Vignettes: On Philosophy

In the class of people who are interested in facts and ideas, we have, of course, most scientists, and also a good number of nonscientists who think along the same lines even though they don't have scientific training. In the other class—those interested in words—we have some scientists and some philosophers, and many nonscientists. I remember reading a book on philosophy in which the author went on, page after page, on the question: If there is a leaf on a tree and you see that it is green in the springtime and red in fall, is that the same leaf or is it a different leaf? Is the essence of leafness still in it? Words, words, words, but "chlorophyll" and "xanthophyll"—which are sensible in this connection of what has happened to that leaf—just don't appear at all.

—*Linus Pauling*, as quoted in *Linus Pauling in His Own Words: Selections from His Writings, Speeches, and Interviews* (Barbara Marinacci, Ed.; Simon and Schuster)

Many scientists, especially physicists, do not have a high opinion of philosophy. To them the fantastic amount of highly non-trivial knowledge that scientists have acquired over the last few hundred years bears no comparison with the seemingly endless squabbles about ever more subtle points of no practical importance that philosophers have spent their time on. Of course, this is being unfair to philosophers. Philosophical questions cannot be answered by empirical inquiry and the pace of progress in philosophy, therefore, is much slower than in physics. But anyone interested in what physics tells us about the world can hardly avoid asking philosophical questions. . . . Einstein said that physics without philosophy was not interesting enough to spend a lifetime on.

—*Jan Hilgevoord*, in *Physics and Our View of the World* (Jan Hilgevoord, Ed.; Cambridge University Press)

Books Received

Acquired Immune Deficiency Syndrome. Biological, Medical, Social, and Legal Issues. Gerald J. Stine. 2nd ed. Prentice Hall, Englewood Cliffs, NJ, 1994. xxx, 511 pp., illus. $45.

Acta Numerica 1995. A. Iserles, Ed. Cambridge University Press, New York, 1995. vi, 491 pp., illus. $59.95.

The Behavior of Chemical Elements in Stars. Carlos Jaschek and Mercedes Jaschek. Cambridge University Press, New York, 1995. xiv, 324 pp., illus. $69.95.

Beliefs and Values in Science Education. Michael Poole. Open University Press, Bristol, PA, 1995. 146 pp., illus. Paper, $24.95. Developing Science and Technology Education.

Beyond Confrontation. Learning Conflict Resolution in the Post-Cold War Era. John A. Vasquez *et al.*, Eds. University of Michigan Press, Ann Arbor, 1995. viii, 239 pp. $39.50.

Changes in Fluxes in Estuaries. Implications from Science to Management. Keith R. Dyer and Robert J. Orth, Eds. Olsen and Olsen, Fredensborg, Denmark, 1994. x, 486 pp., illus. $175 or £108. From a symposium, Plymouth, UK, Sept. 1992.

Changing the Odds. Cancer Prevention Through Personal Choice and Public Policy. R. Grant Steen. Facts on File, New York, 1995. xii, 388 pp. $35.

Chaotic Behavior of Deterministic Dissipative Systems. Miloš Marek and Igor Schreiber. Cambridge University Press, New York, 1995. xii, 367 pp., illus. Paper, $39.95. Reprint, 1991 ed.

Deaf Young People and Their Families. Developing Understanding. Susan Gregory, Juliet Bishop, and Lesley Sheldon. Cambridge University Press, New York, 1995. xii, 361 pp. $79.95; paper, $29.95.

The Decision to Use the Atomic Bomb. And the Architecture of an American Myth. Gar Alperovitz. Knopf, New York, 1995. xiv, 848 pp. $32.50 or $C45.50.

Democracy and Technology. Richard E. Sclove. Guilford, New York, 1995. xiv, 338 pp., illus. $42; paper, $18.95. Conduct of Science.

Electrical Characterization of Silicon-on-Insulator Materials and Devices. Sorin Cristoloveanu and Sheng S. Li. Kluwer, Norwell, MA, 1995. xvi, 381 pp., illus. $125 or £85 or Dfl. 210. Kluwer International Series in Engineering and Computer Science, 305.

Electrochromism. Fundamentals and Applications. Paul M. S. Monk, Roger J. Mortimer, and David R. Rosseinsky. VCH, New York, 1995. xxiv, 216 pp., illus. $98.

Electronic Structure Calculations on Fullerenes and Their Derivatives. Jerzy Cioslowski. Oxford University Press, New York, 1995. x, 281 pp., illus. $65. Topics in Physical Chemistry.

Fetal Development. A Psychobiological Perspective. Jean-Pierre Lecanuet *et al.*, Eds. Erlbaum, Hillsdale, NJ, 1995. xii, 512 pp., illus. $99.95.

Fever and Antipyresis. The Role of the Nervous System. Keith E. Cooper. Cambridge University Press, New York, 1995. xvi, 182 pp., illus. $49.95.

A Field Guide to Germs. Wayne Biddle. Holt, New York, 1995. xxiv, 196 pp., illus. $22.50.

Geographical Information Systems in Assessing Natural Hazards. Alberto Carrara and Fausto Guzzetti, Eds. Kluwer, Norwell, MA, 1994. xii, 353 pp., illus. $178 or £113 or Dfl. 250. Advances in Natural and Technological Hazards Research, vol. 5. From a workshop, Perugia, Italy, Sept. 1993.

Geometric Scattering Theory. Richard B. Melrose. Cambridge University Press, New York, 1995. xii, 116 pp., illus. $34.95; paper, $14.95. Stanford Lectures.

Hiroshima. Why America Dropped the Atomic Bomb. Ronald Takaki. Little Brown, New York, 1995. viii, 194 pp., + plates. $19.95 or $C29.95.

The History of Pain. Roselyne Rey. Harvard University Press, Cambridge, MA, 1995. vii, 394 pp. $39.95. Translated from the French edition (Paris, 1993) by Louise Elliott Wallace, J. A. Cadden, and S. W. Cadden.

A History of Scientific Thought. Elements of a History of Science. Michel Serres, Ed. Blackwell, Cambridge, MA, 1995. viii, 760 pp., illus. $100. Translated from the French edition (Paris, 1989).

Industrial and Organizational Psychology. Research and Practice. Paul E. Spector. Wiley, New York, 1995. xxiv, 420 pp., illus. $64.95.

Infertility. Your Questions Answered. S. L. Tan, Howard S. Jacobs, and Machelle M. Seibel. Birch Lane (Carol), New York, 1995. xvi, 223 pp., illus. $18.95.

Information Superhighways. Multimedia Users and Futures. Stephen J. Emmott, Ed. Academic Press, San Diego, 1995. x, 278 pp., illus. $29.95. Computers and People.

Logic and Representation. Robert C. Moore. CSLI, Stanford, CA, 1995 (distributor, Cambridge University Press, New York). xiv, 196 pp., illus. $39.95; paper, $19.95. CSLI Lecture Notes, no. 39.

Magnespheres and the Spring Atom. Larry Spring. Published by the author, 225 Redwood Ave., Fort Bragg, CA, 1995. 102 pp., illus. Paper, $6.

Mathematical Models for Handling Partial Knowledge in Artificial Intelligence. Giulianella Coletti, Didier Dubois, and Romano Scozzafava, Eds. Plenum, New York, 1995. x, 308 pp., illus. $89.50. From a workshop, Erice, Italy, June 1994.

Navier-Stokes Equations and Related Nonlinear Problems. A. Sequeira, Ed. Plenum, New York, 1995. x, 406 pp., illus. $115. From a conference, Funchal, Madeira, Portugal, May 1994.

Nutrition and Evolution. Michael Crawford and David Marsh. Keats, New Canaan, CT, 1995. xvi, 298 pp., illus. Paper, $15.95. Originally published in the UK as *The Driving Force* (1989).

Ocean Acoustic Tomography. Walter Munk, Peter Worcester, and Carl Wunsch. Cambridge University Press, New York, 1995. xiv, 433 pp., illus., + plates. $59.95. Cambridge Monographs on Mechanics.

Pyramids of Túcume. The Quest for Peru's Forgotten City. Thor Heyerdahl, Daniel H. Sandweiss, and Alfredo Narváez. Thames and Hudson, New York, 1995 (distributor, Norton, New York). 240 pp., illus. $29.95.

Quality Assurance in Analytical Chemistry. Werner Funk, Vera Dammann, and Gerhild Donnevert. VCH, New York, 1995. xxii, 238 pp., illus. $80. Translated from the German by Ann Gray.

RR Lyrae Stars. Horace A. Smith. Cambridge University Press, New York, 1995. x, 156 pp., illus. $59.95. Cambridge Astrophysics, 27.

The Same and Not the Same. Roald Hoffmann. Columbia University Press, New York, 1995. xviii, 294 pp., illus. $29.95. George B. Pegram Lecture Series.

Two-Component Signal Transduction. James A. Hoch and Thomas J. Silhavy, Eds. ASM Press, Washington, DC, 1995. xvi, 488 pp., illus., + plates. $79.

Ultrahigh Pressure Metamorphism. Robert G. Coleman and Xiaomin Wang, Eds. Cambridge University Press, New York, 1995. x, 528 pp., illus. $79.95. Cambridge Topics in Petrology.

Visual Development. Nigel W. Daw. Plenum, New York, 1995. xiv, 228 pp., illus. $45. Perspectives in Vision Research.

Water Relations of Plants and Soils. Paul J. Kramer and John S. Boyer. Academic Press, San Diego, 1995. xvi, 495 pp., illus. $69.95.

The Way Life Works. Mahlon Hoagland and Bert Dodson. Times, New York, 1995. xxii, 233 pp., illus. $35.

Publishers' Addresses

Below is information about how to direct orders for books reviewed in this issue. A fuller list of addresses of publishers represented in *Science* appears in the issue of 26 May 1995, page 1220.

Cambridge University Press, 110 Midland Ave., Port Chester, NY 10573–4930. Phone: 800-872-7423; 914-937-9600. Fax: 914-937-4712.

Oxford University Press, Inc., Order Dept., 2001 Evans Rd., Cary, NC 27513. Phone: 800-451-7556; 919-677-0977. Fax: 919-677-1303.