

is not a neat, clearly identifiable problem area like the functions of the adrenal cortex, the conditions of blood clotting, or the nature of the nerve impulse. It is a concept about which metaphysicians and epistemologists have worried for centuries, a concept that must be given at least a provisional definition before scientists can profitably make it the object of interdisciplinary study.

A working agreement as to the nature of the problem may have been achieved at the first meeting, but if so, it seems to have been forgotten. The record of the fourth meeting presents three short and extremely able papers by Roy R. Grinker, Talcott Parsons, and Jean Piaget, respectively, followed by 121 pages of discussion. Individual contributions are always interesting and frequently informative, but it is difficult to find any thread of development that suggests that a problem is being gradually clarified. Perhaps the final volume will provide the needed synthesis.

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A Field Guide to the Birds of Britain and Europe.

Roger Tory Peterson, Guy Mountfort, and P. A. D. Hollom. Houghton Mifflin, Boston, 1954. xxxiv + 318 pp. Illus. + plates. \$5.

So far as illustrations are concerned, this attractive pocket volume is entirely the work of the American ornithologist and bird painter, Roger Tory Peterson. Of these, there are 1200, and they follow the familiar Peterson method which is primarily patternistic. Six hundred and fifty-four of the illustrations are in color, and a more gemlike brilliance and precise register could not be asked. The text is the work of two well-known British ornithologists. Guy Mountfort is largely responsible for the immense labor of compiling a complex book for which the scientific literature of some 20 languages for the past many years had to be reviewed, and for which the nomenclature of numberless authors had to be weighed and edited into the latest official usage. The 380 distribution maps showing breeding and wintering grounds and the descriptions of the ranges are the work of P. A. D. Hollom. Subspecies are dealt with only when recognizable in the field. Dutch, French, German, and Swedish names are added to the English names, and North American names are included where the bird is conspecific but the name is different (for example, sand martin in England, bank swallow in America, for *Riparia riparia*). Foreign editions in these other languages are scheduled for early publication.

The present volume includes every one of the 551 species of Europe west of the U.S.S.R., which apparently has been excluded for reasons of poor communication and fieldwork facilities at the present time. Even so, Russian ornithological literature has been researched and much of its results included.

Speaking as an American who lived for 6 years in Europe, always deep in the country, I can say that many hours of fruitless search would have been saved

me if I had possessed the present volume while trying to identify hoopoes, rollers, wall-runners, and the many species of *Sylvia*, so strange to New World eyes. This pocket volume will certainly accompany me on my trip to Europe next spring, as more important to a naturalist than language phrase-books or guides to art treasures.

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Electronics. A textbook for students in science and engineering. Thomas Benjamin Brown. Wiley, New York; Chapman & Hall, London, 1954. xi + 545 pp. Illus. \$7.50.

This textbook deals quite broadly with the field of electronics. The topics range from physical electronic principles to microwave applications. The treatment is essentially descriptive with a minimum of mathematical analysis. It would appear to be most suitable for use in a course for students whose major field of interest is other than electronics. For this reason, Brown's book will no doubt be welcomed by those schools that offer survey courses in electronics for students in mechanical and chemical engineering.

I feel that the inclusion of laboratory experiment instructions in the body of the text is unfortunate since the continuity of material is sacrificed, and the book is, therefore, somewhat difficult to read. A further handicap is the use of somewhat unconventional terminology such as "full-cycle power supply" rather than "full-wave rectifier" and "feedback product" rather than "loop gain."

This textbook should prove helpful to individuals who wish to gain a general knowledge of the present state of the electronic art.

LEONARD O. GOLDSTONE

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The Biochemistry of Genetics. J. B. S. Haldane. Macmillan, New York, 1954. 144 pp. \$2.75.

Although the author states that this book is written for the biochemist, and not for the geneticist, there is no doubt that most geneticists can gain a great deal from it. In fact, the geneticist is told in many ways that the future of genetics is in the physiological approach and also that most of the simple chemical models that the geneticist uses are obsolete. There is not only a reiteration of the generally accepted premise that there is a biochemical basis underlying all genetically controlled variations, but there is also an emphasis on how little is really known about the processes themselves and the associated inhibitions, competitions, rates, and so forth. Most biochemical processes that have been studied are remote from the primary gene action.

Haldane speculates in a manner that is pleasing, being neither overly dogmatic nor overly apologetic. The thesis that there is a major evolutionary trend toward