

tive international position. All of which suggests that science policy per se fails to provide an adequate basis for either explanation or critique of the range of "trans-scientific" issues that animate Dickson, namely, the organization of the U.S. and world political economies and the proper distribution of their goods and services.

Finally, the presentation of the conflict between technocratic and democratic control over science suffers the fate of most dichotomous analytical schemes: perforce, the analysis is oversimplified. The reconciliation of the desire for democratic control with science (a necessarily elite enterprise), with American business (the most powerful political institution in the political economy), and with the American military (a professional hierarchy subject in complex but genuine ways to civilian control) remains an unfinished task. With his lack of attention to the democratic institutions of representative government—political parties, elections, legislatures—or to the elite institution of the federal judiciary and his suggestion that environmentalists, labor unions, the women's movement, and those pressing the demands of less developed nations constitute the potential for an effective political coalition, Dickinson realistically leaves to others, presumably less radical, the task of reconciling these competing values. But he has forcefully raised some of the important issues.

RICHARD A. RETTIG

*Department of Social Sciences,
Illinois Institute of Technology,
Chicago 60616*

Feelings about Risk

Workers at Risk. Voices from the Workplace. DOROTHY NELKIN and MICHAEL S. BROWN. University of Chicago Press, Chicago, 1984. xviii, 220 pp. \$20.

As the issue of risk is generally framed, it is, What risks are we as a society prepared to bear to achieve economic and social progress? So put, risk becomes a quantifiable problem amenable to sophisticated risk-benefit analysis and discussions about trade-offs between "acceptable" risk and large social gains. *Workers at Risk* turns this technical formulation on its side and asks instead, How do men and women who actually bear the risks of work contributing to the common weal feel about what they do? The book presents extensive interview material, interspersed with brief editorial comments, detailing the perceptions and

experiences of workers who deal with toxic chemicals in a wide, indeed disparate, range of occupations—from chemical operators to gardeners, from laboratory technicians to firefighters, and from railroad trackmen to graphic artists. The authors take work with such chemicals, substances at present indispensable to our economy, as a sort of paradigm of daily confrontation with risks.

I can mention only some of the main themes that emerge from the interviews. Workers are deeply anxious about the potential dangers of toxic chemicals to their own health, but especially about how their jobs might affect their families. Their anxiety is exacerbated by the wide gap between what they see as obscure and often conflicting scientific assessments of acceptable risk and their own frequent gut feelings that something is seriously amiss in their work situations. Their distrust of their corporations, of their management, of the scientific and medical professionals that serve both, of the Occupational Safety and Health Administration, and often of their own unions leaves them with no reliable public forum or authority to help them assess information accurately. It also leaves them with no institutionalized channels to translate their surmises, guesses, or actual specific knowledge about problems into practical solutions. Often, when it becomes clear that they have been exposed to hazards, their bosses blame them for negligence; they in turn blame their bosses for shortsightedness and callousness. For all these reasons, they are skeptical about the efficacy of those engineering controls that are in place. At the same time, they frequently resist mandated personal protections like respirators or "bunny suits" because of discomfort or social pressures from their fellows. Above all, with the exception of some activists who work for change and a few whose love for their work makes risk manageable, they feel powerless to alter their situations both because they perceive their institutional contexts to be intransigent and because exit is simply not a realistic alternative. For the most part, then, as do workers in other alienating contexts and other groups who feel powerless, these workers normalize their risks: they resign themselves fatalistically to their lot, or deny that risks exist, or deny that anything will happen to them. Such normalization sometimes breeds carelessness and a disregard for fundamental precautions. For some, dancing with hazards seems more bearable than enduring a twilight of anxious resignation.

In drawing this bleak but largely com-

elling picture, the book suggests that the real issues about risk are not technical at all but moral and political ones rooted in the problem of distributive justice. What is needed is not more scientific appraisals of hazards by removed experts but a social reorganization of the workplace to give workers greater control over dangerous work situations.

I cannot argue with the principle behind this conclusion, but the ambiguity of the suggestion points to the book's main recurring weakness. One might ask if greater influence in the workplace would help workers actually control the hazards they face or merely foster the illusion of control by altering their perceptions of risk. Despite the richness of the interview material, the book provides no way of answering such questions because the authors center their presentation on workers' responses to generalized dangers in widely variegated occupational settings that differ markedly in structure and rhythm. One cannot discern or appraise the specific organizational structures that mediate and shape workers' experiences in subtle and intricate ways. Without such links, these voices from the workplace are likely to remain just another set of perspectives easily discounted by those with the power to make their opposing views stick.

ROBERT JACKALL

*Department of Anthropology and
Sociology, Williams College,
Williamstown, Massachusetts 01267*

Economic Geology

Metal Deposits in Relation to Plate Tectonics. F. J. SAWKINS. Springer-Verlag, New York, 1984. xiv, 325 pp., illus. \$38. Minerals and Rocks, 17.

The author of this book was one of the first to realize the potential impact of the theory of plate tectonics on our understanding of how mineral deposits are formed and how we can find more. He has written a book that is clear and terse, linking with ease the characteristics of mineral deposits at all scales. Many of the insights are deceptively simple.

The contents of the book are divided into sections according to the mineral deposits produced in different plate tectonic regimes: Convergent Plate Boundary Environments, Divergent Plate Boundary Environments, and Collisional Environments and Other Matters. Within these regimes, mineral deposits are discussed in the context of more specific