The persistence of cases of silicosis among the work force of one employer was thus blamed on the disproportionate number of blonds among his workers.

The distinction between illness and health, the determination of whether a person was able to work, and identification of the cause of disease translated directly into whether a worker was entitled to compensation and thus into the magnitude of an employer's liabilities. When wealth was at stake, these issues of health assessment were not abstract issues.

For most of the period covered by this history, neither state nor federal government possessed the authority to enter and inspect workplaces or to set and enforce standards of performance. It was not until passage of the Coal Mine Health and Safety Act in 1969 and the Occupational Safety and Health Act in 1970 that the federal government had these rights. Thus government agencies had to limit their activities to investigation and persuasion. In the first half of this century, the U.S. Public Health Service preferred private discussions with employers, out of the glare of publicity. But the Labor Department, under Roosevelt's Secretary of Labor, Frances Perkins, adopted more public methods, attempting to shame employers into better dust control and greater responsibility in caring for the victims of silicosis. Today, the strategies of these two agencies are reversed.

The events covered in this history include a National Silicosis Conference held in Washington in the spring of 1936, a Tri-state conference on silicosis held in Joplin, Missouri, in 1940, formation of the Air Hygiene Foundation (later the Industrial Hygiene Foundation), and labor-organizing efforts of the International Union of Mine, Mill, and Smelter Workers. A dominant tension through these events concerned whose understanding of silicosis and of disability would prevail.

The Air Hygiene Foundation, founded in Pittsburgh in 1934 for the plainly ideological purpose of selling not products but "the system that makes those products possible" (p. 106), played a dominant and triumphant role in the 1936 conference. This conference concluded with a report that trivialized the silicosis problem and, more important, declared that only those who are competent (that is, only professionals) should speak to its causes, prevention, and treatment. This clearly excluded labor organizations and workers from the discourse. Though labor and its allies were present and prepared a dissenting report, they were ignored.

Four years later in Joplin, the heart of the Tri-state mining region and the center of a major epidemic of silicosis, another conference was held in the wake of a decade of labor conflict. In the midst of the Great Depression, employment in mining in the Tri-state region plummeted from over 7000 in 1929 to 1331 in 1932. Silicosis and tuberculosis alike were common. With new rights gained from the National Labor Relations Act of 1935, the left-wing International Union of Mine, Mill, and Smelter Workers initiated an organizing drive in the region that was bitterly opposed by the mine owners. Silicosis was a prominent issue, and it soon brought national attention and eventually gave rise to another conference. At this conference labor unions played a more prominent role and fresh life was breathed into the union's organizing efforts.

If there is a paradigmatic tale of occupational health, in which actors and issues appear at their assigned times and play out their roles as if in a Greek tragedy, *Deadly Dust* is it. Surprisingly similar stories concerning the meaning of "scientific" terms and attribution of responsibility could be and have been told about asbestos-related diseases, "black lung," byssinosis, cancers caused by occupational exposures, lead poisoning, and others, but seldom have they been presented with such attention to detail and documentation.

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Donorism

Giving Blood. The Development of an Altruistic Identity. JANE ALLYN PILIAVIN and PE-TER L. CALLERO. With the collaboration of Louise Keating, Brian Koski, and Donald Libby. Johns Hopkins University Press, Baltimore, 1991. xxvi, 313 pp., illus. \$50. Johns Hopkins Series in Contemporary Medicine and Public Health.

The structure of blood banking in the United States has changed significantly in the last two decades and seems certain to change even more. Perceived or actual risk of blood-borne infections is the primary catalyst. In the early 1970s Richard Titmuss in a highly influential book, The Gift Relationship, comparing the U.S. and British blood-banking systems concluded that payment for donations significantly increased the hazards of hepatitis transmission. Largely in response to that book, and at the urging of nonprofit blood banks, the federal government enacted regulations that virtually eliminated commercial whole-blood banks in the United States.

Titmuss's conclusion that the higher rates of hepatitis transmission in the United States were the result of the use of paid blood donors has since been challenged by Harvey Sapolsky (*Daedalus* 118, no. 3, 149 [1989], who argues that transfusion hepati-

Vignettes: Complexities and Simplicities

It was once thought that science would make that mysterious and intricate complex, called Nature, somehow simpler and easier to grasp for the mind. Instead science has become a structure which, as a whole, is not at all simpler than Nature.... It is easier to find one's way in the woods than in botany.

—Ludwik Fleck, "Nauka i srodowisko," 1926, as quoted by Ilana Löwy in Organisms and the Origins of Self (Alfred I. Tauber, Ed.; Kluwer Academic Publishers)

In New York there are ninety different Christian denominations; each one confessing God the Lord in its own way without being led astray by the others. In science, indeed in research in general, we must achieve this, for what can it mean when everyone speaks of liberality and then wants to prevent others from thinking and expressing themselves in their own way?

—Johann Wolfgang von Goethe, "Ueber Naturwissenschaft im Allgemeinen," as quoted by Karl J. Fink in Goethe's History of Science (Cambridge University Press)

If you cannot—in the long run—tell everyone what you have been doing, your doing has been worthless.

--Erwin Schrödinger, as quoted in The Business of Biotechnology (R. Dana Ono, Ed.; Butterworth-Heinemann) tis rates do not correlate well with donor payment. He notes that Sweden pays all its donors but has a low hepatitis rate and that Japan switched from a largely paid donor system to a voluntary one without altering its hepatitis rate. Selectivity of donors with regard to probability of exposure to bloodborne pathogens, an issue that emerges again with regard to the transmission of HIV, seems the key factor, not donor payment.

By the late 1970s, the U.S. blood donor system was effectively reorganized around the concept of voluntary giving. Bloodbank professionals consequently became in terested in factors affecting voluntarism, and social scientists responded, finding in the study of blood donation an opportunity better to understand a range of social behaviors, including altruism. Social survey research as we know it today began with surveys on factors affecting voluntarism as early as World War II (see Herbert H. Hyman, Taking Society's Measure, Russell Sage Foundation, 1991). Giving Blood: The Development of an Altruistic Identity follows in this tradition, relying on survey research to understand the process by which firsttime donors become committed to regular blood donation.

Committed blood donors are made, not born, conclude social psychologists Piliavin and Callero, on the basis of a decade of research on blood donation. Their particular interest in this volume is understanding the process that transforms the uncommitted into the committed and eventually produces donors who give so often that they are described as "altruistic deviants."

The authors have both practical and scholarly agendas. They share the belief widely held by blood-collection professionals that voluntary, committed blood donors are the solution to maintaining a stable, safe, and sufficiently large supply of whole blood to meet community needs. Thus the practical agenda is to learn how the organization of the blood-collection system might be improved to increase the numbers of "altruistic deviants." Their academic agenda is to explore how a number of theoretical models taken from social psychology contribute to understanding the altruistic underpinnings of blood donation. It is risky to write a single book meant to serve two very different audiences. However, the volume succeeds amazingly well in this regard. It is less successful in developing an overall framework within which a wider range of social behaviors can be understood.

Given the emergence of the HIV/AIDS epidemic during the period of research on which this volume is based, it is surprising that AIDS receives only passing attention and that screening of blood donors is relegated to the appendix. Randy Shilts in And the Band Played On (St. Martin's Press, 1987) chronicles the reluctance of bloodbanking organizations early in the emerging epidemic to acknowledge the possibility that AIDS was transmitted via blood and to use aggressive screening that would alienate a readily accessible, organized population of young, white gay males that had been particularly "altruistic" in giving blood. The present volume does not set out to evaluate whether voluntarism is the best or only principle on which to organize the nation's blood-collection system. Sapolsky, for example, notes that some of the nation's most prestigious teaching hospitals relied quite successfully on a panel of paid donors carefully monitored for health risks. Though the research on altruism represented in this volume makes a valuable contribution to social psychology, its utility to public policy decision-making regarding the organization and regulation of the blood supply is more uncertain.

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Books Received

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Animal and Human Aggression. Pierre Karli. Oxford University Press, New York, 1991. x, 294 pp., illus. \$85. Translated from the French edition (Paris, 1987) by S. M. Carmona and H. Whyte.

The Asbestos Racket. An Environmental Parable. Michael J. Bennett. Free Enterprise Press, Bellevue, WA, 1991 (distributor, Merril, Bellevue, WA). xiv, 241 pp. Paper, \$9.95.

Auditory Imagery. Daniel Reisberg, Ed. Erlbaum, Hillsdale, NJ, 1992. xii, 274 pp., illus. \$45.

The Balance of Nature? Ecological Issues in the Conservation of Species and Communities. Stuart L. Pimm. University of Chicago Press, Chicago, IL, 1992. xiv, 434 pp., illus. \$62; paper, \$26.95.

Biomedical Instruments. Theory and Design. Walter Welkowitz, Sid Deutsch, and Metin Akay. 2nd ed. Academic Press, San Diego, CA, 1992. xiv, 377 pp., illus. \$59.95.

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Chemistry and the Living Organism. Molly M. Bloomfield. 5th ed. Wiley, New York, 1992. xxvi, 749 pp., illus., + index. \$52.95.

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Child Care in Context. Cross-Cultural Perspectives. Michael E. Lamb *et al.*, Eds. Erlbaum, Hillsdale, NJ, 1992. xviii, 542 pp., illus. \$89.95; paper, \$39.95.

Children of Alcoholics. A Critical Appraisal of Theory and Research. Kenneth J. Sher. University of Chicago Press, Chicago, IL, 1992. x, 226 pp., illus. \$24.95. John D. and Catherine T. MacArthur Foundation Series on Mental Health and Development.

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SCIENCE • VOL. 256 • 3 APRIL 1992

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Costing the Earth. The Challenge for Governments, the Opportunities for Business. Frances Cairncross. Harvard Business School Press, Boston, MA, 1992. x, 330 pp., illus. \$24.95.

The Covenant of the Wild. Why Animals Chose Domestication. Stephen Budiansky. Morrow, New York, 1992. xvi, 190 pp. \$18.

Emotion in Social Life. Antony S. R. Manstead, Ed. Erlbaum, Hillsdale, NJ, 1991. iv, 139 pp., illus. \$37.50. Special issue of *Cognition and Emotion*.

The Engineer in America. A Historical Anthology from *Technology and Culture*. Terry S. Reynolds, Ed. University of Chicago Press, Chicago, IL, 1991. viii, 437 pp., illus. \$44.95; paper, \$19.95.

Epidemiology in Military and Veteran Populations. William F. Page, Ed. National Academy Press, Washington, DC, 1992. viii, 103 pp. \$19. From a conference, Washington, DC, 1990.

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