that place is "Eponym as placebo," Boring's address before the Seventeenth International Congress of Psychology (Washington, D.C., August 1963), in his role of Honorary President. The locus and timing of the original provide sufficient rationalizatiion for a reprinting in this book; congress proceedings are not that widely distributed or consumed. Eponymous events in science are those named after great innovators, those apparently responsible for revolutionary trends or outstanding periods of intellectual development—Newtonian physics, Darwinian biology, and Freudian psychology. The idea of science progressing by eponyms is not simply a regression to the Great Man theory of history but a recognition that the need for communication is often served by using the names of men as labels, provided hero worship is at the same time shunned. Eponymy, indeed, distorts history. "It magnifies those persons who are found above the threshold and diminishes those below it. Eponymic distortion arises out of man's limited range or perception . . . out of his need for leaders . . . and out of his desire to perceive high goals upon which he may train his ambition." The eponym is a placebo.

The overall content of the book, 30 papers in all (plus a set of alphabetized references and careful indexes of names and subjects) is organized under five major rubrics: The Zeitgeist and the Psychology of Science (8 papers), The History of Psychology (5), The Scientific Method (7), The Mind-Body Problem (4), and The Psychology of Communicating Science (6). Taken together with *Psychologist at Large* (another dozen papers, some selected short essays, and a chronology of Boring's principal publications through 1960, as well as the autobiography) and, of course, the major works listed above, one has an excellent working library of Boring's formal output. The informal one will probably never be assembled—oceans of letters and memoranda on all manner of things, residing in countless files all over the world, and treasured by their possessors.

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Plant Biochemistry, An Introductory Survey

The Chemistry of Plant Processes. C. P. Whittingham. Methuen, London; Philosophical Library, New York, 1965. 209 pp. Illus. $7.50.

This pocket-sized but densely packed introductory survey of plant biochemistry goes on to cover also most of the organismal features of plant function, emphasizing their cellular and biochemical aspects. Up-to-date textbook material of this kind has been badly needed in the field. The book is tersely written, and by the student must be studied, not just read. Its value is enhanced by 167 literature references, plus a small selection of general references at the end of each chapter.

The book is divided into two parts, the first covering plant metabolism and including chapters on cellular structure and function; enzymes; fermentation and respiration; energetics of respiration and biological syntheses; photosynthesis; and nitrogen metabolism. The subjects of respiratory metabolism and photosynthesis are very effectively developed, with historical milestones and examples of experimental data that will give the student an unusually good feel for the why behind biochemical pathways and components, which students so often confront as straight and tedious memory work.

Part 2 proceeds to nonbiochemical and organismal aspects of plant physiology, and includes chapters on osmotic relations of the individual cell (including diffusional and active uptake of solutes), water relations of the whole plant, translocation, and growth. The book concludes with an appendix entitled "Chemistry of the constituents of living organisms," which presents a brief survey of bio-organic chemistry useful for the many students whose background could well be refreshed at the beginning of a course.

A few important topics have been missed, including oxygen affinity of respiratory chain oxidases; mechanism and problems of respiratory and photosynthetic gas exchange of tissues and organs; mineral nutrition; and dormancy. The term *glycolysis* is not used or explained; I consider this unfortunate in view of the term's wide use.

Part 2 is noticeably weaker, less accurate, and less modern in outlook than the more purely biochemical chapters in part 1. Coverage of osmotic relations is old-fashioned. The one-page treatment of water transport by the vascular system is hopelessly inadequate. We run into quite a few misleading or incorrect statements—for example, there is no evidence for movement of salts through a tissue against a concentration gradient (p. 136); the mechanism of root pressure is unknown (p. 137); Munch's theory is that mass flow occurs from a place of high suction pressure to a place of low suction pressure (p. 157); the action spectrum of *Avena* and *Phycomyces* phototropism indicates auxin destruction (p. 172); the active component of coconut milk has been shown to be 6-furfuryl adenine (p. 178); *Xanthium* requires a 14-hour dark period for flowering to occur (p. 178); only the far-red-absorbing form of phytochrome is capable of causing floral induction (p. 180).

I noticed quite a number of typographic errors in the spelling in the text, in the titles and authors' names in the references, and in the footnote numbers in the text that cite literature references. The latter errors could cause much trouble for those not familiar with the references cited.

These shortcomings could be rather easily rectified. And even as it stands, *The Chemistry of Plant Processes* is an admirable piece of work, and one that will, I am sure, find wide application as a textbook in modern courses in plant physiology.

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Active Organisms

The Biology of Hemichordata and Protochordata. E. J. W. Barrington. Freeman, San Francisco, Calif., 1965. vi + 176 pp. Illus. Paper, $2.50.

Naturalists and experimentalists alike will appreciate this well-written résumé of some of the more recent work on the groups concerned. The emphasis is on function, and the animals are portrayed as active organisms operating in an environment. Information on structure, physiology, behavior, and ecology is interrelated, and descriptive