Exploring the Distant Stars. Thrilling adventures in our galaxy and beyond. Clyde B. Clason. Putnam, New York, 1958, 384 pp. Illus. \$5.

Most books which popularize astronomy are written in a highly conservative style and with a heavy syntax compared with Clyde Clason's. As he puts it, "Man, oh man, have there been changes made!" Even the professional astronomer may find the text highly entertaining because of the novelty of seeing astronomy expressed in, let us say, "sportscaster" English. Oddly enough, outright errors of fact are no more frequent than in some books written by people closer to astronomy than is Clason. The one legitimate objection to this book is that it is highly derivative. Clason modestly remarks, "Being a mere layman in astronomy, I probably did not look in the right places." Popular articles and books by astronomers and nonastronomers comprise most of his bibliography, and he does not consider newspaper stories beneath notice. Few really original sources are consulted. The book cannot be an authoritative source of astronomical information, but it is a lively rendition of astronomical miscel-

The format is pleasing, although in view of the cheap cloth binding and the absence of halftones, the book's price is rather high. The index is extensive.

Clason is evidently a gentleman of the old school of education, for he refers confidently to "an old algebra textbook kicking around your house" when he invites his reader to join him in a computation of magnitudes. Many an author would steer gently around similar obstructions. Generally speaking, one has to admire Clason for his sincere belief that the chap who is used to a baseball score card will not find the astronomical game dragging in the tenth inning.

Hugh M. Johnson Department of Mathematics and Astronomy, State University of Iowa

The Measurement and Appraisal of Adult Intelligence. David Wechsler. Williams and Wilkins, Baltimore, ed. 4, 1958. 297 pp. \$5.

The new edition of Wechsler's book sketches the background and standardization of the new (1955) edition of the Wechsler Adult Intelligence Scale, which has become the standard clinical method of appraising mental ability of older persons. Testing and scoring procedure which appeared in previous editions of the book has been removed to the test manual. The description makes it clear that the changes in the test are minor in nature but constitute a substantial im-

provement in practicality and accuracy.

Many contentious statements of minor significance have been removed or altered in this edition, but Wechsler's views have not changed. He continues to emphasize the use of score patterns for diagnosis of psychopathology; the "signs" suggested have been changed negligibly by the volume of research that has been done since publication of the 1944 edition—research which casts doubt on the usefulness of many of them. One sentence suffices to dismiss without citation the substantial negative evidence on the diagnostic usefulness of variability within the subtest profile; the bit of positive evidence Wechsler offers is presented only sketchily. He handles inadequately Bayley's evidence that mental abilities increase during early adulthood; it is regrettable that he has not supported his own views on mental decline with any evidence from retests of the same persons. Wechsler devotes a chapter to factor analyses of subtests, and while he reaches no grossly erroneous conclusions, he is not at home with statistical reasoning and gains little from it.

Wechsler is a good observer and a sound practical test designer. His theoretical discussion remains vague and poetic, and his test interpretations are rooted more in personal experience than in systematic evidence. His scale represents the highest flowering of the pragmatic mental testing initiated early in this century, rather than a break into any new understanding of intellectual processes.

LEE J. CRONBACH

School of Education and Department of Psychology, University of Illinois

New Books

The Earth and Its Gravity Field. W. A. Heiskanen and F. A. Vening Meinesz. McGraw-Hill, New York, 1958. 480 pp. \$12.50.

Fifty Years of Botany. Golden jubilee volume of the Botanical Society of America. William Campbell Steere, Ed. McGraw-Hill, New York, 1958. 651 pp. \$10.

Social Stratification in Polynesia. Marshall D. Sahlins. Univ. of Washington Press, Seattle, 1958. 319 pp. \$4.50.

Taxonomy and Genetics of Oenothera. Forty years' study in the cytology and evolution of the Onagraceae. vol. VII of Monographiae Biologicae. R. Ruggles Gates. W. Junk, The Hague, Netherlands, 1958. 115 pp.

Technical Editing. B. H. Weil. Reinhold, New York; Chapman & Hall, London, 1958. 291 pp.

Theoretical Principles of Organic Chemistry. vol. II. Walter Huckel. Elsevier, Amsterdam, 1958. xi + 1057 pp.

The Transuranium Elements. Glenn T. Seaborg. Yale Univ. Press, New Haven, Conn., 1958. 350 pp. \$7.

Advances in Food Research. vol. VIII. E. M. Mrak and G. F. Stewart, Eds. Academic Press, New York, 1958. 449 pp. \$12. Contributors to vol. VIII are G. W. Scott Blair, "Rheology in food research"; Frank A. Lee, "The blanching process"; Max Milner, "New methods to detect and eliminate insect-infected grain"; Maynard A. Amerine, "Composition of wines—Inorganic constituents"; P. A. Roelfsen, "Fermentation, drying, and storage of cacao beans"; A. C. Hulme, "Some aspects of the biochemistry of apple and pear fruits."

Agricultural Botany. N. T. Gill and K. C. Vear. Duckworth, London, 1958. 644 pp. \$12.

Aircraft and Missile Propulsion. vol. II, The Gas Turbine Power Plant, the Turboprop, Turbojet, Ramjet, and Rocket Engines. M. J. Zucrow. Wiley, New York; Chapman & Hall, London, 1958. 650 pp. \$13.

Basic Clinical Parasitology. David L. Belding. Appleton-Century-Crofts, New York, 1958. 476 pp.

Bibliography and Index of Literature on Uranium and Thorium and Radioactive Occurrences in the United States. pt. 5. Connecticut, Delaware, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, and Wisconsin. Margaret Cooper. Geological Soc. of America, New York, 1958, 472 pp.

Brighter Than a Thousand Suns. A personal history of the atomic scientists. Robert Jungk. Translated by James Cleugh. Harcourt, Brace, New York, 1958. 368 pp. \$5.

Chambers's Technical Dictionary. C. F. Tweney and L. E. C. Hughes, Eds. Macmillan, New York, ed. 3, 1958. 1036 pp. \$7.50.

Clays and Clay Minerals. Fifth national conference on clays and clay minerals. University of Illinois, 8-10 October 1956. Ada Swineford, Ed. National Acad. of Sciences-National Research Council, Washington, 1958. 367 pp. \$4.50.

Clinical Endocrinology. Karl E. Paschkis, Abraham E. Rakoff, Abraham Cantarow. Hoeber-Harper, New York, ed. 2, 1958. 953 pp. \$18.

The Comparative Morphology of the Carotid Body and Carotid Sinus. William Edgar Adams. Thomas, Springfield, Ill., 1958, 290 pp. \$10.50.

Conservation of Natural Resources. Guy-Harold Smith, Ed. Wiley, New York; Chapman & Hall, London, ed. 2, 1958. 485 pp. \$8.50.

Coastal and Submarine Morphology. André Guilcher. Translated by B. W. Sparks and R. H. W. Kneese. Methuen, London; Wiley, New York, 1958. 274 pp. \$6.50.

The Earth and Its Gravity Field. W. A. Heiskanen and F. A. Vening Meinesz. McGraw-Hill, New York, 1958. 480 pp. \$12.50.

The Ecology of Invasions by Animals and Plants. Charles S. Elton. Methuen, London; Wiley, New York, 1958. 181 pp. \$5.25.

Elementary Seismology. Charles F. Richter. Freeman, San Francisco, Calif., 1958. 776 pp. \$12.