

mary of Russian literature and transliteration of Russian names. Also, in the introduction, attention is centered on the *trans-effect*, discovery of which has helped to advance the state of knowledge of these compounds. The bulk of the volume is concerned with the description of individual compounds.

The Gmelin Institute was fortunate in being able to procure the entire Russian platinum literature and, in so doing, to be able to make this vast store of information on complex compounds of platinum available to the outside world. In this instance the literature search was extended through 1953.

These three volumes, prepared with painstaking care and thoroughness, maintain the high standard of excellence characteristic of the other portions of *Gmelins Handbuch*.

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Psychology in the Soviet Union. Translated by J. Ellis, M. Ellis, H. Milne, J. McLeish, N. Parsons *et al.* Brian Simon, Ed. Stanford University Press, Stanford, Calif., 1957. viii + 305 pp. Illus. \$6.

This book is the result of a joint effort on the part of English educationists and Soviet psychologists to "familiarize English readers with the general direction of Soviet psychology." It includes 20 papers which appeared in Soviet journals during the period 1951-55. These cover a wide variety of topics, from discussions of theoretical concepts to applied investigations. In addition there are two appendixes. One of these, written by Luria especially for the volume, reviews Soviet research in psychopathology; the other, by Zaporozhets and Sokolov, is a report on the XIVth International Congress of Psychology. The Soviet contributions are preceded by the English editors' impartial description of the basic premises in Soviet psychology: dialectical materialism and Pavlov's theory of higher nervous activity.

The main target of Soviet investigations is the relation of language to mental functions. In a theoretical paper on the psychology of understanding, Bogoiavlensky differentiates between spoken words and other auditory stimuli. For a semanticist this is not a new distinction. A psychologist, however, may find some interesting applications of this distinction to the phenomena of generalization, transfer, and extinction.

In other papers dealing with the functions of language, Luria offers a plausible explanation for differences between human conditioning and that of lower animals; Ananiev asserts that "the culti-

vation of thought and speech is a key factor in sensitizing human sense organs"; Menchinskaya emphasizes its role in the operation of the "law of effect"; and Shvarts demonstrates experimentally the influence of verbal instructions on the visual threshold.

Another important concept in Soviet psychology is that of the *orienting reflex*. A definition of this in terms of phasic and tonic innervation is reminiscent of Henry Head's concept of *vigilance*. The role of orienting reflex is discussed by Sokolov in connection with perception, and by Milerian in relation to voluntary and involuntary attention. There is also a rather lengthy study of Leontiev and Rozanova, dealing with the effect of orientation on incidental learning.

The studies mentioned so far are only a sample, since there is hardly a paper in the whole collection that fails to make a reference to the importance of language or orientation in human behavior and mental activity.

Of more than theoretical interest are Menchinskaya's paper on the psychology of teaching, Lublinskaya's report on the development of thought in prekindergarten children, and Slavina's account of corrective methods used with "intellectually passive" pupils. For specialists in clinical psychology, Luria's review summarizes studies on the correction and restoration of speech and other motor disorders. The net impression from this paper is one of close collaboration between psychologists, physiologists, and medical practitioners, and its carefully annotated references will undoubtedly lead many to seek the original sources.

The weakest feature of the book is the monotonous reiteration of the Marxian-Pavlovian catechism—an obvious concession to the Party's dictum. American psychologists who scrupulously abide by the operational approach will be amused to find themselves labeled "mechanists," "idealists," and "crude empiricists." The criterion of objectivity apparently lies in the frequency with which references are made to Pavlov's elastic concepts. Paradoxically, all references to the higher nervous activity are inferential, stemming from studies of conditioned reflexes rather than from direct investigation of cortical processes.

The English editors had a difficult task in selecting, translating, and editing the Soviet contributions, and they have accomplished their work with excellence. Comparative psychologists may regret that limitations of space have precluded reports on experiments with lower animals; apart from this omission, however, the articles are representative of a great diversity of psychological endeavor. The scrupulously accurate work of translation is marred by only a few minor typographical errors. Finally, the elegance of style

and the general format of the volume will make reading it enjoyable as well as informative.

The editors' greatest contribution is, of course, the idea of producing such a volume. It acquaints English and American psychologists with some novel interpretations of psychological concepts, as well as with some original methods in attacking the problems of behavior. It is difficult to say what will be its effect on the actual program of research in this country; one may be certain, however, that it will awaken an interest in, and a demand for, more works of this type. For this the editors deserve every scientist's profound gratitude.

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Faune de France. vol. 61. *Hétéroptères Aquatiques*. Raymond Poisson. Lechevalier, Paris, 1957. 262 pp. Illus.

This volume of the *Faune de France* series reflects Raymond Poisson's thorough knowledge of the European fauna as well as his familiarity with world literature concerning the aquatic Hemiptera. In the introductory chapter he provides a brief but informative discussion of phylogeny, anatomy, and habits. The rest of the book consists of keys and individual discussions of genera and species. Each species is described and illustrated. Bionomic information of a general nature is included in the discussion of genera, and for some well-known species there are separate paragraphs concerning habits and life-history.

This and other volumes of the *Faune de France* series are models of style and content that should serve as a challenge to American taxonomists.

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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.)

Some Observations on Soviet Industrial Growth. Occasional Paper 55. G. Warren Nutter. National Bureau of Economic Research, New York, 1957. 16 pp. \$0.50.

Science in Creative Living. Science Bulletin No. 5. Athelstan Spilhaus. Science Museum, St. Paul Institute, St. Paul, Minn., 1957. 16 pp. \$0.50.

El Mundo Nucleonico. Ricardo Cruz-Coke. Editorial De. Pacifico, Santiago, Chile, 1957. 124 pp.

The Fluoridation of Public Water Supplies. Report of the Commission of Inquiry. Presented to the House of Representatives by command of His Excellency. Department of Health, Wellington, New Zealand, 1957. 240 pp. 8s.