

maintains good relations with leaders of the disability rights movement and of the city's financial and philanthropic communities.

In order to tell his story of how rehabilitation goods and services became commodities, bought and sold for a profit in a growing market, Albrecht must synthesize information from many different sources. Hence he has to explain the confusing history of American disability programs, the complex relationship between morbidity and mortality, the many disparate ways in which researchers define the concept of disability and count the number of people with disabilities, and the transformation of hospitals from community to corporate entities. It is easy for anyone to stumble over the resulting details, as Albrecht sometimes does in his recitation of the history of disability programs. Assigning dates to historical events often trips him up. In the text, the dates for the beginnings of the workers' compensation, the Randolph-Sheppard, Medicare, and Medicaid programs appear to me to be wrong. Albrecht also makes a dubious connection between the rise of medicine as a big business and the creation of government programs like the Hill-Burton Hospital Construction Program. He appears to confuse Benjamin Rush, the famous physician of the early Republic, with Howard Rusk, the dynamic rehabilitation doctor of the postwar era. But these are errors of transcription and translation, and they seem to be limited to the few instances where Albrecht depends on secondary sources rather than on his own pioneering research in the disability field.

One can read this book to gain a sense of the vast sweep of the literature on disability and to receive a detailed description and analysis of the rehabilitation process. The book marks an impressive beginning to what should become a growing literature on disability policy now that the Americans with Disabilities Act has been passed. It reveals some disturbing details about that policy that the debate over the act left almost completely unaddressed.

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## A Sometime Specter

**Dirt and Disease.** Polio before FDR. NAOMI ROGERS. Rutgers University Press, New Brunswick, NJ, 1992. xii, 258 pp., illus. \$39; paper, \$15. *Health and Medicine in American Society.*

If you grew up before the advent of polio vaccines in the 1950s, mention of the

disease probably conjures up images of "iron lungs," Sister Kenny, and the dread inspired by infantile paralysis. Yet the disease did not always raise such a specter. In the 19th century exposure to the polio virus commonly occurred in infancy and resulted merely in a mild fever and then life-long immunity. By the 1890s, poorer children whose environments lacked the accoutrements of modern sanitation were still likely to develop such immunity, while, ironically, middle-class and upper-class children exposed to the virus later in life developed the paralytic form of the disease.

Little was understood about the cause and transmission of polio before the 1930s and '40s. During the epidemics of the early decades of this century, the focus of this well-written book, healthfulness and cleanliness were so firmly linked in the public mind and in medical thinking that polio cases seen among the middle class were viewed as anomalies.

Even as late as 1920 most of those practicing medicine had trained in an era that connected disease with dirt; it was only during their years of practice that bacteriological explanations had taken hold, and despite developments in theory and increasingly sophisticated laboratory methods researchers and physicians in the early 20th century could do little to halt the spread of epidemics. Lacking any efficacious treatment, analysts returned to traditional beliefs; they blamed unsanitary conditions, most notably the living conditions of recent immigrant families from southern and eastern Europe. Even the most progressive public-health departments reverted to 19th-century sanitation efforts such as fumigation and disinfection, focusing on immigrant and working-class areas of the city. Though epidemiological evidence demonstrated greater occurrence of polio in the supposedly cleaner rural and suburban environments, scientists continued to concentrate their research on urban immigrant neighborhoods.

In this era—the Progressive period—all levels of government were coming to rely more and more on scientific experts and expertise in the shaping of public policy in general and of health policy in particular. The search for modes of disease transmission between working-class and middle-class homes led them to the fly as the vector of polio. Thus public health officials found a concrete, manageable target, as well as an explanation for the spread of polio into "clean" districts. In her account of the anti-fly campaigns Rogers shows the clear ethnic and class dimensions of early-20th-century public health efforts. Faced with a situation that bacteriology could not resolve, officials placed the veneer of

the germ theory over 19th-century theories of filth and disease, positioning middle-class children as victims and working-class and immigrant children as guilty carriers of polio. Only in the 1920s with the emergence of Franklin Delano Roosevelt as polio patient did this image begin to change.

Focusing on the 1916 epidemic, Rogers ably presents the beliefs and activities of scientists, physicians, and the public, analyzing the tensions between traditional explanations of disease causation and the promise of scientific medicine. Throughout the period, disagreements among scientists about causation, mode of transmission, and therapeutic agents demonstrated the limitations of scientific medicine. One of Rogers's most interesting chapters describes alternative theories and therapies devised by lay and domestic healers, which often incorporated contemporary scientific rhetoric. In this fascinating history, Rogers demonstrates how old and new theories of medicine defined a disease within a culture that was granting increasing authority to scientific medicine.

Drawing on an impressive array of published sources, including medical journals and popular newspapers and magazines, as well as private unpublished sources, *Dirt and Disease* tells the story of scientific confusion, medical frustration, and public dread in the years when the spread of polio seemed inexplicable despite the evident promise of modern scientific medicine. Through Rogers's analysis we can appreciate the complex array of factors that shape the understanding of disease in our culture.

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## Books Received

**American Health Quackery.** Collected Essays. James Harvey Young. Princeton University Press, Princeton, NJ, 1992. xii, 299 pp., illus. \$24.95.

**Analysis of Dynamic Psychological Systems.** Vol. 2, Methods and Applications. Ralph L. Levine and Hiram E. Fitzgerald, Eds. Plenum, New York, 1992. xvi, 404 pp., illus. \$60.

**The Andromeda Galaxy.** Paul Hodge. Kluwer, Norwell, MA, 1992. x, 358 pp., illus. \$79. Astrophysics and Space Science Library, vol. 176.

**Animal Models of Neurological Disease, I.** Neurodegenerative Diseases Alan A. Boulton, Glen B. Baker, and Roger F. Butterworth, Eds. Humana, Totowa, NJ, 1992. xvi, 368 pp. \$79.50. *Neuromethods*, 21.

**Bone Marrow and Stem Cell Processing.** A Manual of Current Techniques. Ellen M. Areman, H. Joachim Deeg, and Ronald A. Sacher. Davis, Philadelphia, 1992. xxii, 487 pp., illus. \$145.

**Brain Sex.** The Real Difference between Men and Women. Anne Moir and David Jessel. Dell, New York, 1992. x, 242 pp., illus. Paper, \$10. Reprint, 1989 ed.