

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

and discussions focusing on taxonomic diversification in the Phanerozoic by Hoffman and on mass extinction by Stephen M. Stigler. The volume, which stems from the Field Museum's Eighth Spring Systematics Symposium, is dedicated to the memory of Thomas J. M. Schopf.—K.L.

Ontogeny and Systematics. C. J. HUMPHRIES, Ed. Columbia University Press, New York, 1988. xvi, 236 pp., illus. \$40. Based on a symposium, Brighton, U.K., July 1985.

This volume, which sets out to "explore the principles [of developmental biology and phylogenetic systematics] in an effort to combine them," contains seven essays, five of which were originally presented at the Third International Congress of Systematic and Evolutionary Biology. In the opening essay, V. Louise Roth considers the concept of homology. In the second, P. Weston examines the use of parsimony and direct and indirect techniques for establishing character phylogenies as expounded by G. Nelson. Arnold Kluge then describes and discusses "some recent advances in methodology that may lead to a synthesis of ontogenetic patterns," focusing on "the major advantages and disadvantages of treating species as life cycles." The relationship between systematics and ontogeny is discussed with respect to pollen and spores by Stephen Blackmore and Peter R. Crane and with respect to bryophytes by Brent D. Mishler. Henri M. André, with reference to arthropods, expounds the concept of "stase" and provides an introduction to ideas propounded by W. Garstang and F. Grandjean that "should have altered our whole outlook on evolutionary biology." An essay on epigenetics by Søren Løvtrup concludes the volume. An introduction by Humphries and an index are also included.—K.L.

Books Received

Applications of Polymers. Raymond B. Seymour and Herman F. Mark, Eds. Plenum, New York, 1988. viii, 156 pp., illus. \$49.50. From a symposium, Denver, CO, April 1987.

Applied Multivariate Analysis. Ira H. Bernstein. Springer-Verlag, New York, 1988. xx, 508 pp., illus. \$49.

Art in Organic Synthesis. Nitya Anand, Jasjit S. Bindra, and Subramania Ranganathan. 2nd ed. Wiley-Interscience, New York, 1988. xx, 427 pp., illus. \$39.95.

Asa Fitch and the Emergence of American Entomology. With an Entomological Bibliography and a Catalog of Taxonomic Names and Type Specimens. Jeffrey K. Barnes. State Education Department, University of the State of New York, Albany, New York, 1988. viii, 120 pp., illus. Paper, \$12.50. New York State Museum Bulletin, no. 461.

Conservation in Africa. People, Policies and Practice. David Anderson and Richard Grove, Eds. Cambridge University Press, New York, 1988. x, 355 pp., illus. \$54.50. Based on a workshop, Cambridge, U.K., April 1985.

Cool Stars, Stellar Systems, and the Sun. J. L. Linsky and R. E. Stencel, Eds. Springer-Verlag, New York, 1987. xiv, 537 pp., illus. \$55.80. Lecture Notes in Physics, vol. 291. From a workshop, Boulder, CO, July 1987.

Counterexamples in Probability. Jordan M. Stoyanov. Wiley, New York, 1988. xxiv, 314 pp. \$81.95. Wiley Series in Probability and Mathematical Statistics.

The Developing Person Through the Life Span. Kathleen Stassen Berger. 2nd ed. Worth, New York, 1988. xxiv, 622 pp., illus., + indexes and appendixes. \$33.95.

The Development of Scientific Thinking Skills. Deanna Kuhn et al. Academic Press, San Diego, CA, 1988. xii, 249 pp. \$29.95. Developmental Psychology Series.

Disease Prevention/Health Promotion. The Facts. Office of Disease Prevention and Health Promotion, U.S. Public Health Service. Bull Publishing, Palo Alto, CA, 1987. viii, 341 pp., illus. Paper, \$22.95.

Evaporite Basins. Tadeusz M. Peryt, Ed. Springer-Verlag, New York, 1987. vi, 188 pp., illus. Paper, \$29.50. Lecture Notes in Earth Sciences, vol. 13.

The Evolutionary Dynamics of Complex Systems. A Study in Biosocial Complexity. C. Dyke. Oxford University Press, New York, 1988. xii, 161 pp. \$35. Monographs on the History and Philosophy of Biology.

The Expanding Universe. Arthur Eddington. Cambridge University Press, New York, 1988. xxiv, 128 pp. Paper, \$12.95. Cambridge Science Classics. Reprint, 1933 ed.

Experimental Techniques in High-Pressure Research. W. F. Sherman and A. A. Stadtmüller. Wiley, New York, 1988. x, 471 pp., illus. \$126.

The Facts on File Dictionary of Astronomy. Valerie Illingworth. 2nd ed. viii, 437 pp., illus. \$24.95; paper, \$12.95.

Genetic Engineering for Almost Everybody. William Bains. Penguin, New York, 1988. x, 214 pp. Paper, \$6.95.

Integral Transforms in Geophysics. Michael S. Zhdanov. Springer-Verlag, New York, 1988. xxiv, 367 pp., illus. \$140. Translated from the Russian edition (Moscow, 1984).

Intermediate Physics for Medicine and Biology. Russell K. Hobbie. 2nd ed. Wiley, New York, 1988. xvi, 623 pp., illus. \$54.60.

The Internal Constitution of the Stars. Arthur S. Eddington. Cambridge University Press, New York, 1988. xiv, 407 pp. Paper, \$19.95. Cambridge Science Classics Series. Reprint, 1962 ed.

Interpolation of Operators. Colin Bennett and Robert Sharpley. Academic Press, Orlando, FL, 1988. xiv, 469 pp. \$69.95. Pure and Applied Mathematics, vol. 129.

The Invention of Memory. A New View of the Brain. Israel Rosenfeld. Basic Books, New York, 1988. x, 229 pp., illus. \$18.95.

Laboratory Experiments in Economics. Six Points of View. Alvin E. Roth, Ed. Cambridge University Press, New York, 1987. x, 219 pp., illus. \$29.95.

Laser Remote Chemical Analysis. Raymond M. Measures, Ed. Wiley-Interscience, New York, 1988. xiv, 546 pp., illus. \$75. Chemical Analysis, vol. 94.

Law and Semiotics. Vol. 1. Roberta Kevelson, Ed. Plenum, New York, 1987. viii, 354 pp. \$65. From a conference, University Park, PA, April 1987.

Learning from Good and Bad Data. Philip D. Laird. Kluwer, Norwell, MA, 1988. xviii, 211 pp. \$45. Kluwer International Series in Engineering and Computer Sciences.

Mental Models as Representations of Discourse and Text. Alan Garnham. Horwood, Chichester, U.K. and Halsted (Wiley), New York, 1988. 205 pp. \$64.95. Ellis Horwood Series in Cognitive Science.

Metals in Coastal Environments of Latin America. U. Seeliger, L. D. de Lacerda, and S. R. Patchineelam, Eds. Springer-Verlag, New York, 1988. xvi, 297 pp., illus. \$54. From a symposium, Rio de Janeiro, Brazil, Aug. 1986.

Meteor Showers. A Descriptive Catalog. Gary W. Kronk. Enslow, Hillside, NJ 07205. xxiv, 291 pp. Paper, \$24.50. Enslow Astronomy Series.

Modeling in Urban and Regional Economics. Alex Anas. Harwood, New York, 1987. viii, 133 pp. Paper, \$36. Fundamentals of Pure and Applied Economics, vol. 26.

Modelling of Structure and Properties of Molecules. Z. B. Maksic, Ed. Horwood, Chichester, U.K., and Halsted (Wiley), New York, 1987. viii, 360 pp., illus. \$67.95. From a symposium, Zagreb, Yugoslavia, May 1986.

New Interventions of Children and Youth. Action-Research Approaches. Robert N. Rapoport. Cambridge University Press, New York, 1987. viii, 275 pp. \$39.50.

Nicotine Replacement. A Critical Evaluation. Ovide F. Pomerleau and Cynthia S. Pomerleau. Liss, New York, 1988. xiv, 317 pp., illus. \$58. Progress in Clinical and Biological Research, vol. 261. Based on a conference, Bethesda, MD, Jan. 1987.

Nitrogen Fixation by Legumes in Mediterranean Agriculture. D. P. Beck and L. A. Materon, Eds. Nijhoff, Dordrecht, 1988 (U.S. distributor, Kluwer, Norwell, MA). xvi, 379 pp., illus. \$125. Developments in Plant and Soil Sciences, vol. 32. From a workshop, Aleppo, Syria, April 1986.

The Nonlinear Theory of Elastic Shells. One Spatial Dimension. A Libai and J. G. Simmonds. Academic Press, San Diego, CA, 1988. xvi, 412 pp., illus. \$49.50.

Nonnegative Matrices. Henryk Minc. Wiley-Interscience, New York, 1988. xiv, 206 pp. \$39.95.

Numerical Modeling in Science and Engineering. Myron B. Allen III, Ismael Herrera, and George F. Pinder. Wiley-Interscience, New York, 1988. xii, 418 pp., illus. \$39.95.

Numerical Radiative Transfer. Wolfgang Kalkofen, Ed. Cambridge University Press, New York, 1988. vi, 373 pp., illus. \$49.50.

Okavango. Jewel of the Kalahari. Karen Ross. Macmillan, New York, 1988. 256 pp., illus. \$24.95.

Online Retrieval. Analysis and Strategy. Peter J. Vigil. Wiley, New York, 1988. xiv, 242 pp., illus. \$34.95.

Optics. K. D. Möller. University Science, Mill Valley, CA, 1988. xii, 644 pp., illus. \$48.

Organic and Inorganic Low-Dimensional Crystalline Materials. Pierre Delhaes and Marc Drillon, Eds. Plenum, New York, 1987. xiv, 482 pp., illus. \$95. NATO Advanced Science Institutes Series B, vol. 168. From a workshop, Minorca, Spain, May 1987.

Plant Strategies and the Dynamics and Structure of Plant Communities. David Tilman. Princeton University Press, Princeton, NJ, 1988. xii, 360 pp., illus. \$45; paper, \$15.95. Monographs in Population Biology, vol. 26.

Polycrystalline Silicon for Integrated Circuit Applications. Ted Kamins. Kluwer, Norwell, MA, 1988. xiv, 290 pp., illus. \$55. Kluwer International Series in Engineering and Computer Science.

Polymer Surface Dynamics. J. D. Andrade, Ed. Plenum, New York, 1988. viii, 182 pp., illus. \$49.50. From a symposium, Denver, CO, June 1986.

Power Sonic and Ultrasonic Transducers Design. B. Hamonic and J. N. Decarpigny, Eds. Springer-Verlag, New York, 1988. x, 249 pp., illus. \$59.40. From a workshop, Lille, France, May 1987.

Predicting Recidivism Using Survival Models. Peter Schmidt and Ann Dryden White. Springer-Verlag, New York, 1988. xii, 174 pp., illus. \$39. Research in Criminology.

Prehistoric Stone Technology of Northern Black Mesa, Arizona. William J. Parry and Andrew L. Christenson. Center for Archaeological Investigations, Southern Illinois University, Carbondale, 1987. xx, 312 pp., illus. Paper, \$23.50. Occasional Paper no. 12.

The Presence of the Past. Morphic Resonance and the Habits of Nature. Rupert Sheldrake. Times Books, New York, 1988. xxii, 391 pp., illus. \$19.95.

Prison Crowding. A Psychological Perspective. Paul B. Paulus, with Verne C. Cox and Garvin McCain. Springer-Verlag, New York, 1988. x, 115 pp., illus. \$43. Research in Criminology.

Probabilistic Methods in Mathematical Physics. Kiyosi Itô and Nobuyuki Ikeda, Eds. Academic Press, San Diego, CA, 1988. viii, 441 pp. \$59.50. From a symposium, Katata and Kyoto, Japan, June 1985.

The Problems of Physics. A. J. Leggett. Oxford University Press, New York, 1987. xii, 192 pp., illus. \$17.95; paper, \$10.95. An OPU Book.

Professional Judgment. A Reader in Clinical Decision Making. Jack Dowie and Arthur Elstein, Eds. Cambridge University Press, New York, 1988. xvi, 565 pp., illus. \$59.50; paper, \$19.95.

The Protolobar Structure of the Human Kidney. Its Biologic and Clinical Significance. Gabor Inke. Liss, New York, 1988. xiv, 788 pp., illus. \$275.

Relatives at Risk for Mental Disorder. David L. Dunner, Elliot S. Gershon, and James E. Barrett, Eds. Raven, New York, 1988. xii, 324 pp., illus. \$79. American Psychopathological Association Series.

Reliability Assessment of Large Electric Power Systems. Roy Billinton and Ronald N. Allan. Kluwer, Norwell, MA, 1988. xii, 296 pp., illus. \$52.50. Kluwer

(Continued on page 995)