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## **Book Review**

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## Book Review **Erratum** The citation for this review is 3 RISK 259 (1992) in most commercial databases.

ELAINE DRAPER, RISKY BUSINESS: GENETIC TESTING AND EXCLUSIONARY PRACTICES IN THE HAZARDOUS WORK-PLACE. (Cambridge University Press 1991) [315 pp.] Index of names and subjects, glossary, notes, references. LC 90-28112; ISBN 0-521-37027-2 (cloth \$49.50); ISBN 0-42248-5 (paper \$15.95). [40 W. 20th St., New York NY 10011.]

There are at least two divergent accounts of the nature and consequences of workplace exposure to hazardous substances. According to one view, the risks created by exposure to certain chemicals represent threats to everyone and, therefore, they ought to be reduced as much as possible. On this account, emission of certain chemicals is a social disease causing ubiquitous harm.

According to a second view, workplace exposure to certain substances represents a threat only to particular persons. Hence, in order to protect them, susceptible individuals ought to be removed from occupations involving such exposures. On this second view, exposure to chemicals is not generally harmful, since only hypersensitive individuals are affected.

Proponents of the first view tend to blame industry for general chemical hazards to workers and the public. Proponents of the second view, however, tend to blame susceptible workers, particular individuals who are the most obvious victims of chemical exposures. The main purpose of RISKY BUSINESS is to argue against the second view and therefore against the practice of genetic screening to determine worker susceptibility. Instead, sociologist Elaine Draper argues for stricter health standards for chemical exposures. Like canaries used by coal miners for early detection of methane, Draper claims that genetically susceptible members of high-risk groups also provide warning signals for conditions likely to be dangerous for all workers. If employers react to the warnings by removing the canaries, the high-risk workers, instead of reducing hazardous workplace exposures, Draper argues that deadly consequences will follow for everyone. Less susceptible workers will lose their signals that warned of danger, and exposures and health hazards will increase, ultimately harming even more persons.

Using case studies of two large chemical companies, Dow and DuPont, Draper chronicles how contemporary industries are removing the canaries, the high-risk workers. They also deliberately fail to inform more susceptible employees of possible hazards, deny the risks involved and therefore accelerate the threat to other workers. More importantly, Draper reveals how industry paints a deadly, occupationally induced hazard as a problem of unique, individual susceptibility. Using 120 interviews, as well as documentary materials and workplace observations, Draper provides an account that is sure to become a classic in the risk literature.

RISKY BUSINESS includes seven chapters as well as 100 pages of references and notes. The first chapter outlines the emergence of genetic testing and susceptibility explanations, surveying the conflict between labor and management over how to define workers at risk from hazardous chemicals. 1 Chapter 2 explains the way that industry often defines and debates workplace risk, in terms of specific, genetic propensities of individuals, rather than as a societal threat to virtually everyone. In other words, industry typically deals with workplace risk by "blaming the victim" and by projecting social ills onto individuals 3 whom industry then defines as unusual or atypical.<sup>4</sup> Chapter 3 shows how managers and scientists who accept the individual-susceptibility approach make it appear that all workers and exposure conditions not considered "high risk" are safe.<sup>5</sup> In Chapter 4, Draper analyzes the stratification of the work force. She argues that, contrary to its proponents, the new genetic screening technology is neither ethically nor politically neutral. Instead the process often singles out women and minorities.<sup>6</sup> Hence, she argues, the search for workers most at risk often results in the identification of inappropriate biological categories.

<sup>&</sup>lt;sup>1</sup> At 18.

<sup>&</sup>lt;sup>2</sup> At 37.

<sup>&</sup>lt;sup>3</sup> At 39.

<sup>&</sup>lt;sup>4</sup> At 44, 49.

<sup>&</sup>lt;sup>5</sup> At 59.

<sup>6</sup> At 75–83.

Chapter 5 surveys the use of genetic susceptibility tests, showing that the results are typically denied to workers, even after they ask.<sup>7</sup> and that the tests are rarely used to monitor and improve worker health. Instead, the chapter argues that the results are used largely to "remove the canary" and to deny that any health threat exists. Such denial is possible, Draper argues, because workers in dangerous industries typically are not unionized.<sup>8</sup> Chapter 6 uncovers the legal and regulatory environment that is conducive to removing particular employees, rather than to reducing workplace exposures to hazardous substances. Such an environment encourages initial screening, not continual surveillance and secrecy, not honesty, about hazards. Hence, Draper argues that there is virtually no sense in which genetic screening has helped workers in any way. In Chapter 7, Draper summarizes the arguments and suggests the policy implications of her findings. With the rapid growth of genetic knowledge and the increasing influence of economic, legal and regulatory factors, Draper predicts that exclusionary testing will become even more prevalent in the future.

Draper's book deserves high praise, not only because of the wealth of information about chemical risks, genetics, occupational medicine and corporate policies and politics that it includes, but also because of her compelling sociological thesis. This thesis is that industry assimilates scientific and technological developments — like genetic testing — in ways that both reflect and serve its social biases and power relationships. Because her volume attempts to tell a story of causes and motives, and not merely actions and consequences, Draper is likely to be both praised for her insights but attacked by those who are uncomfortable with her case-study methodology. The complex inferences associated with the sociology of risk are typically not amenable to the precise and quantitative techniques of hypothesis deduction often used in other sciences. Because they are not, some researchers may argue that Draper should have done more to build her

<sup>&</sup>lt;sup>7</sup> At 100.

<sup>&</sup>lt;sup>8</sup> At 114.

<sup>&</sup>lt;sup>9</sup> At 157.

case with a variety of statistical methods and tests.

In response, however, Draper's defenders should point out that, in order to deal with some of issues she confronts, Draper could have used only informal methods such as interviews, observations and analysis of documents. Also, one book cannot do everything, and Draper's volume is meant to achieve sociological analysis, not statistical proof. In laying a plausible sociological foundation for a compellingly correct thesis, Draper accomplishes more than most authors. She shows us how industry apparently uses advances in science and technology to serve its own economic ends and social biases.

In laying a sociological foundation for future work on occupational risks and genetic screening, Draper has achieved a number of goals that make her work unique and particularly noteworthy. For one thing, the type of sociological analysis that she uses has never before been brought to bear on the question of exclusionary testing of workers in the chemical industry. Second, Draper consistently employs a detailed, analytic treatment of alternative positions on particular issues related to genetic testing in the workplace. She carefully exposes the assumptions and traces the consequences of opposing arguments, revealing logical and social analysis at its best. Third, Draper does a superb job of showing how the shift from emphasis on chemical hazards to emphasis on individual susceptibility is neither a scientific breakthrough nor an objective analysis of recent consequences of genetic developments. Rather, she reveals that the shift is a socially constructed account designed to serve special interests. Fourth, Draper serves policymakers well by outlining specific alternatives to exclusionary genetic testing in the workplace. For all these reasons, her volume is a landmark discussion of the sociological study of workplace risk.

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<sup>†</sup> See previous review.