

## LETTERS

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tional motor action. It dramatizes also the fact that the evolutionary theory has not generated interesting new hypotheses about emotional expression or about the emotions, and in over one century has not led to much interesting research. In contrast, the vascular theory has generated a host of new interesting and testable hypotheses. Even if the basic theory is wrong in some respects, the hypotheses that can be derived from it are in themselves quite worthwhile.

The challenge of vascular theory of emotional efferece to the evolutionary theory of emotional expression does not imply that the two are mutually contradictory. On the contrary, together they can form a richer explanatory basis for expressive behavior. The vascular theory of emotional efferece supplies the evolutionary theory of emotional expression with an explanation of why and how certain emotional gestures came to be parts of the human communication system and why they are universal across cultures and often across species. How and to what extent emotional efferents serve a restorative vascular function is a problem for empirical research.

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9. J. Cartwright-Smith, paper presented at the meetings of the Eastern Psychological Association, Philadelphia, Pa., April 1979.

**Erratum:** The "turrigid gastropod" referred to on page 713 (column 2, line 22) of the article "Hydrothermal vent animals: Distribution and biology" by J. Frederick Grassle (23 Aug.) should have been a "turrigid gastropod." The first reference 26 on page 716 (column 2, line 14) should have been to R. A. Lutz and D. C. Rhoads, *Eos* 64, 1017 (1983). The statement at the end of page 716 that vent animals have metabolic rates that are orders of magnitude higher than relatives in other parts of the deep sea cannot be substantiated because, although many deep-sea organisms have low metabolic rates, benthic decapod crustacea and echinoderms from areas away from hydrothermal vents in the deep sea have metabolic rates similar to those of vent species when measured at the same temperature. This is further discussed in a forthcoming issue of the *Bulletin of the Biological Society of Washington*.

## BOOKS RECEIVED

(Continued from page 660)

**Handbook of Tritium NMR Spectroscopy and Applications.** E. A. Evans et al. Wiley-Interscience, New York, 1985. xiv, 249 pp., illus. \$39.95.

**Hereditary and Visual Development.** Joel B. Shefield and S. Robert Hilfer, Eds. Springer-Verlag, New York, 1985. xii, 214 pp., illus. \$49.50. Cell and Developmental Biology of the Eye. From a symposium, Philadelphia, Oct. 1983.

**High-Energy Ion-Atom Collisions.** Invited Lectures and Contributed Papers. D. Berényi and G. Hock, Eds. Akadémiai Kiadó, Budapest, 1985. 307 pp., illus. \$36. From a workshop, Debrecen, Hungary, Aug. 1984.

**Iron Fortification of Foods.** Fergus M. Clydesdale and Kathryn L. Wiemer, Eds. Academic Press, Orlando, Fla., 1985. xvi, 178pp., illus. \$36.50. Food Science and Technology.

**Macroscopic Modelling of Turbulent Flows.** U. Frisch et al., Eds. Springer-Verlag, New York, 1985. x, 362 pp., illus. Paper, \$23.70. Lecture Notes in Physics, vol. 230. From a workshop, Sophia-Antipolis, France, Dec. 1984.

**Normal and Abnormal Bone Growth.** Basic and Clinical Research. Andrew D. Dixon and Bernard G. Sarnat, Eds. Liss, New York, 1985. xxii, 524 pp., illus. \$76. Progress in Clinical and Biological Research, vol. 187. From a conference, Los Angeles, Jan. 1985.

**Planetary Ecology.** Douglas E. Caldwell, James A. Brierley, and Corale L. Brierley, Eds. Van Nostrand Reinhold, New York, 1985. xvi, 591 pp., illus. \$57.50. From a symposium, Santa Fe, N.M., Oct. 1983.

**Roberts' Birds of Southern Africa.** Gordon Lindsay Maclean. Illustrated by Kenneth Newman and Geoff Lockwood. 5th ed. Trustees of the John Voelcker Bird Book Fund, Cape Town, South Africa, 1985. xlviii, 848 pp. + plates. S. A. Rand \$24.50.

**The Role of Chemicals and Radiation in the Etiology of Cancer.** Eliezer Huberman and Susan H. Barr Eds. Raven, New York, 1985. xxii, 538 pp., illus. \$69. Carcinogenesis, vol. 10. From a symposium, Oakbrook, Ill., Aug. 1984.

**The Sasquatch and Other Unknown Hominoids.** Vladimir Markotić and Grover Krantz, Eds. Western Publishers, Calgary, Canada, 1985. viii, 335 pp., illus. Paper, \$12.

**Scientific and Technological Information for Development.** United Nations, New York, 1985. vi, 179 pp., illus. Paper, \$17.50. From a meeting, Rome, Jan. 1985.

**Trauma of the Central Nervous System.** Ralph G. Dacey, Jr., et al., Eds. Raven, New York, 1985. xviii, 341 pp., illus. \$69.50. Seminars in Neurological Surgery Series. From a conference, Charlottesville, Va., Sept. 1982.

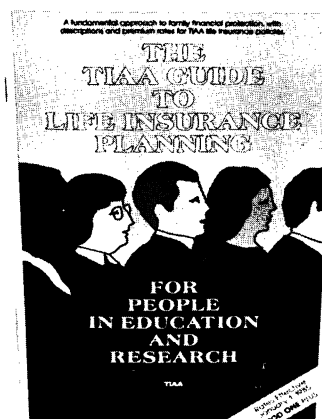
**Tropical Root Crops.** Postharvest Physiology and Processing. I. Uritani and E. D. Reyes, Eds. Japan Scientific Societies Press, Tokyo, 1984 (U.S. distributor, International Specialized Book Services, Beaverton, Ore.). xxii, 328 pp., illus. Paper, \$26. From meetings, 1981-1983.

**Victorian Science and Victorian Values.** Literary Perspectives. James Paradis and Thomas Postlewait, Eds. Rutgers University Press, New Brunswick, N.J., 1985. xiv, 362 pp., illus. \$30; paper, \$14. Reprint, 1981 edition.

**The Woods Hole Cantata.** Essays on Science and Society. Gerald Weissmann. Dodd, Mead, New York, 1985. xxii, 230 pp., illus. \$14.95.

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