

Russian Challenge

The Role of Speech in the Regulation of Normal and Abnormal Behavior.

A. R. Luria, J. Tizard, Ed. Pergamon, New York, 1961. 100 pp. \$8.50.

This little lithographed book consists of the text and illustrations of three lectures given at University College, London, in 1957–58, by A. R. Luria, one of the best known and most distinguished Russian psychologists. The lectures were devoted to the empirical examination of the role of speech in the regulation of nonlanguage behavior. The nonlanguage behavior dealt with throughout the book was ordinarily a simple, voluntary motor response made in the presence of an auditory or visual signal as a result of verbal preinstruction (for example, "Press when the light comes on"; "Press every third time the bell rings"). This elementary situation was utilized to explore the extent to which subjects (children and persons with brain pathology) could use, first other persons; and then their own, verbalizations to bring their motor behavior into the desired relationship with events in the experimental situation. The ingenuity shown by the investigators in the analysis and development of extensive programs of research must command respect and admiration from psychological research workers everywhere. In many ways the work is reminiscent of the basic study of classical conditioning and its ramifications, made by Pavlov and his students. Results of scores of experiments are presented to illustrate and support current Russian conceptions of (i) the formation of higher mental processes, (ii) the emergence of speech as a regulatory mechanism, and (iii) the modifications of the role played by speech as a result of brain pathology.

For the reader with a command of Russian, the current references cited will prove valuable; for the reader without Russian, this book is virtually the only source for much of the material. Unfortunately, the details of many of the experiments are sparse and the results are illustrated rather than documented in the statistical fashion approved in current Western psychology. This should furnish no deterrent to the interested research worker, however. As C. A. Mace points out in his foreword, the book now makes replication of these studies possible, and it is to be hoped that many workers will rise to

the challenge of the ideas expressed in the lectures and that they will systematically replicate and extend the experimental work reported.

The book should furnish excitement and stimulation for research workers in the psychology of language for some time to come.

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Paleozoic Questions

Geologie von Bayern. Adolf Wurm. Borntraeger, Berlin, 1961. xvii + 554 pp. Illus. + maps. DM. 96

Adolf Wurm, professor emeritus at the University of Würzburg, has devoted most of his life to the geological investigation of Bayern, or Bavaria, the second largest state of prewar Germany (about three-fourths the size of New York State). Geologically Bavaria includes orogenic areas of Paleozoic as well as of alpine age and was therefore predestined for an early leading role in the solution of Paleozoic stratigraphic and tectonic questions.

The first edition of this book was published in 1925. Since then much work has been done, and many new detailed maps have come out. Wurm has done a very commendable piece of work in completely re-editing his original monograph. He consulted and listed over 1000 references, a large proportion of which appeared after publication of the first edition. The volume is dedicated to C. W. von Gümbel, the father of Bavarian geology.

Bavaria is the "type locality" or "lieu of origin" of various new rock names (for example, Gümbel's name, *keratophyre*), of tectonic periods (for example, Variscan orogeny), and of many important new fossils, mainly of Paleozoic age. It also played an early and a leading role in the solution of geologic problems in Germany and in Europe as a whole, although it never attained the fame of the Swiss Alps.

The arrangement of the text is logical and the book is well organized. The major sections are as follows: A brief introduction with a valuable review of the history of geological work in Bavaria (10 pages); a detailed description of the major areas of Bavaria—the Frankenwald, the Fichtelgebirge, and the northern Oberpfälzer Wald [each area is first

described stratigraphically (pages 11 to 362) and later tectonically]; tectonic description of the last two areas (pages 435 to 447) follows an intermission, which is an elaborate description and discussion of the Münchberger gneis (pages 362 to 424). The lengthy treatment is well worthwhile since this gneis area has been mentioned and described in many basic papers on the granite problem.

The last part of Wurm's book consists of short chapters on special stratigraphic and tectonic problems, on the state of geophysical exploration (2 pages only), on the morphology of Bavaria (pages 463 to 488), and on mineral deposits (pages 489 to 540). This part is of particular value, since it mentions various basic publications and discussions which appear to be entirely unknown to the English-speaking geologist.

The list of localities at the end of the book is complete, whereas the index of subject matter is very incomplete with regard to both subject names and page numbers. The text is remarkably free of errors, and the figures are clear and well drawn.

As a whole, this book is an admirably complete handbook of one of the geologically best studied areas of Europe. It can be highly recommended to everyone who is interested in regional geology, or in basic problems of general geology.

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Reduced Status

The Ciliated Protozoa. Characterization, classification, and guide to the literature. John O. Corliss. Pergamon, New York, 1961. 310 pp. Illus. + plates. \$12.

The author of this monograph is, needless to say, a specialist on ciliate taxonomy. He is, moreover, one of the few remaining protozoologists with patience enough to search the literature to the point of exhaustion (both of the literature and the author, and not infrequently of the reader). No work of this type is expected to be fascinating reading, and this one is no exception.

The first two parts deal with a modified scheme of classification, in which he places the Ciliates and the Suctorians together into a single class, the Ciliata.