

poses the sexual and other intimidation of the young male by the old male, and the enforcement of the incest taboo. Actually, because of the basic fact that all psychic activities are heavily overdetermined, a proof of the validity of Bettelheim's thesis does not *automatically* represent a refutation of Freud's thesis and must, instead, be viewed as a valuable supplementation thereof. Bettelheim's attempted "refutation" of Freud's view also suffers from factual inaccuracies. He asserts that circumcision is nowhere equated with castration. Yet, in Merker's book on the Masai, which Bettelheim cites, we read that an initiate's father was ridiculed by the circumcisers, because during circumcision the son allegedly "bellowed like a bull which is being castrated." The statement that male Australian aborigines are kind fathers is correct but does not abolish the fact that among those people, in times of famine, foetuses are aborted to feed those already born, small children are fed to older ones, the young are terrorized by the magic "bone pointing" of old men, and the penalty for a trespass on the dietary and other privileges of the old is the indefinite postponement of the signs of sexual maturity—surely an equivalent of castration-threats.

On the whole, Bettelheim rendered an important service to anthropology and psychoanalysis alike by his thoughtful and creative discussion of a relatively neglected and highly important aspect of the relationship between the sexes and of puberty rites, which supplements but in no way refutes other psychoanalytic and anthropologic theories regarding these complex matters.

The publishers are to be congratulated for having published a fine book in a format worthy of its contents.

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Fluid Dynamics. vol. IV. Proceedings of 4th symposium in applied mathematics of the American Mathematical Society held 22–23 June 1951. M. H. Martin, Ed. McGraw-Hill, New York, 1953. v + 186 pp. Illus. \$7.

This book, the fourth volume in the valuable series of reports on applied mathematics symposiums arranged by the American Mathematical Society, contains 12 papers written by specialists for specialists. Some of the authors are leading authorities in their fields, and all papers are written on a very high level of competence. There are three points of view discernible in the literature of fluid dynamics: that of the physicist, that of the aeronautical engineer, and that of a professional mathematician. All three are ably represented in this collection.

Some of the papers are comprehensive reviews of the subject. Others are technical discussions of a single problem that could just as well have been published in a scientific journal. As far as subject matter goes, some papers deal with recently developed disciplines of fluid dynamics, which abounds in open problems

and even in controversies, such as the theory of turbulence and the theory of potential transonic flows. Other papers discuss such classical matters as conformal mapping and the solution of the Poisson equation, the emphasis in this case being on effective numerical solutions. The fact that new and interesting results are possible in such fields confirms the dictum of Poincaré that no mathematical problem is ever completely solved.

There are two papers on turbulence (Chandrasekhar, Lin), six papers on flows of compressible fluids (Busemann, Meyer, Thomas, Carrier and Yen, Martin and Thiekstun, Burgers), five papers on incompressible flows (Heins, Theodorsen, Birkhoff, and Young and Zarantonello, Synge, Weinstein), and one paper on hydrodynamics and thermodynamics (DeGroot). The book is very attractively printed. There are voluminous bibliographies and a good index.

Although no book of 186 pages can possibly give a comprehensive picture of the present state of fluid dynamics, this volume gives an excellent cross section of this actively developing science, and it will be of great value to every worker in this field.

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Intertidal Invertebrates of the Central California Coast. S. F. Light's *Laboratory and Field Text in Invertebrate Zoology*, rev. by Ralph I. Smith *et al.* Univ. of California Press, Berkeley, 1954. xiv + 446 pp. Illus. \$5.

The book under review is a new revision of the late S. F. Light's well-known laboratory and field textbook for his course at the University of California. The significance of the book is greater than its primary purpose as a guide to the identification of the fauna of a limited region for the use of a particular university course, and it is this significance that invites wide notice. What we have is a series of illustrated determinative keys to the species of the more common intertidal animals. Each key is preceded by a compact discussion of the group, emphasizing the morphology that must be mastered before attempting identifications, and each is followed by a list of species, sometimes annotated, which will find wide use faunistically.

The revision has been made mostly by specialists with a firsthand knowledge of the groups, and the work therefore makes a distinct contribution to the knowledge of the California marine fauna. There are additional sections on problems of classification and identification and a rather extended chapter on field studies that is arranged on a habitat basis. Specific suggestions are made for special problems that can profitably be investigated during a summer course. There is a highly selected, useful bibliography. The book is not meant as a self-sufficient textbook of general invertebrate zoology; the discussions of morphology, classification, and ecology are not that complete.