

Book Reviews

Behavior

THE STRUCTURE OF HUMAN MEMORY

ed. by Charles N. Cofer. 1976. W.H. Freeman and Company (660 Market Street, San Francisco 94104). 213 p. \$5.50 softback, \$10.00 hardback.

This book encompasses the proceedings of a symposium on *The Structure of Human Memory*, held under joint sponsorship of the Section on Psychology and the Section on Information and Communication on January 29, 1975 at the Annual Meeting of the American Association for the Advancement of Science.

The editor presents a historical perspective in the first chapter. This is followed by eight chapters dealing with various aspects of human memory by a multitude of authors. Although this is a multi-author volume (14 contributors), the chapters are uniformly well written, producing a lucid synthesis of the present knowledge of this most complex topic.

The book does not read easily. Unless one is more than merely knowledgeable in the fields of psychology, computers, and even linguistics, it may be difficult to learn from some of the chapters. Unfortunately, significant segments are very terse.

This book should be of primary interest to psychologists. However, behavioral biologists, philosophers, and psychiatrists will find it rewarding.

The teacher, the student, and the specialist will be grateful to the editor and authors for the extensive references at the end of each chapter and the index of names and topical index at the end of the book.

Ralph Troll
Augustana College
Rock Island, Illinois

BEYOND INTELLECTUAL SEXISM: A NEW WOMAN, A NEW REALITY

ed. by Joan I. Roberts. 1976. David McKay Company, Inc. (750 Third Avenue, New York 10017). 400 p. \$14.95 hardback, \$7.95 softback.

Joan I. Roberts has compiled nearly two dozen articles written by women scholars analyzing the status of women in this country and abroad. The book grew from a group of 21 women who

gathered to initiate an interdisciplinary women's studies program at the University of Wisconsin in Madison. A great diversity of women's thinking is represented by the collection which discusses many disciplines including education, law, psychology, literature, economics, and political science to name only a few. The web of discrimination is exposed as these women reassess social reality. It is the intent of the authors to encourage cooperation among women in an effort to rethink and reconstruct a new culture ensuring female autonomy and dignity.

The text is well-written by knowledgeable women who are active participants in the area under discussion. The touch of emotional excitement provides an intensity which makes the book very interesting and enjoyable to read. While it is written at a level beyond that of most high school students, the style makes it useful as a reference text. I would recommend it for people teaching in women's studies programs and for anyone who wishes to be informed on the feminist movement.

Claudia B. Douglass
Central Michigan University
Mt. Pleasant

THE SOCIAL ANIMAL

by Elliot Aronson. 2nd ed., 1976. W.H. Freeman and Company, (660 Market Street, San Francisco, California 94104). 336 p. \$12.50 hardback, \$4.95.

The Social Animal is a book on social psychology which attempts to explain the behavior of humans in social situations. First published in 1972, this second edition is slightly more detailed and longer than the first, although essentially unchanged in tone and approach.

In the introduction and first chapter, "What is Social Psychology?" Aronson explains the nature of social psychology as a science. The final chapter re-emphasizes this theme and analyzes the scientific experiments described in previous chapters.

The remainder of the book includes the topics of conformity, mass communication, self-justification, human aggression, prejudice, attraction, and communication in sensitivity training groups. For each of these topics Aronson cites real life examples of social behavior (socio-

psychological situations) and then analyzes them, using scientific experiments to support his views.

Although I would not recommend this book for teachers of biology or students of behavior, it is a well-written and interesting account of human behavior that would certainly interest the casual reader.

Gordon G. Snyder
Schoolcraft College
Livonia, Michigan

Cell and Molecular Biology

DYNAMIC ASPECTS OF CELLS

by Michael A. Tribe, Irwin Tallan, Michael R. Erout, and Robert K. Snook. 1976. Cambridge University Press, (32 East 54th Street, New York, 10022). 127 p. \$14.95 hardback, \$5.95 softback

This is Book 3 of Unit One of a Basic Biology Course tutor text. The title of Unit One is Microscopy and its Application to Biology. The book is usually accompanied by film loops to be used with a special projector; these were not available. However, the book contains an abundance of photographs of excellent quality obtained by light and electron microscopy. It was obvious that great care had been taken in their selection.

The areas covered by this text are locomotion and contact inhibition, mitosis, the cell cycle, fertilization, meiosis and its genetic consequences. Included, also, are three useful appendices; (1) the normal human karyotype and sex determination; (2) tetrad analysis in *Neurospora*; genetic analysis and crossing-over; and (3) suggestions for practical work. A glossary defines commonly used terms in cytogenetics and cell morphology.

The text is well written and the material is current. The strategy of the authors is to present the material, ask questions, and provide answers. All tutor texts do that. But, the questions are not all of the type that merely require regurgitation of the material read. They extend beyond the material and require the reader to speculate on why things might occur in a particular sequence or

of what benefit certain mechanisms might be to the organism in terms of fidelity of transmission of genetic information. The textbook was written for college undergraduate students but could also be useful to high school students.

Ralph H. Kathan
*University of Illinois at the Medical Center
Chicago*

Ecology and Environmental Biology

PROCEEDINGS: SANDUSKY RIVER BASIN SYMPOSIUM

by David B. Baker, William B. Jackson, and Bayliss L. Prater, eds. 1975. Heidelberg College (Tiffin, Ohio 44883) or Bowling Green State University (Bowling Green, Ohio 43403). 475 p. Complimentary copies available from either college.

This volume contains the reports of thirty-five water quality and environmental management projects in the Sandusky River Basin. They are arranged under four headings: Geology, Land Use, and General Water Quality; Biological Water Quality Indices; Sandusky Bay and Upgrounds Reservoirs; and Governmental Planning. With such a large number of writers the quality of writing is not uniformly excellent, but in general it is done in a crisp, precise, scientific manner.

The problems in the volume are minor. Some verb tense changes were incorporated within certain paragraphs; some writers included a description of their habitat in the methodology section of their report; and a few, understandable typing errors were included.

The reports provide some good format samples for students doing field studies. They should be usable by advanced high school students and college students.

The major value of these reports will be to assist future Sandusky River Basin researchers. In addition, the book should be valuable to others who wish to initiate similar studies in other river basins.

Robert E. Holtz
*Concordia College
St. Paul, Minnesota*

TAKING THINGS APART AND PUTTING THINGS TOGETHER,

by John H. Woodburn, 1976. American Chemical Society (1155-16th Street, N.W., Washington, D.C. 20036). 120 p. \$1.75 softback, \$6.00 hardback.

The author has taken chemistry out of the laboratory and into the real world. He

conducts the reader on a hit-and-run tour of many practical applications of chemistry to agriculture, to our natural surroundings, to the production of new structural materials, to the harnessing of energy, to the establishment of environmental priorities and to our own physical well-being. He provides a unique perspective which should prove particularly valuable to those seeking justification and explanation for the exotic equipment and strange odors characteristic of the atomic/molecular juggling that we have labeled "chemistry."

This intriguing survey of chemistry's impact upon our lives is very readable to the layman, and is sufficiently detailed to hold the interest of the student and teacher. The numerous multi-colored drawings and photographs are of excellent quality, and both serve as an effective supplement to the narrative.

More publications of this type are needed to interpret for the general public what the logical contributions and limitations of the various fields of science actually are.

James M. Garner
*Office of Washington State
Superintendent of Public Instruction
Olympia*

Educational and Professional Concerns

WOMEN IN GEOLOGY

ed. by S.D. Halsey, B. McCaslin, W.L. Carey and W.D. Romey. 1976. Ash Lad Press, (P.O. Box 396, Canton, New York 13617). 81 p. Price not given.

Women in Geology is an interesting introduction to the impact of women role models as influences upon young women who are interested in pursuing careers in traditionally male-dominated fields. The book consists of the proceedings of the first Northeastern Women's Geoscientists Conference held at St. Lawrence University in 1976, plus a statement by each author describing her goals and attitudes as a scientist.

The scientific papers are scholarly and well-presented. Even more impressive, perhaps, are the similarities between these women role models in their early careers, and their frank discussions of the situations and persons which influenced their decisions to enter the earth science field. In most cases they encountered discrimination and resistance from male peers in graduate school and might have been discouraged enough to change fields were it not for encouragement from

some individual—professor, relative, or friend—to continue their professional development. The women emphasize the fact that more female role models are needed in traditionally male-dominated fields, and that each person needs to be herself, and pursue professional goals in the total range of study fields and careers.

M. Michelle Balcomb
*Colorado Mountain College
Glenwood Springs*

EDUCATOR'S GUIDE TO FREE SCIENCE MATERIALS

ed. by Mary H. Saterstrom. 17th ed., 1976. Educator's Progress Service, (Randolph, Wisconsin 53956). 417 p. \$11.25.

Here is an old stand-by resource aid for science teachers, and seventeen editions is evidence enough that its value is well known and accepted. This compilation of free materials includes films, transparencies, slides, filmstrips, pamphlets, etc. Further than a simple listing, the materials are categorized, cross-referenced, and indexed in a useful manner. Accompanying the annotated bibliography are essays and sample units for science teachers from elementary to the various secondary courses.

The biology listings are unusually rich, and having this guide on hand—and using it—will be a resource sought by all science teachers.

Paul Klinge
*Indiana University
Bloomington*

ELEMENTARY TEACHERS GUIDE TO FREE CURRICULUM MATERIALS

ed. by Patricia M. Suttles. 33rd ed., 1976. Educators Progress Service, (Randolph, Wisconsin 53956). 369 p. \$11.50.

Thirty-three editions prove something; it's a useful volume. As usual, the indexing and arrangements lead to easy use. There are instructions to use and requests to be sent, an essay on career education, and illustrative units including one on the metric system. The science section is divided into general science and nature study. Other sections are on safety, aerospace, clubs and hobbies, communication and transportation, environment, fine arts, guidance, health, home economics, industrial, language arts, arithmetic, social studies, and audio-visual aids.

This body offers an amazing resource for all teachers, and it is not confined to