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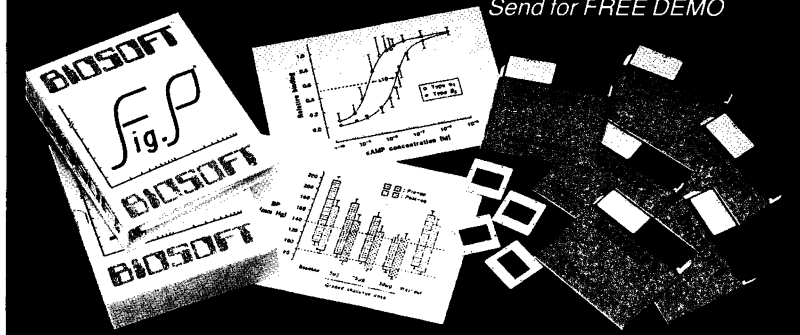
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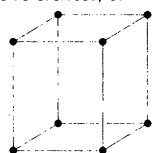
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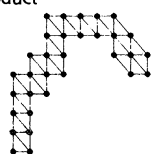
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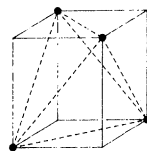


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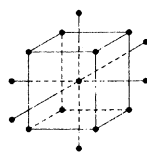


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The final section of the book contains Fuster's arguments that the prefrontal cortex has "a cardinal function . . . in the temporal order of behavior, consisting of and supported by three subordinate functions: provisional memory, anticipatory set, and control of interference." This idea arises from many experiments, starting with those of Jacobson in the 1930s demonstrating that the prefrontal cortex is necessary for the performance of delayed response tasks by nonhuman primates. Physiological experiments, especially those of Fuster and his group, have established that neurons in the prefrontal cortex have properties consistent with the necessary components for performing these tasks. The theory is not unreasonable, but Fuster does little to flesh it out, instead resorting to generalizations such as "the activated neural ensemble constitutes a giant associative network representing the stimulus in all its cognitive aspects and relationships."

Nonetheless, the book is valuable, precisely because it collects in one place the literature about the prefrontal cortex and illustrates by its very failures the sort of problems awaiting one who would tackle the topic. It may be unsatisfying, but, because of the diffuse and difficult nature of the field today, it is the best book we have.

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Some Other Books of Interest

Biology and Conservation of the River Dolphins. W. F. PERRIN, R. L. BROWNELL, JR., ZHOU KAIYA, AND LIU JIANKANG, Eds. International Union for the Conservation of Nature, Cambridge, U.K., 1989. vii, 173 pp., illus. Paper, \$25. IUCN Species Survival Commission Occasional Paper no. 3. From a workshop, Wuhan, China, Oct. 1986.

Handbook of Marine Mammals. Vol. 4, River Dolphins and Larger Toothed Whales. SAM H. RIDGWAY AND RICHARD HARRISON, Eds. Academic Press, San Diego, CA, 1989. xx, 442 pp., illus. \$99.50.

The river dolphins, Platanistidae, are "in trouble around the world" and "are the most endangered of all cetaceans," according to the editors of these two volumes. In 1986 the International Union for the Conservation of Nature sponsored a workshop in Wuhan, China, to inaugurate a campaign for their preservation, an event to which these books owe their content in whole or in part.

The proceedings volume consists of a general Report of the Workshop and revised versions of 24 of the 38 "working papers"

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prepared for it. The Report consists of a brief review of each of the five species considered at the workshop, summarizing their distribution and biology, population status, and conservation, with recommendations concerning both research and management. Various appendixes to the Report give details of the workshop itself and reports on various specific topics (effects of dams, sighting methods). The contributed papers are focused on particular species. In keeping with the site of the workshop, *Lipotes vexillifer*, which inhabits the Yangtze River, receives the most extensive treatment, being the subject of 13 papers, all but one by Chinese authors and including detailed accounts of physiology and behavior as well as consideration of conservation issues. Three papers each are devoted to *Inia geoffrensis* (found in the Amazon and Orinoco rivers), *Pontoporia blainvillei* (inhabiting coastal waters of Brazil, Uruguay, and Argentina), and *Platanista* (two species found in the Ganges, Indus, and other rivers of the Indian subcontinent). Two final papers consider issues of platanistoid propagation and review relevant national laws and international agreements. All papers are in English, with abstracts in Chinese.

The *Handbook* volume belongs to a series that is meant to provide useful basic biological information, as distinct from guidance for management. The treatment of the river dolphins is provided by authors many of whom are also contributors to the proceedings volume: Best and Da Silva on *Inia geoffrensis*, Chen Peixun on *Lipotes vexillifer*, Brownell on *Pontoporia blainvillei*, Reeves and Brownell on *Platanista gangetica* and minor, and Marsh *et al.* on *Orcaella brevirostris* (the Irawaddy dolphin, found from the Bay of Bengal to northern Australia).

In the section of the *Handbook* volume devoted to whales (312 pp.) the largest amount of space is given to the sperm whale, in recognition both of its ecological significance and the size of the literature, reflecting its commercial importance. Eight other chapters treat the Arctic white whale and narwhal, the pygmy and dwarf sperm whales (genus *Kogia*), beaked whales of four genera, and bottlenose whales (*Hyperoodon*).

Unlike the proceedings volume, the *Handbook* includes indexes. Neither work gives an overview of the river dolphins as a group or as related to other cetaceans.—K.L.

Books Received

Conformational Analysis of Cyclohexenes, Cyclohexadienes, and Related Hydroaromatic Compounds. Peter W. Rabideau, Ed. VCH, New York, 1989. x, 323 pp., illus. \$74.50. Methods in Stereochemical Analysis.

Co-Operative Management of Local Fisheries. New Directions for Improved Management and Com-

munity Development. Evelyn Pinkerton, Ed. University of British Columbia Press, Vancouver, 1989. xiv, 299 pp. CAN\$36.95; paper, CAN\$21.95.

Coral Reefs of the World. Vol. 2, Indian Ocean, Red Sea and Gulf. Susan M. Wells *et al.* International Union for Conservation of Nature and Natural Resources, Cambridge, U.K., 1988 (U.S. distributor, Columbia University Press, New York). 1, 389 pp., illus. \$45.

Cosmology in (2+1)-Dimensions, Cyclic Models, and Deformation of $M_{2,1}$. Victor Guillemin. Princeton University Press, Princeton, NJ, 1989. vi, 228 pp. \$50; paper, \$15. *Annals of Mathematics Studies*, no. 121.

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Darkness at Night. A Riddle of the Universe. Edward Harrison. Harvard University Press, Cambridge, MA, 1989. x, 293 pp., illus. Paper, \$12.95. Reprint, 1987 ed.

The Determination and Use of Stability Constants. Arthur E. Martell and Ramunas J. Motekaitis. VCH, New York, 1989. xii, 216 pp., illus., + diskette. \$34.50.

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