chose for it. This collection of 16 papers is the result of the conference. As a prelude to the contributions on muscle Robert Stämpfli provides a biographical essay recounting something of Huxley's family background and some personal reminiscences focused on the period during which the neurophysiological research that led to the 1963 prize, shared with Alan Hodgkin and John Eccles, was being conducted. (On Hodgkin's contribution to this work see the review of his autobiography in *Science*, 2 October.) Stämpfli's essay is followed by another by Simmons that describes in a similar vein Huxley's research on muscle, which began in 1951 at a time when (he is quoted as saying) "there was . . . no obvious way of pushing the analysis of excitation to a deeper level." In the remaining papers 19 authors from six nations who have worked in Huxley's laboratory give more technical accounts of their own work on such subjects as inactivation of human sodium channels (Rüdel and Fakler), calcium-induced calcium release in skeletal muscle (Endo), hypodynamic tension changes in the frog heart (Niedergerke and Page), high-speed digital imaging microscopy of isolated muscle cells (Taylor and Roos), and the mechano-chemistry of negatively strained cross-bridges in skeletal muscle (Goldman). In addition to the extensive bibliographies of Huxley's own works that follow the two opening essays there is a combined reference list for the volume as a whole, and a brief index is included.

—*Katherine Livingston*

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**The Biology of Millipedes.** STEPHEN P. HOPKIN and HELEN J. READ. Oxford University Press, New York, 1992. xii, 233 pp., illus. $70.

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Dispelling an assumption that might be made by the literal-minded, the authors open this work by reporting that the "world champion" among the millipedes has only 375 pairs of legs. Most of the approximately 10,000 species in the class (Diplopoda) make do with fewer than 50, and these are distinguished from those in the other classes of myriapods in being arranged two pairs, rather than only one, to a body segment, a feature that enables the millipedes to "exert a considerable forward thrust." Noting that the millipedes are the only major group of terrestrial invertebrates that have not been the subject of an introductory text in English, Hopkin and Read have set out to remedy that deficiency. The treatment follows the conventional format for such works, beginning with systematics, evolution, and zoogeography and proceeding, in a total of 10 chapters, through basic anatomy, feeding and metabolic arrangements, the nervous system, reproduction, and development and life history to broader considerations of the group's place in the world. Ecologically, millipedes feed primarily on decaying plant material, playing roles of varying importance in soil processes; appear to have achieved much of their worldwide dispersal by passive means; and aggregate in large numbers for reasons that are unclear but with effects that include such inconveniences as the delay of railroad trains. As to the direct importance of the group to humanity, the authors otherwise make only modest claims and conclude the book by advocating the study of these "dare we say it, endearing creatures" for their own sake.

—*Katherine Livingston*

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## Books Received

**Accretion Power in Astrophysics**. Juhan Frank, Andrew King, and Derek Raine. 2nd ed. Cambridge University Press, New York, 1992. xvi, 294 pp., illus. $79.95; paper, $37.95.

**The Adrenal Gland**. Vivian H. T. James, Ed. 2nd ed. Raven, New York, 1992. xiv, 513 pp., illus. $138. Comprehensive Endocrinology.

**Aging and Alzheimer's Disease**. Sensory Systems, Neuronal Growth, and Neuronal Metabolism. John H. Growdon *et al.*, Eds. New York Academy of Sciences, New York, 1991. xiv, 303 pp., illus. $75. Annals of the New York Academy of Sciences, vol. 640. From a meeting, Zurich, Switzerland, Feb. 1991.

**Aging and Neuropsychological Assessment**. Asenath La Rue. Plenum, New York, 1992. xvi, 369 pp., illus. $45. Critical Issues in Neuropsychology.

**Biology of the Grapevine**. Michael G. Mullins, Allain Bouquet, and Larry E. Williams. Cambridge University Press, New York, 1992. xii, 239 pp., illus. $59.95. Biology of Horticultural Crops.

**Biosynthesis**. Molecular and Cell Biochemistry. Smith and Wood. Chapman and Hall, New York, 1992. xiv, 226 pp., illus. Paper, $27.

**Butterfly Conservation**. T. R. New. Oxford University Press, New York, 1992. xii, 224 pp., illus. Paper, $29.95. Reprint, 1991 ed.

**C. P. Snow and the Struggle of Modernity**. John de la Mothe. University of Texas Press, Austin, 1992. xx, 242 pp., illus. $35.

**The Care and Conservation of Geological Material**. Minerals, Rocks, Meteorites and Lunar Finds. Frank M. Howie, Ed. Butterworth-Heinemann, Stoneham, MA, 1992. xvi, 138 pp., illus. $74.95. Butterworth-Heinemann Series in Conservation and Museology.

**Catastrophe Theory**. V. I. Arnold. 3rd ed. Springer-Verlag, New York, 1992. xiv, 150 pp., illus. Paper, $24. Translated from the Russian by G. S. Wassermann.

**Dinosaur Systematics**. Approaches and Perspectives. Kenneth Carpenter and Philip J. Currie, Eds. Cambridge University Press, New York, 1992. xvi, 318 pp., illus. Paper, $29.95. From a symposium, Drumheller, Alberta, Canada, June 1986. Reprint, 1990 ed.

**Discrete Mathematics for Computing**. John E. Munro. Chapman and Hall, New York, 1992. x, 306 pp. Paper, $27.50.

**Disease-Mongers**. How Doctors, Drug Companies, and Insurers Are Making You Feel Sick. Lynn Payer. Wiley, New York, 1992. xiv, 292 pp. $22.95.

**Economics**. Mathematical Politics or Science of Diminishing Returns?. Alexander Rosenberg. University of Chicago Press, Chicago, 1992. xviii, 266 pp. $32.50. Science and Its Conceptual Foundations.

**Engineering and the Mind's Eye**. Eugene S. Ferguson. MIT Press, Cambridge, MA, 1992. xvi, 241 pp., illus. $24.95.

**Engineering Field Theory**. With Applications. Leo Setian. Cambridge University Press, New York, 1992. xii, 354 pp., illus. $80; paper, $34.95.

**Fission-Track Dating**. Günther Wagner and Peter Van Den Haute. Enke, Stuttgart, and Kluwer, Norwell, MA, 1992. xiv, 285 pp., illus. $99. Solid Earth Sciences Library, vol. 6. Based on a workshop, Besançon, France, Sept. 1988.

**Foraging Strategies and Natural Diet of Monkeys, Apes and Humans**. A. Whiten and E. M. Widdowson, Eds. Clarendon (Oxford University Press), New York, 1992. viii, 138 pp., illus. $65. From a meeting, London, May 1991. Also published in *Philosophical Transactions of the Royal Society* B, vol. 334.

**Frontiers of Stellar Evolution**. David L. Lambert, Ed. Astronomical Society of the Pacific, San Francisco, CA, 1992. viii, 626 pp., illus. $44.50. Astronomical Society of the Pacific Conference Series, vol. 20. From a symposium, Alpine, TX, July 1989.

**Genetics of Hearing Impairment**. Robert J. Ruben, Thomas R. Van De Water, and Karen P. Steel, Eds. New York Academy of Sciences, New York, 1991. viii, 331 pp., illus. $122. Annals of the New York Academy of Sciences, vol. 630. From a conference, New York, Sept. 1990.

**Gravitational-Electromagnetic Field Theory**. Fran de Aquino. Vantage, New York, 1992. vi, 138 pp., illus. $18.50.

**Green Plants**. Their Origin and Diversity. Peter R. Bell. Dioscorides (Timber Press), Portland, OR, 1992. 315 pp., illus. $39.95; paper, $24.95. New edition of *Diversity of Green Plants*.

**Handbook of Gene Level Diagnostics in Clinical Practice**. Victor A. Bernstam. CRC, Boca Raton, FL, 1992. xxiv, 695 pp. $99.50.

**Ivory Diptych Sundials, 1570–1750**. Steven A. Lloyd. Harvard University Collection of Scientific Instruments, Cambridge, MA, 1992 (distributor, Harvard University Press, Cambridge). vi, 169 pp., illus. $50.

**Japan's Growing Technological Capability**. Implications for the U.S. Economy. Thomas S. Arrison *et al.*, Eds. National Academy Press, Washington, DC, 1992. viii, 235 pp., illus. Paper, $30. From a symposium, Washington, DC, Oct. 1991.

**Larvae and Evolution**. Toward a New Zoology. Donald I. Williamson. Chapman and Hall, New York, 1992. xvi, 223 pp., illus. $39.95.

**The Logic of Typed Feature Structures**. With Applications to Unification Grammars, Logic Programs and Constraint Resolution. Bob Carpenter. Cambridge University Press, New York, 1992. viii, 270 pp. $34.95. Cambridge Tracts in Theoretical Computer Science.

**The Logical Foundations of the Marxian Theory of Value**. Adolfo García de la Sienra. Kluwer, Norwell, MA, 1992. viii, 226 pp. $76. Synthese Library, vol. 223.

**Making Science**. Between Nature and Society. Stephen Cole. Harvard University Press, Cambridge, MA, 1992. xiv, 290 pp. $39.95.

**The Male Germ Cell**. Spermatogonium to Fertilization. Bernard Robaire, Ed. New York Academy of Sciences, New York, 1991. xii, 510 pp., illus. $106. Annals of the New York Academy of Sciences, vol. 637. From a workshop, Montreal, Quebec, April 1991.

**Maternal Substance Abuse and the Developing Nervous System**. Ian S. Zagon and Theodore A. Slotkin, Eds. Academic Press, San Diego, CA, 1992. xvi, 377 pp., illus. $89.95.

**Methodological Issues in Applied Social Psychology**. Fred B. Bryant *et al.*, Eds. Published for the Society for the Psychological Study of Social Issues by Plenum, New York, 1992. xxiv, 304 pp., illus. $49.50. Social Psychological Applications to Social Issues, vol. 2.

**Microscopic Simulations of Complex Hydrodynamic Phenomena**. Michel Mareschal and Brad Lee Holian, Eds. Plenum, New York, 1992. xiv, 438 pp., illus. $115. NATO Advanced Science Institutes Series B, vol. 292. From an institute, Alghero, Sardinia, July 1991.

**Modern Gas-Based Temperature and Pressure Measurements**. Franco Pavese and Gianfranco Molinar. Plenum, New York, 1992. xx, 514 pp., illus. $220. International Cryogenics Monograph Series.

**Motivation and Personality**. Handbook of The-