other nations, he could have convincingly demonstrated how cultural and political forces shape the business corporation's development. Mainstream U.S. economists are usually ethnocentric and overly wedded to the idea that our economic institutions are socially optimal. Sociology has much to contribute to the remedying of those faults. But this book is a poor demonstration of that claim.

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A Biomedical Success

Patenting the Sun. Polio and the Salk Vaccine. JANE S. SMITH. Morrow, New York, 1990. 413 pp. + plates. $22.95.

Jane Smith's account of the development and clinical trial of the Salk polio vaccine is dramatic, suspenseful, exciting, sad, touching, and detailed. Her book belongs to a genre of scientific tell-it-as-it-was in which the science is shown as deeply embedded in society, which does not simply provide a distant ideological background for it but brings it into existence, or blocks it, in a very direct way. An earlier example having to do with medical research is David Zimmerman's *Rh: The Intimate History of a Disease* (1973), which starts out by saying that it is about scientific creativity but is really about the struggle for funding.

This book, too, is about funding and politicking. Although the costs involved were enormous, the money for the development and testing of the Salk anti-polio vaccine was raised not from state or government, which were scarcely involved at all at any stage, but directly from the people in what may be uniquely American, "democratic" style. The author suggests, and this is a most interesting suggestion, that it was the public participation in the fundraising for polio research and the successful outcome of the effort that have formed the public paradigm of an all-powerful medical science. For a post-polio generation, children are expected to be healthy, and science is expected to be able to find a cure for anything, given enough funds.

In all applied science, research falls somewhere along a line stretching from basic science to the demands of the economic client. Where it falls in any given case is probably determined by the institution in which the work is done. In this case, however, no institution provided Jonas Salk with a context in basic science, and there was no network of colleagues to enfold him, or to recommend him for a Nobel Prize. The National Foundation for Infantile Paralysis owned the means of production: the client in this case owned the scientist outright. The picture of the relationship between Salk and the National Foundation is full of slightly snide insights, based quite firmly on the data, but tinged with pity. Of Salk's first contact with the Foundation Smith writes (p. 111): "Salk was proud of having maneuvered around a restrictive budget to find another source of money, but he was now working with people far wilier than he. Their scheming was to get someone to find an end to polio. Dr. Salk fell gladly into their toils."

The account of the National Foundation for Infantile Paralysis, its March of Dimes fund-raising campaigns, its internal politics, and its relations with Jonas Salk is solidly based on the Salk papers at the University of California, the Thomas Francis papers at the University of Michigan, and a large number of personal interviews, as well as the usual published scientific material. Smith's style is colorful, even perhaps, quite appropriately in the circumstances, *popular*, but her research outdoes the most meticulous Ph.D. thesis. This is a book that is both readable and insightful. Your reviewer enjoyed it and also learned a lot from it.

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Science in New York

Knowledge, Culture, and Science in the Metropolis. The New York Academy of Sciences, 1817–1970. SIMON BAATZ. New York Academy of Sciences, New York, 1990. x, 269 pp., illus. Cloth or paper, $55. Annals of the New York Academy of Sciences, vol. 584.

At the outset of his study of the New York Academy of Sciences, Simon Baatz notes that he has little interest in the organization's internal features, its officers, finances, and administration. Rather, the political and cultural factors that shaped the institutional development of science in New York City and the impact those developments had on the Academy's history are the focus of this work. The result is a lively, insightful book that offers the first extended analysis of science in New York City.

Baatz examines the history of the Academy in relation to institutional developments on a local and national scale. The Academy, first known as the Lyceum of Natural History, was created in an auspicious political environment that favored the interests of a coterie of naturalists and physicians. Subsequent efforts to obtain a permanent location for its meetings and collections led to temporary alliances or negotiations with New York University, City College of New York, and Cooper Union. In addition to describing the development of those institutions, Baatz analyzes a more significant problem: how the Lyceum, a local natural history society, responded to the challenges posed by the emergence of national scientific organizations and increasing scientific specialization. In New York the establishment of the American Museum of Natural History and the transformation of Columbia College into a major university presented problems for an institution that had emphasized research and public education. Deftly weaving together local and national developments, Baatz describes the emergence of the Academy as an umbrella organization for specialist scientific societies. Rather than declining as a result of specialization, the Academy emerged as an important metropolitan forum for scientists becoming increasingly isolated by disciplinary developments.

Baatz studies the changing character of the Academy by focusing on prominent figures who dominated its activities. Samuel Latham Mitchell, John Torrey, John William Draper, and Charles Frederick Chandler are among those he examines in some detail. Particularly noteworthy is his study of two figures who transformed the Academy: Nathaniel Lord Britton and Eunice Thomas Miner. Britton, a botanist best known for establishing the New York Botanical Garden, played a pivotal role in changing the Academy into an umbrella organization. Miner, a zoologist who became the Academy's executive secretary in the 1930s, transformed a local body of 300 members into an internationally renowned society of over 26,000 members. Through his ability to describe their scientific contributions and define their political and administrative talents, Baatz provides new insights into the work of those prominent New York scientists.

The focus on notable individuals and external relationships also highlights weaknesses in the book. At times the discussion of scientific organizations, for example the Torrey Botanical Society or the Scientific Alliance, takes on a life of its own; only after several pages does the reader realize the connection to the Academy. Despite the author's discussions of the work of Torrey, Draper, and Chandler it is unclear whether the Academy took up their interests in its meetings or publications. Baatz offers little analysis of the scientific preoccupations of