

party's hold on power. In Japan, the explanation is the famous "nuclear allergy" conditioned by the nation's unique experience as a victim of nuclear bombing. In India, it is a conscious assessment of tradeoffs in domestic economic and political costs.

For the other three nations, external factors appear to be dominant. The security tie with the United States is more important to South Korea, given the threat from heavily armed North Korea, than having its own nuclear weapons. Both Israel and South Africa, in the class of "besieged states," risk intensifying local threats and international antagonism if they go nuclear openly, but profit from being perceived as latent nuclear powers. They exercise restraint, but in a highly calculated way, and barely.

Reiss then infers that the nonproliferation regime was not a major restraining factor in any of these cases. Apart from challenging the conventional wisdom, the purpose of this observation is not clear. It should be no surprise to find that three countries in the sample—countries that openly reject the NPT, a central feature of the nonproliferation regime—are not directly restrained by that aspect of the regime. The inference is surprising, however, in the cases of Sweden, Japan, and South Korea, since all are NPT members. But is it correct?

There is a way out. Reiss finds that a nonproliferation norm acts as a less tangible restraint on nuclear decisions in each selected case. He regards this norm, somewhat arbitrarily, as political and therefore different from the nonproliferation regime, which he construes narrowly in legal and technical terms. Therein lies the mistake. The regime has legal and technical attributes, to be sure, but it could never have formed unless it was based on constructs, effort, and adjustment that were inherently political. The norm itself is integral to the regime. That it is observed in some degree even by threshold states that reject certain formal institutions of the regime is reassuring. But would it be so if most states had not joined those institutions?

These two books are quite different but complementary for those who need to understand what is happening on the proliferation front. The Reiss contribution is readable and informative, and valuable in its political focus on how states decide not to go (overtly) nuclear. The Simpson book is indispensable for those who need to know in practical terms how the issues will be framed when the NPT is reviewed and, if they have a mind to play a part, how to get ready.

RODNEY W. JONES
11632 Sourwood Lane,
Reston, VA 22091

Academic Trials

Cold War on Campus. A Study of the Politics of Organizational Control. LIONEL S. LEWIS. Transaction Books, New Brunswick, NJ, 1988. x, 358 pp. \$29.95.

Cold War on Campus by sociologist Lionel Lewis is based on an examination of the cases of 128 faculty members whose appointments were lost or threatened between 1947 and 1956 as a result of their political beliefs or activities. Drawing on the records of the American Association of University Professors (AAUP) and on the archival collections of more than 20 colleges and universities, Lewis has sought to compile comparable data on the disposition of each of the 128 cases.

The faculty involved, Lewis concludes from these data, were a more or less conventional lot, including both junior and senior faculty from among the full range of academic disciplines. The overwhelming majority were white males, with Jews perhaps overrepresented. Though most identified themselves (or were identified by others) as radicals and dissenters, only a small minority were highly active politically. In short, there was little aside from their political beliefs to distinguish them from other faculty. Almost half of them came to the attention of academic authorities only after they had been summoned to appear before congressional committees, usually the House Committee on Un-American Activities or the Senate Internal Security Committee. Others were identified as a result of their unwillingness to sign loyalty oaths, their support for Henry Wallace and the Progressive Party, or other political activities. Nor, according to Lewis, did the characteristics of the institutions at which they taught have much impact on how their cases were settled. Faculty at larger or more prestigious institutions were apparently at no less risk than those teaching at smaller or more parochial schools.

The disposition of cases involving individual faculty varied widely. Dismissal, in most cases, came only after protracted hearings, committee meetings, and other deliberations. Virtually no one defended the right of Communists to teach; the Association of American Universities (AAU) expressed a consensus among academic administrators when it declared, in 1953, that scholarly integrity and independence were incompatible with membership in the Communist Party and that such membership "extinguishes the right to a university position." Faculty accused of Party membership or sympathies were required to clear themselves by testifying as to their political beliefs

and activities. Those called before congressional committees were particularly vulnerable. If they denied accusations by the committee, they were liable to prosecution for perjury. If they testified as to their own beliefs and activities, moreover, they were required to testify as well concerning the beliefs and activities of others—to become informers. Yet to refuse to testify, to invoke the First or Fifth Amendment, was viewed by many institutions as grounds for dismissal. Faculty members had, most authorities agreed, a duty to cooperate fully with congressional investigations. The invocation of the Fifth Amendment against self-incrimination, the AAU concluded, "places upon a professor a heavy burden of proof of his fitness to hold a teaching position and lays upon his university an obligation to reexamine his qualifications for membership in its society." Those faculty members who fully cooperated with congressional investigators generally managed to keep their jobs. So did some who refused to testify before congressional committees but who were willing to talk freely before colleagues and university authorities. Those who refused to testify before both congressional committees and university authorities, who argued that their political beliefs were irrelevant to their competence as teachers and scholars, were almost invariably dismissed.

The principal actors in this process, according to Lewis, were college and university administrators, who, he believes, could have stood up to outside pressures (as in fact a handful did). They did not do so, he argues, not because they feared communism or subversion but because they feared that they and their institutions would suffer from damaging public relations. Institutional politics, not ideology, he concludes, drove the cold war on American campuses.

Unfortunately, *Cold War on Campus* is a badly flawed book. It is, despite citations from many archival sources, both poorly researched and poorly documented. Many important archival collections are ignored, as is much of the secondary literature. Information on faculty and institutions, we are told, was "encoded," but nowhere is there a systematic presentation of such information. The notes are highly incomplete, failing to include, for example, the collection from which a citation has been taken or its location. The volume is neither well organized nor well written. Nor, finally, is the author's reasoning always persuasive. Should one conclude, for example, that because institutional politics played an important role in the disposition of individual cases ideology was therefore unimportant or the struggles occurring on campuses therefore were not "another arena for the larger ideological

struggle taking place across America"? Indeed, this is in every aspect a work far inferior to Ellen Schrecker's recently published book on the same subject, *No Ivory Tower: McCarthyism and the Universities* (Oxford University Press, 1986).

There are, nevertheless, important issues raised by both Lewis and Shrecker that deserve attention, chief among them the power of universities, as well as the state, to compel loyalty and conformity. In the 1950s and 1960s, historians and social scientists portrayed McCarthyism as a mass movement of the "radical" right, a populist revolt against modernization and the nation's modern, elite-managed institutions. The latter were depicted as bulwarks against popular passion and hysteria. What seems clear from the studies by Lewis and Shrecker, however, is the degree to which such institutions became themselves not guardians of liberty but instruments of repression. Such conclusions suggest in turn the need not only to rethink our understanding of McCarthyism (as well as the "new right" of the 1980s) but also to examine more critically the role of universities and other large organizations in our political culture.

ROBERT GRIFFITH
Department of History,
University of Massachusetts,
Amherst, MA 01003

Radon Reduction

Radon and Its Decay Products in Indoor Air. WILLIAM W. NAZAROFF and ANTHONY V. NERO, JR., Eds. Wiley-Interscience, New York, 1988. xxvi, 518 pp., illus. \$75. Environmental Science and Technology.

When radon was first recognized as a major indoor pollutant in Canada and Sweden in the 1970s, methods of reducing radon levels in homes were emphasized and criteria to determine when satisfactory levels had been reached were set. In Canada the criterion of what was acceptable was developed not on the basis of health risk but statistically (within three standard deviations of the background radon progeny level of an uncontaminated town near another town contaminated with residues from an early Canadian radium refinery). Some justification based on health risk was later found for this criterion, and the same action-level value was applied to housing containing naturally produced radon. The criterion still appears as the no-action-necessary level in the U.S. Environmental Protection Agency's *A Citizen's Guide to Radon*.

However, now that the technology for mitigation is well established and radon reduction programs are in place in a number of countries, it is time to reevaluate what is known about radon.

The last year has seen the publication of several books and numerous magazine and newspaper articles on radon, but there have been few treatments of indoor radon aimed at readers with scientific training. As its preface states, this is the first comprehensive source book on the subject. It examines current information in an overview chapter by Anthony Nero followed by contributed chapters arranged in four parts: sources and transport processes, characteristics and behavior of radon decay products, the basis for health concerns, and controlling indoor exposures.

As a health professional, I found part 3, on the basis for health concerns, particularly helpful. In his chapter on lung dosimetry, Anthony James leads the reader through the basic biology into the physics of lung models, attaching numbers when available and ending up with a risk estimate. His comments on the interaction of radon exposure with smoking are useful, and his preliminary evaluation of the degree of synergism addresses a major concern of current radon studies. F. Steinhäusler's chapter on epidemiological evidence of radon-induced health risks is a minitextbook. Basic principles are briefly noted, the data on uranium miners are examined, and the limitations of these studies are set out. There are more than 200 citations. Steinhäusler rightly questions the validity of the risk factor, even though we now appear to have a hard number. General population-based epidemiological studies are under way in a number of countries, including Canada, with the promise of results over the next few years.

One cautionary note: the discussion of epidemiological studies of the general public does not mention that people are continually changing addresses, in North America at least. We know that in Canada, for example, about 50 percent of the population moves every five years. Epidemiological studies will have to allow for the possibility of exposure from houses previously occupied by the subjects interviewed. With the latency periods involved, current exposure may be the least significant factor of any measured.

Arthur Scott's chapter in part 4 on preventing radon entry reflects both earlier Canadian work and present experience. He describes how radon comes into a building, indicating some unusual entry points, and notes the inexpensiveness of designing new houses to be radon-proof as compared to taking remedial action in existing housing.

Nero concludes this section with a chap-

ter outlining a strategy for control of indoor radon that includes comments on planning future buildings. He gives some weight to the use of geological indicators of higher-than-usual uranium levels to identify possible problem areas. While one cannot quibble with the logic of that approach, it would not have led us to look for high-radon housing in Winnipeg and Regina, where radon levels are among the highest known in Canada, for there are no geological indicators to point to such findings; indeed we would have expected these regions to contain below-average amounts of radon.

An appendix by William Nazaroff on techniques for measuring radon and radon decay products completes the book.

All in all, this is the best book to date at providing a background for understanding radon. It does more than say that radon is a problem; it treats the science and practical experience of radon in a way that is both thorough and comprehensible. It should be on the desk of every worker researching, measuring, or mitigating radon or administering radon reduction programs.

R. S. EATON
Health Protection Branch,
Department of National Health and Welfare,
Ottawa, ON, Canada K1A 1C1

Some Other Books of Interest

Neutral Models in Biology. MATTHEW H. NITTECKI and ANTONI HOFFMAN, Eds. Oxford University Press, New York, 1987. x, 166 pp., illus. \$29.95. Based on a symposium, Chicago, May 1985.

The editors open this volume by noting the imprecision of the term "neutral model," which is related in meaning to such terms as "null hypothesis," "baseline model," and "stochastic approach." Rather than pursuing this semantic issue, however, they elect to focus on the research strategy associated with the term and provide an introductory discussion of the issue of levels of organization and of explanation. In the ensuing papers, a sampling of neutral models as used in various biological disciplines are discussed. The first group consists of three essays: James F. Crow on molecular evolution, William C. Wimsatt on genetics, and Stuart A. Kauffman on development and evolution. The next two papers are concerned with ecology: L. B. Slobodkin on community studies and Paul Harvey on interspecific competition in island biogeography. The concluding group of papers, representing paleontology, contains an essay including four case studies by David Raup