

ology of knowledge—or, as he carefully avoids calling it until the last chapter, epistemology. Eiconics is a close neighbor of cybernetics. Where communications theory is not concerned with the semantic content of messages, however, the theory of images is concerned—in terms of the effect of information on its recipient. Those who wish Boulding's thesis in a single sentence will find it on page 7: "The meaning of a message is the change which it produces in the image."

This is, of course, to do great injustice to his book, which is witty and courageous and deserves critical study. The author is himself the first to protest its limitations. As he anticipates, specialists will undoubtedly discover that he has rifled their own storehouses somewhat more to their convenience than theirs; and generalists may well lament that he has belatedly arrived at notions of hierarchy and form which others had reached before him ("unfortunately," he cheerfully admits, "I find it easier to remember messages than their sources"). All of which is more or less necessary camouflage, a protective screen of deference to the means by which his ideas are most likely to be disparaged. Granted that his method of didactic exposition, common to so many memoranda produced for and by seminars, juxtaposes platitudes and profundities in startling contrast, the lapses may profitably be ignored, for where he is profound, he is very close indeed to his admirably extravagant objective.

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## New Books

*CERN Symposium on High Energy Accelerators and Pion Physics, Proceedings.* vol. 1, *High Energy Accelerators*; 567 pp.; F.40. Vol. 2, *Pion Physics*; 443 pp.; F. 40. European Organization for Nuclear Research, Geneva, 1956.

*Education and Human Motivation.* H. Harry Giles. Philosophical Library, New York, 1957. 108 pp. \$3.

*Glaucoma.* Transactions of the First Conference, 5-7 December 1955, Princeton, N.J. Frank W. Newell, Ed. Josiah Macy, Jr. Foundation, New York, 1956. 251 pp. \$4.50.

*Studies in Differential Equations.* Series in Mathematical and Physical Sciences, No. 3. Harold T. Davis, Ed. Northwestern University Press, Evanston, Ill., 1956. 114 pp. \$1.75.

*An Introduction to Cybernetics.* W. Ross Ashby. Wiley, New York, 1956. 295 pp. \$6.50.

*Psychology.* General, industrial, social. John M. Fraser, Philosophical Library, New York, 1956. 310 pp. \$7.50.

*In the Last Analysis.* Adam E. Armstrong. Philosophical Library, New York, 1956. 115 pp. \$3.

*Wire Brush Surgery.* In the treatment of certain cosmetic defects and diseases of the skin. James W. Burks, Jr. Thomas, Springfield, Ill., 1956. 154 pp. \$6.75.

*Dictionary of Anthropology.* Charles Winick. Philosophical Library, New York, 1956. 579 pp. \$10.

*Elements of Algebra.* Howard Levi. Chelsea, New York, ed. 2, 1956. 160 pp. \$3.25.

*Wildlife Law Enforcement.* William F. Sigler. Brown, Dubuque, Iowa, 1956. 318 pp. \$4.50.

*Administrative Medicine.* Transactions of the Fourth Conference, 31 October-2 November 1955, Princeton, N.J. George S. Stevenson, Ed. Josiah Macy, Jr. Foundation, New York, 1956. 251 pp. \$4.25.

## Miscellaneous Publications

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

*Birds of Midway and Laysan Islands.* Museum Pictorial No. 12. Alfred M. Bailey. Denver Museum of Natural History, Denver, Colo., 1956. 130 pp. \$2.

*A Study of Human Weight Lifting Capabilities for Loading Ammunition into the F-86H Aircraft.* WADC Technical Report 56-367. ASTIA Document No. AD 97206. Irvin Emanuel, John W. Chaffee, John Wing. Wright Air Development Center, Wright-Patterson Air Force Base, Ohio, 1956 (order from ASTIA Document Service Center, Knott Building, Dayton 2, Ohio). 12 pp.

*Symposium on Vitamin Metabolism.* Proceedings of a symposium held under the auspices of the University of Texas and the National Vitamin Foundation, Inc., New York, 6 March 1956. Nutrition Symposium Ser., No. 13. National Vitamin Foundation, New York, 1956. 118 pp. \$2.50.

*Census Atlas Maps of Latin America. Greater Antilles.* Census Atlas Project. U.S. Department of Commerce, Washington 25, 1956 (order from Bureau of the Census, Washington 25). 7 maps. \$1.

*Laboratory Manual to Accompany Fundamentals of Chemistry and Applications.* Charlotte A. Francis, Edna C. Morse, Helen R. Chadwick. Macmillan, New York, ed. 2, 1956. 190 pp.

*Statistics of Higher Education: Faculty, Students, and Degrees 1953-54.* Chapter 4, Section I, Biennial Survey of Education in the United States, 1952-54. Henry G. Badger and Mabel C. Rice. 142 pp. \$0.45. *Federal Funds for Education, 1954-55 and 1955-56.* Bulletin 1956, No. 5. Clayton D. Hutchins, Albert R. Munse, Edna D. Booher. 163 pp. \$0.60. U.S. Office of Education, Washington, 1956 (order from Supt. of Documents, GPO, Washington 25).

*Report of the Trustees of the Australian Museum for the Year Ended 30 June 1955.* Parliament of New South Wales, Sydney, N.S.W., 1956. 7 pp. 9d.

*Education of the Uncommon Man.* The President's report of the Cooper Union for the Advancement of Science and Art. Cooper Union, New York, 1956. 38 pp.

*Extraclass Activities in Aviation, Photography, Radio for Secondary School Pupils.* Suggestions for school administrators and sponsors. Bull. 1956, No. 11. Willis C. Brown. 48 pp. \$0.25. *Statistics of City School Systems: Staff, Pupils, and Finances 1953-54.* Biennial Survey of Education in the United States, 1952-54, Chapter 3. Lester B. Herlihy. 153 pp. \$0.60. U.S. Office of Education, Washington 25, 1956 (order from Supt. of Documents, GPO, Washington 25).

*Distribution of Air Within a Room for Year-Round Air Conditioning.* Part 1. Engineering Expt. Station Bull. No. 435. Harold E. Straub, Stanley F. Gilman, Seichi Konzo. University of Illinois, Urbana, 1956. 48 pp.

*Noise Evaluation of Air Force Ground Support Units.* WADC Technical Note 56-335. John N. Cole. 24 pp. *A Statistical Comparison of the Body Typing Methods of Hooton and Sheldon.* WADC Technical Report 56-366. C. Wesley Dupertuis and Irvin Emanuel. 26 pp. Wright Air Development Center, Wright-Patterson Air Force Base, Ohio, 1956 (order from ASTIA Document Service Center, Knott Building, Dayton 2, Ohio).

*Société Internationale de Photogrammétrie, Rapport de la Commission I (Photographie).* VIII Congrès International de Photogrammétrie. 36 pp. *Rapport National au VIII Congrès International de Photogrammétrie Stockholm, 17-26 Juillet 1956.* 8 pp. *Société Internationale de Photogrammétrie, Rapport sur les Travaux Expérimentaux de Levés Urbains.* Exécutés en 1955-1956. VIII Congrès International de Photogrammétrie, Commission IV-Sous-Commission 2. Levés Urbains. B. L. Y. Dubuisson. 35 pp. Société Française de Photogrammétrie, Paris, 1956.

*VIII Congrès International de Photogrammétrie, Stockholm, 1956. L'Appareil S.F.O.M. de l'Institut Géographique National pour la projection de photographies aériennes en Relief.* 8 pp. *Compte Rendu des Travaux Effectués par l'Institut Géographique National pour l'Essai Contrôlé No. 1 (Aérottriangulation).* Application de la communication sur les méthodes de détermination des canevas de restitution des cartes aux petites échelles. 30 pp. *Essai de Levé Urbain au 1/2000 (Commune de Donzy).* 11 pp. *Méthodes de Détermination du Canevas de Restitution des Cartes à Petite Échelle.* 33 pp. *Les Laboratoires du Service des Études et Fabrications de l'Institut Géographique National et Méthode Générale d'Étalonnage des Obturateurs Photographiques.* 44 pp. Institut Géographique National, Paris, 1956.

*Climatology of Summer Fogs in the San Francisco Bay Area.* University of California Publ. in Geography, vol. 10, No. 3. Clyde Perry Patton. University of California Press, Berkeley, 1956. 88 pp. \$2.

*Seminars in Archeology: 1955.* Memoirs of the Society for American Archaeology, No. 11. American Antiquity, vol. XXII, No. 2, pt. 2. Robert Wauchope, Ed. Society for American Archaeology, Salt Lake City, Utah, 1956. 158 pp. \$1.50.