

even ludicrous, and you have an unsavory concoction hardly to be recommended.

This rather mannered tome is one of a rash of amateurish and adulatory "popular" books on archeology and related subjects, published since the Second World War, which tend to fill the specialist, whose handiwork they exploit, with chagrin and dismay. For these specious works are not designed to inform and enlighten but to edify, inspire, and enthrall. In the case of the ancient Near East, for example, the intent is often to "prove" the Bible, or to glamorize the ancients as knowers and purveyors of profound mysteries, or to take advantage in one way or another of the current yearning to "escape" to the past from a bitter present and an ominous future.

It needs no stressing that effective "vulgarization" of the findings and results of archeological research is highly desirable for its educational and humanistic value, and should be encouraged on every hand. Fortunately the specialists themselves are now devoting part of their time and energy to this end. Thus, to return to writing and decipherment, the themes of the book under review, the adult reader will find succinct, lucid, and informative accounts in the works of two distinguished scholars: I. J. Gelb's *A Study of Writing* (University of Chicago Press, Chicago, Ill., 1952) and Johannes Friedrich's *Extinct Languages* (Philosophical Library, New York, 1957).

SAMUEL NOAH KRAMER
University Museum,
University of Pennsylvania

Russian Numerical Analysis

Approximate Methods of Higher Analysis. L. V. Kantorovich and V. I. Krylov. Translated from the third Russian edition by Curtis D. Benster. Interscience, New York, 1959. xv + 681. \$17.

The recent advent of high-speed computers has brought about a tremendous increase of activity in the field of numerical analysis. Most of the work is centered around the search for new, computer-oriented numerical methods to replace the classical methods developed with the hand computer in mind. However there are many results in clas-

sical numerical analysis which were never popular among workers in the field because they were ill-suited for hand calculation but which are very suitable for use in a computer installation. It behooves the seeker of new methods to study the works of the old masters before embarking on any time-consuming research project.

One source for such classical results is this book by Kantorovich and Krylov, originally titled *Methods for the Approximate Solution of Partial Differential Equations*, which has been expanded to include material on integral equations and conformal mapping. The volume contains much material not available elsewhere, especially results of the Russian school of numerical analysis. It also contains many numerical examples, which unfortunately do not indicate the scope of the methods illustrated since they are intended to illustrate hand calculations. Of course, some of the text has been rendered obsolete by recent investigations. However, the richness of the book will provide many new ideas for the interested reader. The translator is to be congratulated for making this classic available to the English-speaking public.

PHILIP RABINOWITZ
Department of Applied Mathematics,
Weizmann Institute of Science,
Rehovot, Israel

New Books

Biological and Medical Sciences

Advances in Agronomy. vol. 13. A. G. Norman, Ed. Academic Press, New York, 1961. 397 pp. Illus. \$12.

The Biological Role of Ribonucleic Acids. Jean Brachet. Elsevier, Amsterdam, 1960 (order from Van Nostrand, Princeton, N.J.). 144 pp. Illus.

The Complete Book of Birth Control. Alan F. Guttmacher. Ballantine Books, New York, 1961. 157 pp. Illus. Paper, \$0.50.

Fearon's Introduction to Biochemistry. William John Edward Jessop. Academic Press, New York, ed. 4, 1961. 480 pp. Illus. \$8.

Frontiers in General Hospital Psychiatry. Louis Linn, Ed. International Universities Press, New York, 1961. 509 pp. \$10.

Functions of the Blood. R. G. MacFarlane and A. H. T. Robb-Smith, Eds. Academic Press, New York, 1961. 648 pp. Illus. \$16.80.

Genetics on the Population Level. Marianne Rasmuson. Scandinavian Univ. Books; Heinemann, London, 1961. 191 pp. Illus.

Heredity. An introduction to genetics. A. M. Winchester. Barnes and Noble,

New York, 1961. 282 pp. Illus. Paper, \$1.75.

Hormones in Blood. C. H. Gray and A. L. Bacharach, Eds. Academic Press, New York, 1961. 573 pp. Illus. \$20.

Mechanisms of Antibody Formation. Proceedings of a symposium held in Prague, 1959. M. Holub and L. Jaroskova, Eds. Academic Press, New York, 1960. 385 pp. Illus. \$10.

Mechanisms in Radiobiology. vol. 1, *General Principles.* Maurice Errera and Arne Forssberg, Eds. Academic Press, New York, 1961. 549 pp. Illus. \$16.

Modern Pharmacology and Therapeutics. Ruth D. Musser and Joseph G. Bird. Macmillan, New York, ed. 2, 1961. 903 pp. Illus. \$7.

Parasitology of Fishes. V. A. Dogiel, G. K. Petrushevski, and Yu. I. Polyanski, Eds. Translated by Z. Kabata. Oliver and Boyd, Edinburgh, Scotland, 1961. 394 pp. Illus. 84s.

Primatologia. Handbook of primatology. vol. 2, pt. 2, chapter 8. H. Hofer, A. H. Schultz, and D. Starck, Eds. Karger, Basel, Switzerland, 1961. 87 pp. Paper, \$7.50.

Mathematics, Physical Sciences, and Engineering

Basic Physics of the Solar System. V. M. Blanco and S. W. McCuskey. Addison-Wesley, Reading, Mass., 1961. 318 pp. Illus. \$7.50.

Combustion and Propulsion. 4th Agard Colloquium. A. L. Jaumotte, A. H. Lefebvre, and A. M. Rothrock, Eds. Published for the North Atlantic Treaty Organization. Pergamon, New York, 1961. 415 pp. Illus. \$15.

Computer Control Systems Technology. Cornelius T. Leondes, Ed. McGraw-Hill, New York, 1961. 659 pp. Illus. \$16.

Dissertations in Physics. An indexed bibliography of all doctoral theses accepted by American universities, 1861-1959. Compiled by M. Lois Marckworth. Stanford Univ. Press, Stanford, Calif., 1961. 815 pp. \$17.50; pt. 1, an alphabetical listing by author, which gives full bibliographical information; pt. 2, alphabetical by key title word; cross-referenced.

Elementary Differential Equations. William Ted Martin and Eric Reissner. Addison-Wesley, Reading, Mass., ed. 2, 1961. 344 pp. Illus. \$6.75.

Filtration. George D. Dickey. Reinhold, New York; Chapman and Hall, London, 1961. 362 pp. Illus. \$12.

Metallic Fatigue. W. J. Harris. Pergamon, New York, 1961. 342 pp. Illus. \$12.50.

Miniaturization. Horace D. Gilbert, Ed. Reinhold, New York; Chapman and Hall, London, 1961. 315 pp. Illus. \$10.

Photochemistry of Air Pollution. Philip A. Leighton. Academic Press, New York, 1961. 309 pp. Illus. \$11.

Radical Polymerization. J. C. Bevington. Academic Press, London, 1961. 196 pp. Illus. \$6.

Recent Advances in Heat and Mass Transfer. J. P. Hartnett, Ed. McGraw-Hill, New York, 1961. 412 pp. Illus.

The Teaching of Arithmetic. F. F. Potter. Philosophical Library, New York, 1961. 471 pp. Illus. \$10.