

wasps, is of special interest and in a number of ways thought-provoking, especially in regard to the fine line, if any, that delimits instinctive and intelligent behavior.

The book will be of special value to students of insect behavior and bionomics and to those studying evolution and phylogeny, and it should be an inspiration to anyone confronted with a paucity of information about a large and complicated subject. The need for additional work is emphasized, the critical areas are indicated, and the author's interpretation of various behavioral patterns is stimulating. It is well organized and written and is liberally illustrated with drawings, pictures, and charts. There are 47 tables and 215 figures.

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Russian Papers

The most noticeable characteristic of **Atomic Collisions: The Theory of Electron-Atom Collisions** (V. Ya. Veldre, R. Ya. Damburg, and R. K. Peterkop, Eds.; M. V. Kurepa, Transl. M.I.T. Press, Cambridge, Mass., 1966. 143 pp., illus. \$7.50), an English version of volume 13 of the *Transactions of the Latvian Academy of Sciences (U.S.S.R.)*, is the translation, which is awkward, unidiomatic, and in many places inaccurate. On almost every page a word or a phrase comes gratingly to the fore to remind the reader that the translator does not possess a full command of the English language.

This of course should not, and would not, be an overriding criticism of a collection of scientific articles, were the contents themselves of sufficient value. And, indeed, out of a total of 16 articles, 3 can be described as first rate and several others are of more than passing interest. The difficulty here lies in the fact that almost all of the valuable articles have already appeared (in a somewhat modified form, perhaps) in English-language journals or in Russian journals which are regularly translated. Thus an article by Damburg and Peterkop which introduces the *M* matrix into atomic physics is virtually identical to their 1962 article in the *Proceedings of the Physical Society (London)*. In this latter form, however, the paper is very well known, so that the presently translated version really

serves no useful purpose. The same can be said of an article by Gailitis on the behavior of cross sections near the threshold for new reactions in the presence of Coulomb forces. If the subsequent *JETP* article is not as well known, it is only because most of the results were previously known from papers of Baz and of Newton and Fonda. A close coupling calculation of electron-hydrogen scattering above the inelastic threshold by Damburg and Peterkop is in a somewhat different category in that, even though a short summary was published in the *Proceedings of the Physical Society*, the present results are much more extensively tabulated and show that this Russian work deserves as much credit as more widely quoted English and American papers. There are a couple of papers by Gailitis on ionic excitation by electron impact which merit wider circulation. A paper of Vainstein which attempts to justify the types of truncation in the adiabatic polarization potential used by some of us is of reasonable importance. For most of the rest, however, I must say that the papers are interim in character and would only have been of value if the translated version had appeared, say, 2 years earlier.

One unintended bonus of the crude translation and provisional nature of many of the articles is that an outsider is thereby given the "flavor" of research in an outstanding Soviet center for theoretical investigation of electronic collisions.

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Note

The Report of the International Clearinghouse on Science and Mathematics Curricular Developments, 1966, compiled under the direction of J. David Lockard as a joint project of the AAAS and the Science Teaching Center at the University of Maryland (311 pp., paper. Available from J. D. Lockard, Science Teaching Center, University of Maryland, College Park), presents data about curriculum projects for elementary and secondary schools all over the world, and about college commissions and science and mathematics materials from state and local school systems in the United States. The volume is the first of a projected annual series.

New Books

Advances in Enzyme Regulation, vol. 4. Proceedings of the fourth symposium on Regulation of Enzyme Activity and Synthesis in Normal and Neoplastic Tissues (Indianapolis, Ind.), October 1965. George Weber, Ed. Pergamon, New York, 1966. 395 pp. Illus. \$15. Twenty papers.

Advances in Tracer Methodology, vol. 3. A collection of papers presented at the Ninth and Tenth Symposia on Tracer Methodology (San Francisco and Zürich), October 1964 and March 1965. Seymour Rothchild, Ed. Plenum Press, New York, 1966. 343 pp. Illus. \$12.50. Thirty-three papers.

Agricultural Development of Taiwan, 1903-1960, Yhi-Min Ho. Vanderbilt Univ. Press, Nashville, Tenn., 1966. 184 pp. Illus. \$7.50.

Alcohol and Food in Health and Disease (*Ann. N.Y. Acad. Sci.* 133). Edward M. Weyer, Ed. New York Acad. of Sciences, New York, 1966. 95 pp. Illus. Paper. Twelve papers presented at a conference in January 1966.

Analysis and Synthesis of Tunnel Diode Circuits. J. O. Scanlan. Wiley, New York, 1966. 282 pp. Illus. \$9.75.

The Analytic S Matrix: A Basis for Nuclear Democracy. Geoffrey F. Chew. Benjamin, New York, 1966. 115 pp. Illus. \$7.50.

Annual Review of Phytopathology, vol. 4. James G. Horsfall and Kenneth F. Baker, Eds. Annual Reviews, Palo Alto, Calif., 1966. 433 pp. Illus. \$8.50. Eighteen papers.

Antennas. Lamont V. Blake. Wiley, New York, 1966. 429 pp. Illus. \$6.95.

Applied Queueing Theory. Alec M. Lee. Macmillan, London; St. Martin's Press, New York, 1966. 256 pp. Illus. \$8.50.

Approaches to Psychopathology. James D. Page, Ed. Columbia Univ. Press, New York, 1966. 318 pp. \$7.50. Thirteen papers.

The Astronomical and Mathematical Foundations of Geography. Charles H. Cotter. Elsevier, New York, 1966. 254 pp. Illus. \$7.

Atomic Energy and Southern Science. William G. Pollard. Oak Ridge Associated Universities, Oak Ridge, Tenn., 1966. 147 pp. Illus. Paper.

Axenic Cultures and Defined Media (*Ann. N.Y. Acad. Sci.* 139). Edward M. Weyer, Ed. New York Acad. of Sciences, New York, 1966. 272 pp. Illus. Paper, \$8. Twenty-one papers.

Basic Concepts of Anatomy and Physiology: A Programmed Study. W. B. Dean, G. E. Farrar, Jr., and A. J. Zoldos. Lippincott, Philadelphia, 1966. 352 pp. Illus. Paper, \$4.50.

Basic Endocrinology for Students of Biology and Medicine. J. H. U. Brown and S. B. Barker. Davis, Philadelphia, ed. 2, 1966. 229 pp. Illus. Paper, \$4.50.

Building with Large Prefabricates. Bohdan Lewicki. Elsevier, New York, 1966. 460 pp. Illus. \$25.

Business Environment in an Emerging Nation: Profiles of Indonesian Economy. Rossall J. Johnson, Dale L. McKeen, and Leon A. Mears. Northwestern Univ. Press, Evanston, Ill., 1966. 354 pp. Illus. \$8.50.

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