

and other pertinent facts about 154 translators in the United States.

Part 2, "Pools of translations," lists services, size, scope, languages, subject fields, and index publications for 42 translation pools throughout the world.

Part 3, "Bibliographies of translations," cites 83 published bibliographies of translations and includes an informative abstract for each entry.

A geographical-subject-language index with cross references is included, together with two appendixes: "Other services offered by translators" (that is, abstracting, photocopying, editing, searching, and so forth) and "Publishers of bibliographies" (which gives the mailing addresses of the publishers of bibliographies listed in part 3).

The value of this guide would be enhanced by inclusion of qualitative evaluations of the translations produced by individual translators or organizations—perhaps in the form of ratings similar to the movie evaluations that appear in *Consumer Reports*.

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Radiographic Atlas of Skeletal Development of the Hand and Wrist. William Walter Greulich and S. Idell Pyle. Stanford University Press, Stanford, Calif.; Oxford University Press, London, ed. 2, 1959. xvi+256 pp. Illus. \$15.

The Greulich-Pyle *Atlas*, now in its second edition, has become a classic in its field. Regarded as indispensable to pediatricians and radiologists, the *Atlas* is also an important reference volume for general practitioners, experimental investigators, and students of skeletal development, generally.

The quality of reproduction of the plates in this edition surpasses even that of the handsome first edition. Several new standards have been introduced, so that in the current edition no unduly long intervals occur in the presentation of the developmental sequence. Revision of the section entitled "Maturity indicators" has been accomplished with the utmost clarity. In the developmental line graphs (skeletal versus chronologic age), the range of standard deviation, based on the normal population studied, may be appreciated more readily than as presented in the first edition. Convenient scales are included on both the vertical and horizontal coordinates of the devel-

opmental line graphs. The valuable tables for predicting adult height from skeletal age, by Bayley and Pinneau, which had been revised for use with the Greulich-Pyle hand standards, have been included in the second edition.

The *Atlas* stands as a proud memorial to the much beloved, highly esteemed professor T. Wingate Todd.

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College Testing. A guide to practices and programs. Prepared by the Committee on Measurement and Evaluation of the American Council on Education. The Council, Washington, D.C., 1959. 189 pp. \$3.

College Testing, prepared by the Committee on Measurement and Evaluation of the American Council on Education, is intended for study and use by college teachers and administrators. Part 1 deals with the role and administration of measurement programs in college and discusses the use of tests in the admission of students, the placement of students in courses, educational counseling, the evaluation of student performance in courses, and general institutional evaluation. Part 2 describes the testing programs found at seven representative colleges and universities: Chatham College, the College of the University of Chicago, Dartmouth College, College of Arts and Sciences of the University of Louisville, the Counseling Bureau of the University of Minnesota, Pasadena City College, and San Francisco State College.

The aim of the Committee on Measurement and Evaluation was to write a statement on college testing which would be understandable and useful to the college teacher and administrator not trained in educational and psychological measurement. The authors hold the view that many tests and evaluation instruments are receiving less attention than they deserve, because many college teachers and administrators are unaware of their existence, their applicability, or their range of utility. *College Testing* is designed to give a minimum of background information about testing and a description of ways in which some institutions are using tests and, perhaps most important, to provide a stimulus to seek further information about testing. The committee is to be commended on its success in achieving this goal.

It is difficult to write a statement of the kind which is attempted in *College Testing*. The reader who knows a good deal about testing may be inclined to say that he is already well versed in what is said about tests in this publication; the person with no background in testing may feel that he isn't quite well enough prepared to read the statement with full comprehension. I believe that the statement will be of maximum usefulness in a faculty seminar on testing, led by a specialist in this field.

It seems to me that the usefulness of the book would have been enhanced by the inclusion in part 1 of more illustrative data. Such data are included only in connection with the analysis of test scores. The use of similar illustrative data in the discussion of other topics would have helped to clarify certain concepts and the application of test results to specific situations. The usefulness of tests in educational research could also have been given more emphasis.

In the years immediately ahead, with the ever-increasing enrollments that are predicted, more and more tests will be used on the college campus. *College Testing* should provide a helpful starting point for faculty members, administrators, and test specialists to begin discussions of testing problems on a particular campus.

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One Great Society. Humane learning in the United States. Howard Mumford Jones. Harcourt, Brace, New York, 1959. xiii + 241 pp. \$4.50.

This is an important book, written by just the right man, about a subject of fundamental national concern, and at a critical moment in the development of our country. Dealing authoritatively with our cultural heritage, the present state of our national values, and, by implication, with our readiness to play a mature role in helping to fashion tomorrow's world, this work deserves the attention of all thoughtful Americans.

This book, by a dean of American humanists, constitutes a brilliant course on the humanities. With his usual deftness Howard Mumford Jones disperses, by the use of clear definition and apt illustration, the vagueness which often surrounds terms such as *culture* and *humanities*. Good humanist that he is, he elucidates such values as respect for information coupled with skill in using it;

the ability of the individual "living in the secret chamber of himself" to use "experience of beauty and faith to get [himself] through"; and collective confidence in presenting to the rest of the world "a coherent, sensible, and persuasive philosophy of democracy."

The author's main purpose, however, is to alert us to a dangerous imbalance in our national culture. For example, in 1951, the per capita expenditure for original research in science was estimated to be \$1800; in the social sciences, \$600; and in the humanities, \$130. The endowment of the American Council of Learned Societies is \$65,000, that of the Social Science Research Council, about \$3 million, while the National Research Council "does not have to worry about endowment since it is supported by the United States Government."

In urging a better balance, Jones values the natural and social sciences too highly to suggest that they be deemphasized, but he points out that support for the humanities does need to be brought into line. He proposes modestly that "we ought immediately to increase our support . . . by at least fifty million dollars a year—and then go on from there" and itemizes twenty specific needs which the humanities can be expected to meet. That we will not as a nation make the necessary effort, once we really understand the issues involved, is unthinkable. We must look to the humanists for vigorous leadership—the kind of leadership of which this book is an admirable example.

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Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, but to the publisher or agency sponsoring the publication.)

The Atlantic Cable. Bern Dibner. Burndy Library, Norwalk, Conn., 1959. 95 pp. Cloth, \$3.50; paper, \$2.50.

Australia, Commonwealth Scientific and Industrial Research Organization, Tenth Annual Report, 1957–58. Parliament of the Commonwealth of Australia, Canberra, 1959. 174 pp. 14s.

Axenic Culture of Invertebrate Metazoa: A Goal. Annals of the New York Academy of Sciences, vol. 77, art. 2, pp. 25–406. Ellsworth C. Dougherty, Consulting Ed. The Academy, New York, 1959. \$4.50. This series of papers is the result of a conference held and supported by the Academy and by the Kaiser Foundation of Oakland, Calif. The papers are divided as follows: part 1, "The lower Metazoa: free-living forms (except nematodes)"; part 2, "The lower Metazoa: parasitic worms and free-living nematodes"; part

3, "The Mollusca"; part 4, "The Arthropoda: Crustacea and Chelicerata"; part 5, "The Arthropoda: Insecta."

Better Utilization of College Teaching Resources. A summary report. Committee on Utilization of College Teaching Resources. Fund for the Advancement of Education, New York, 1959. 62 pp.

The Biographical Approach to John Dalton. Manchester Literary and Philosophical Society, memoirs and proceedings, vol. 100. Frank Greenaway. The Society, Manchester, England, 1959. 98 pp. £1 1s.

The Chemical Industry Facts Book. Manufacturing Chemists' Association, Inc., 1625 Eye St., NW, Washington, ed. 3, 1959. 149 pp. \$1.25.

Commemoration of the Centennial of the Publication of "The Origin of Species" by Charles Darwin. Proceedings of the American Philosophical Society, Philadelphia, vol. 103, No. 2, pp. 159–319. 23 Apr. 1959. \$1. Contents: "The crucial evidence for human evolution" (W. E. LeGros Clark); "The concept of natural selection: a centennial view" (I. M. Lerner); "Variation and heredity transmission" (C. Stern); "Darwin's views on variation under domestication in the light of present-day knowledge" (A. Müntzing); "Isolation as an evolutionary factor" (E. Mayr); "The role of hybridization in evolution" (G. L. Stebbins); "Variation and evolution" (T. Dobzhansky); "The nature of the fossil record" (N. D. Newell); "Anatomy and morphology: Classification and evolution, 1859 and 1959" (G. G. Simpson); "Darwin and zoogeography" (P. J. Darlington, Jr.).

Current Research and Development in Scientific Documentation. No. 4. Office of Science Information Service, National Science Foundation, Washington (order from Supt. of Documents, GPO, Washington 25). 85 pp. \$0.15.

Engineering Societies Directory, 1959. International and national joint bodies; national, state, regional, and local societies; registration; Canadian societies. Engineers Joint Council, 29 W. 39th St., New York, 1959. 36 pp. A revision of the 1956 edition.

An Evaluation of the First Academic-Year Institute, University of Utah, 1957–58. Frank B. Jex and Reed M. Merrill. University of Utah, Salt Lake City, 1959. 65 pp.

Geophysical Activity in 1958. Committee on Geophysical Activity, Society of Exploration Geophysicists, Tulsa, Okla., 1959. 36 pp.

Germfree Vertebrates: Present Status. Annals of the New York Academy of Sciences, vol. 78, art. 1, pp. 1–400. James A. Reyniers, Consulting Ed. The Academy, New York, 1959. \$5. This series of papers is a result of the conference sponsored by the Academy and the Runyon Memorial Fund for Cancer Research. The papers are divided as follows: part 1, "Instrumentation for rearing germfree vertebrates"; part 2, "Rearing germfree vertebrates"; part 3, "Characteristics of germfree and disease-free animals"; part 4, "Use of germfree vertebrates in research"; part 5, "Present status and future development of germfree life studies."

Guides for Developing Curricula for

the Education of Practical Nurses. Dorothea E. Orem. Office of Education, Washington, 1959 (order from Supt. of Documents, GPO, Washington 25). 165 pp. \$0.60.

Haffkine Institute Diamond Jubilee, 1899–1959, Souvenir. Haffkine Institute Celebrations Committee, Bombay, India, 1959. 140 pp.

Hypertension and Coronary Heart Disease: Classification and Criteria for Epidemiological Studies. WHO Technical Report 168. First report of the Expert Committee on Cardiovascular Diseases and Hypertension. World Health Organization, Geneva, Switzerland, 1959. 28 pp. \$0.30.

Introduction to the Physical Sciences. Morris Goran. Free Press, Glencoe, Ill., 1959. 421 pp. \$6.

Machine Design Problems. Donald J. Myatt. McGraw-Hill, New York, 1959. 186 pp. \$5.50.

Mammals of the San Francisco Bay Region. William D. and Elizabeth Berry. 72 pp. *The Natural History of the San Francisco Bay Region.* Arthur C. Smith. 72 pp. *Native Trees of the San Francisco Bay Region.* Woodbridge Metcalf. 72 pp. *Reptiles and Amphibians of the San Francisco Bay Region.* Robert C. Stebbins. 72 pp. University of California Press, San Francisco, 1959. \$1.50 each.

Mathematics for the Academically Talented Student in the Secondary School. Report of a conference. Julius H. Hlavaty, Ed. 48 pp. \$0.60. *Mathematics Tests Available in the United States.* Sheldon S. Myers. 12 pp. \$0.50. *A Guide to the Use and Procurement of Teaching Aids for Mathematics.* Emil J. Berger and Donovan A. Johnson. 41 pp. \$0.75. National Council of Teachers of Mathematics, National Education Association, Washington, 1959.

Natural Aerosols and Nuclear Debris Studies. Progress report No. 1. GRD Research Notes No. 8. ASTIA Documents No. 8. ASTIA Documents No. AD 209-539. Atmospheric Circulations Laboratory, Geophysics Research Directorate, U.S. Air Force, Bedford, Mass., 1959 (order from Armed Services Information Agency, Document Service Center, Dayton 2, Ohio). 45 pp.

Notes on Plants and Plant Habitats Observed in the Abydos-Woodstock Area, Pilbara District, Western Australia. Division of Plant Industry technical paper No. 12. Nancy T. Burbidge. Commonwealth Scientific and Industrial Research Organization, Melbourne, Australia, 1959. 16 pp.

The Spectrum of Beta Lyrae. Transactions, vol. 49, pt. 1. J. Sahade, S.-S. Huang, O. Struve, V. Zeberg. American Philosophical Soc., Philadelphia, Pa. 1959. 64 pp. \$2.

Symposium on Metabolism. Quarterly, vol. 19, No. 3. Chicago Medical School, Chicago 12, Ill., 1958. 48 pp.

Why Should You Study Physics in High School? American Institute of Physics, 335 East 45 Street, New York, 1959. 16 pp.

World Directory of Venereal-Disease Treatment Centres at Ports. World Health Organization, Geneva, Switzerland, 5th list, 1959. 159 pp. \$1.75.