that may be analyzed rhetorically. The

chapter also includes passing references to Raymond Williams and Michel Foucault.

Chapter 2 focuses on Galileo, Bacon, Descartes, and Darwin. The research here is staggeringly thin: the bibliography includes no primary sources for any of these authors. The discussion of Galileo cites a mere six pages of George Johnston's *The Galileo Affair*. Tietge's comments on Bacon and Descartes refer only to W. T. Jones's *A History of Western Philosophy*. His discussion of Darwin does examine two passages written by Darwin, but one is drawn from a general science reader and the other is quoted in one of only two secondary articles Tietge cites.

Chapters 3 and 4 argue that the popular press in the early 1950s portrayed science simultaneously as the source of new, sometimes threatening challenges and as the best hope for meeting those challenges. Tietge contends that the purpose of such representation was to defuse opposition to funding for science and to recruit new scientists, and he suggests that the phrase "solubility ethos" describes this "important form of scientific rhetoric" (p. 81). Unfortunately, none of the rhetoric he cites in either chapter is "scientific"—except, ironically, for the term "solubility" itself, and his use of the word ignores its scientific meaning.

The final chapter moves furthest from simple description toward actual rhetorical analysis. The presentation, however, remains simplistic and poorly researched: we are told, for instance, that "contrary to traditional viewpoints that teach metaphors as rhetorical tropes or linguistic conveniences that only poets, essayists, and professional writers use, metaphors are pervasive in everyday speech and even casual conversation" (p. 134). Few readers will find anything new or convincing in this assertion or in the lengthy discussion of Churchill's "Iron Curtain" speech, which lacks any consideration of a broader historical context and therefore makes absurd claims for the effects of Churchill's rhetoric: "So in one sense, the entire basis for public understanding regarding the gravity of Soviet/U.S. tensions was defined by a single metaphor" (p. 145) and "Any metaphor Churchill might have used would determine the tone of the political and technological climate" (p. 146).

Toward the end, Tietge indulges in some bizarre reflections. In a discussion of the rise of drug and alcohol abuse, for instance, he implicates the "uncertainty principle," suggesting that it "can have an exacting effect on the human consciousness, especially if one's cultural upbringing gives weight to the pursuit of order and