Lexington School for the Deaf. The girls were 15 to 18 years of age and were selected as normal girls by their teachers. The Wechsler results were compared with a sample of 100 records of 16-year-old subjects from the Wechsler standardization data.

The results showed no statistically significant difference between the deaf and hearing groups in the over-all Wechsler IQ. On the other hand, the hearing group was superior to the deaf on the verbal scale, while the deaf were superior to the hearing group on the performance scale. The author concludes, after an analysis of the subtests, that the deaf are quantitatively inferior to the hearing group in verbal abstract thinking and superior in reactions to the concrete type of test stimulus. The Rorschach results likewise showed in the deaf a "noncreative, reproductive type with lowered capacity for conceptual thinking and strong emphasis upon concrete, tangible stimuli."

The study as a whole suffers from the usual difficulties encountered by psychologists in obtaining a representative sample of deaf subjects. The author recognizes the difficulties of drawing conclusions from tests that utilize language responses in a group whose major disability is language. She believes, however, that her experience with the deaf and the utilization of all forms of communication minimized this difficulty.

The fact that the average educational achievement of the deaf subjects used was approximately the fourth grade, as compared with a ninth- or tenth-grade achievement for the hearing control group, may furnish an explanation for the difference on tests requiring language responses. How to control this important variable is one that has stumped researchers in this field. The author implies that much more rigid experimentation is needed in this area.

The book is well written in a semipopular style, as represented by the title, *Youth in a Soundless World*. A more descriptive title would have been "A study of Wechsler and Rorschach scores of 31 adolescent deaf girls."

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Amino Acid Handbook. Methods and results of protein analysis. Richard J. Block and Kathryn W. Weiss. Thomas, Springfield, 1956. 386 pp. Illus. $10.50.

The first part of this handbook constitutes an excellent laboratory manual that gives, with experimental details, the procedures available for the analysis of proteins and determination of their component amino acids. Chemical, microbiological, and chromatographic methods are covered, and the results and limitations in typical cases are presented. Two short chapters cover dietary requirements for amino acid and protein consumption in the United States.

The latter half of the book is devoted to a very comprehensive tabulation of the amino acid composition of about 160 proteins. The tables list method and results in the analysis of each protein by a large number of investigators. The accompanying bibliography, which gives 1300 references to the original literature, through 1955, should be of great value to protein chemists, and the handbook itself should be extremely useful to those concerned with nutritional aspects of protein chemistry.

Archimedes. vol. 12, *Acta Historica Scientiarum Naturalium et Medicinalium*. E. J. Dijksterhuis. Ejnar Munksgaard, Copenhagen, 1956. 420 pp.

This book is an English version of the author's *Archimedes* [in Dutch (Groningen, 1938)] and of articles that appeared in the Dutch periodical *Euclides* between 1938 and 1944.

In setting forth the mathematical arguments, E. J. Dijksterhuis employs a notation of his own devising, which is somewhat between the modern symbolic notation of T. L. Heath's English version and the nonsymbolic verbal mathematics of Paul Ver Eecke's literal French translation. The bulk of the work is a discussion of all the writings of Archimedes, proposition by proposition. As a rule, only the enunciation of the proposition is actually translated; the rest is generally paraphrased, summarized, and commented on. In addition, there are chapters on Archimedes' life and works and on the basic concepts and lemmas that he employs.

With this book, Dijksterhuis has put all students of Greek mathematics in his debt. The modern reader who approaches an author as profound as Archimedes needs every help he can get, and he is indeed fortunate, now, to be able to consult Dijksterhuis along with the standard editions of Heath and Ver Eecke.

The new work is so very valuable for what it seeks to do—that is, to make more understandable the actual mathematics of Archimedes—that it may seem ungracious to ask for more. Yet a consideration of Archimedes' work suggests many topics (some of them outside the boundaries of technical mathematics) which have not been adequately dealt with in any of the standard treatises on Archimedes. Among these are the factors that determined the direction of Greek geometry and molded Archimedes' thinking; the peculiar insights that enabled him so decisively to break some (but not others) of the barriers of traditional geometry; the historical relations between numerical and geometric methods in applied science and the reason for the emphasis on the latter in the Greek development; the failure of Archimedes' followers, in antiquity, to advance his work (for example, with any quantitative treatment of specific gravity); the attitude of Archimedes (and antiquity, in general) on the sort of labor-saving machinery for which his work laid theoretical foundations; the preservation of Archimedes' thought in the Middle Ages, and the precise nature of the impact of his work on such men as Galileo and Newton at the beginning of the modern era.

Study on some of these topics is going forward; the fundamental work of Marshall Clagett in assessing the influence of Archimedes in the Middle Ages is a case in point. With the progress of such studies we shall have a clearer understanding of the position of Archimedes in the general history of science. Toward our understanding of Archimedes' achievement in the more restricted field of technical mathematics, Dijksterhuis has made a welcome and substantial contribution.

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They've Got Your Number. Robert Wernick. Norton, New York, 1956. 124 pp. Illus. $2.95.

That the *Zeitgeist* influences the course of scientific inquiry and occasionally the findings and theoretical constructions of scientists is a key proposition in the sociology of knowledge.

The most valuable thing about this little book is that, in its own gag-laden and irresponsible way, it may force upon those psychologists who happen to read it a recognition of the fact that psychological testing as a field is heavily influenced by some of the social imperatives of our time and place.

Robert Wernick is probably right in contending that the cultural compulsives toward conformity and against privacy have energized the boom in psychological testing. Unfortunately he gives no evidence of having carried his thought a step further to the connection between the demand for conformity and the development of a bureaucratized mass society whose functioning seems to require members governed by routinized needs and motivated to the execution of predictable patterns of interaction.

That he avoids these, or any other, social-analytic implications of his subject is not really a matter of surprise. Although it touches upon serious matters, this is not a serious book. Rather, it belongs to that genre of "indignation pieces" which so many publishers are presently seeking and encouraging. And if indignation may be turned upon the "conspiracy of the professors," why so much the better in these days of counter-eggheadism.

Having raised the spectre of "conformity," Wernick vents the remainder of his vituperative gaiety on insisting that psychological tests (by which he seems largely to mean aptitude and personality questionnaires) are at any rate scientifically worthless.

Some portions of his critique of test-development methods are well taken, and one cannot but admire the skill with which he seems to have taken them from the very body of literature which he aspires to ridicule.

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New Books

Advances in Virus Research. vol. IV. Kenneth M. Smith and Max A. Lauffer, Eds. Academic Press, New York, 1957. 339 pp. $8.

Liver-Fluke Snails in Britain. Alan Mozley. Lewis, London, 1957. 55 pp. 9s.

Structure Reports for 1940–1941. A. J. C. Wilson, Gen. Ed. Uitgevers, Utrecht, Netherlands, 1956 (for The International Union of Crystallography). 384 pp.

Learning to Live as a Widow. Marion Langer. Gilbert Press, New York, 1957. 255 pp. $3.95.

Contributions to the Flora of Venezuela. Fieldiana: Botany, vol. 28, No. 4. Julian A. Steyermark. Chicago Natural History Museum, Chicago, 1957. 512 pp. $7.50.

The Wind and the Weather. Joe Bolton. Crowell, New York, 1957. 277 pp. $3.95.

Physics. A textbook for colleges. Oscar M. Stewart. Sixth edition by Newell S. Gingrich. Ginn, Boston, ed. 6, 1957. 756 pp. $6.50.

Differential Equations Applied in Science and Engineering. Harold Wayland. Van Nostrand, Princeton, N.J., 1957. 353 pp. $7.50.

Theories of the Universe from Babylonian Myth to Modern Science. Milton K. Munitz. Free Press, Glencoe, Ill., 1957. 437 pp. $6.50.

General College Chemistry. Jesse H. Wood and Charles W. Keenan. Harper, New York, 1957. 689 pp. $6.50.

The Life and Death of Cells. Joseph G. Hoffman. Hanover House, Garden City, N.Y., 1957. 301 pp. $4.50.

Organic Synthesis. vol. I, *Open-Chain Saturated Compounds*; vol. II, *Open-Chain Unsaturated Compounds, Alicyclic Compounds, Aromatic Compounds.* Vartkes Migrdichian. Reinhold, New York, 1957. 1822 pp. 2 vols., $35.

Space, Time and Creation. Philosophical aspects of scientific cosmology. Milton K. Munitz. Free Press, Glencoe, Ill., 1957. 182 pp. $3.75.

Applied Mathematics in Chemical Engineering. Harold S. Mickley, Thomas K. Sherwood, Charles E. Reed. McGraw-Hill, New York, ed. 2, 1957. 413 pp. $9.

Éléments de Psychologie Sociale Générale. Georges A. Heuse. Vrin, Paris; Stoops, Brussels, 1954. 110 pp.

Glossary of Indian Medicinal Plants. R. N. Chopra, S. L. Nayar, I. C. Chopra. Council of Scientific and Industrial Research, New Delhi, 1956. 330 pp.

The Genesis of the Rat Skeleton. A laboratory atlas. Donald G. Walker and Zolton T. Wirtschafter. Thomas, Springfield, Ill., 1957. 59 pp. $7.50.

Introduction to the Bacteria. C. E. Clifton. McGraw-Hill, New York, 1950. 528 pp. $8.50.

Outside Readings in Psychology. Eugene L. Hartley and Ruth E. Hartley. Crowell, New York, ed. 2, 1957. 499 pp. $2.50.

Battle for the Mind. A physiology of conversion and brain-washing. William Sargant. Doubleday, Garden City, N.Y., 1957. 263 pp.

The Reefs of Taprobane. Underwater adventures around Ceylon. Arthur C. Clarke. Harper, New York, 1956–57. 205 pp. $5.

College Geometry. Leslie H. Miller. Appleton-Century-Crofts, New York, 1957. 201 pp. $4.50.

XIV International Congress of Zoology, Proceedings. Copenhagen, 5–12 August 1953. Danish Science Press, Copenhagen, 1956. 567 pp. Paper, Kr. 100.

Handbook of Solvents. vol. 1, *Pure Hydrocarbons.* Ibert Mellan. Reinhold, New York; Chapman & Hall, London, 1957. 249 pp. $6.50.

The Oxidation and Weathering of Meteorites. Publications in Meteoritics, No. 3. John D. Buddhue. University of New Mexico Press, Albuquerque, 1957. 161 pp. Paper, $1.75.

Dictionary of Microbiology. Morris B. Jacobs, Maurice J. Gerstein, William G. Walter. Van Nostrand, Princeton, N.J., 1957. 276 pp. $6.75.

American Families. Paul C. Glick. 240 pp. $6. *American Housing and Its Use.* The demand for shelter space. Louis Winnick and Ned Shilling. 143 pp. $5.50. Wiley, New York; Chapman & Hall, London, 1957 (for the Social Science Research Council in cooperation with the U.S. Department of Commerce, Bureau of the Census).

Introduction to Physiological and Pathological Chemistry. L. Earle Arnow and Marie C. D'Andrea. Mosby, St. Louis, ed. 5, 1957. 529 pp. $4.25.

Cenozoic Foraminifera of Micronesia. Memoir 66. Shoshiro Hanzawa. Geological Society of America, New York, 1957. 163 pp.

Semiconductor Surface Physics. R. H. Kingston, Ed. University of Pennsylvania Press, Philadelphia, 1957. 413 pp. $8.

The Prospects of Nuclear Power and Technology. Gerald Wendt. Van Nostrand, Princeton, N.J., 1957. 348 pp. $6.

The First One Hundred and Fifty Years, a History of John Wiley and Sons, Incorporated, 1807–1957. Wiley, New York, 1957. 245 pp. $7.50.

Flora of Southeastern Washington and Adjacent Idaho. Harold St. John. Students Book Corp., Pullman, Wash., rev. ed., 1956. 561 pp.

The Harvey Lectures. Delivered under the auspices of the Harvey Society of New York, 1955–1956. Under the patronage of the New York Academy of Medicine. Series LI. Academic Press, New York, 1957. 298 pp. $7.50.

Properties of Petroleum Reservoir Fluids. Emil J. Burcik. Wiley, New York; Chapman & Hall, London, 1957. 190 pp. $7.50.

Mechanical Engineering Laboratory, Instrumentation and Its Application. Jesse S. Doolittle. McGraw-Hill, New York, 1957. 396 pp. $6.50.

Chemical Phase Theory. A comprehensive treatise on the deduction, the applications and the limitations of the phase rule. J. Zernike. Kluwer's, Deventer, Netherlands, 1955. 493 pp. Fl. 70.

Heterocyclic Compounds. vol. 6, *Six-Membered Heterocycles Containing Two Hetero Atoms and Their Benzo Derivatives.* Robert C. Elderfield, Ed. Wiley, New York; Chapman & Hall, London, 1957. 753 pp. $25.

Muscle Relaxants in Anesthesiology. Francis F. Foldes. Thomas, Springfield, Ill., 1957. 210 pp. $5.50.

Plant Pathology. John C. Walker. McGraw-Hill, New York, ed. 2, 1957. 707 pp. $10.

Relaxation Spectrometry. E. G. Richardson. North-Holland, Amsterdam; Interscience, New York, 1957. 140 pp. $5.75.

Tokugawa Religion. The values of preindustrial Japan. Robert N. Bellah. Free Press, Glencoe, Ill., 1957. 249 pp. $5.

The Chemical Basis of Heredity, a Symposium. Sponsored by the McCollum-Pratt Institute of Johns Hopkins University with support from the Atomic Energy Commission. William D. McElroy and Bentley Glass, Eds. Johns Hopkins University Press, Baltimore, 1957. 848 pp. $12.50.

Operation Deepfreeze. George J. Dufek. Harcourt, Brace, New York, 1957. 243 pp. $5.

Hormones, Brain Function, and Behavior. Proceedings of a Conference on Neuroendocrinology held at Arden House, Harriman, New York, 1956. Hudson Hoagland, Ed. Academic Press, New York, 1957. 257 pp. $7.

Introduction to Bacterial Physiology. C. E. Clifton. McGraw-Hill, New York, 1957. 414 pp. $8.50.

German Influence upon English Education and Science, 1800–1866. Monograph No. 6. George Haines, IV. Connecticut College, New London, 1957. 106 pp. $3.50.

The Final Forming and Shaping of Wrought Non-Ferrous Metals. A symposium held in London on the occasion of the annual general meeting of the Institute, 12 April 1956. Monograph and Report Series No. 20. Institute of Metals, London, 1956. 128 pp. $3.50.