

deserves wide attention. The series of which it is a part will be an expensive one, but it should be a great help to students.

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Ways of Improving Behavior

John Mann's **Changing Human Behavior** (Scribner, New York, 1966. 249 pp. \$5.95) is a provocative piece of work and it engages the reader in dialogue, but part of its provocativeness stems from its inconsistencies.

The earlier part of the work emphasizes the goal of changing the individual to conform to society, chiefly through psychotherapy. In the latter portion, beginning with the discussion of creativity and religion, emphasis is shifted to the goal of ultimate development of the individual. Mann describes three distinct systems, scientific, professional, and friendly, for changing human behavior. He concludes that common assumptions underlie the various behavior-changing processes, a conclusion which I, however, was unable to derive from the analysis presented.

The chapter on "Small groups" is the best and most carefully done in the book. Here not only are studies described but results are stated and placed in context. The chapter on "Attitude change through interpersonal influence" almost approaches "Small groups." One would guess that these two really represent the area of the author's competence. The book as a whole, however, was obviously designed for an audience that is not sophisticated in psychology, and suffers from weaknesses to which such books are subject. Among these are inconsistencies in level of writing. For instance, there are extensive references to individual investigators in some chapters and a complete lack of references in others (the theoretical model of cognitive dissonance is mentioned without any citation of Festinger). The brief chapter entitled "The psychopharmacology revolution" is mostly devoted to Timothy Leary, and no other drug research is discussed. The chapter on "Mass media" provides some discussion of methodology and presents the role categories of people who work in this area, but there is no real discussion of the findings of the "many studies" referred to.

Another weakness is oversimplifica-

tion. The statement of the principle of homeostasis (p. 29) is an example: "[T]he fundamental law of [social] systems is that when an element changes in one direction, a move must be made in the opposite direction to compensate for it"; this principle is then applied to the psychotherapeutic situation, a long extension from its original biological meaning. In the brief discussion of conditioning, the description of the teaching machine as a major breakthrough in education is oversimplified and out-of-date, for psychologists are currently much more concerned with the program itself than with the means by which it is presented.

There are other, smaller difficulties with the book that might have been solved by careful copyreading and editing. But the main problem perhaps lies in the task that Mann has cut out for himself. It is to his credit that, recognizing that we have a long way to go, he constantly calls for careful research in all phases of the study of changing human behavior, even though at the same time he may lead readers mistakenly to expect him to present solutions to the problems he discusses, and though he himself makes use of findings or ideas based on procedures that have not been empirically validated.

Mann provides an interesting discussion of religious views, along with suggestions for their scientific verification. As a way of approaching the problem of changing human behavior, he sketches a "science fiction" Human Development Corporation which would collect, analyze, and become a repository for all scientific studies related to the problem of changing human behavior and in addition perform selective research, consult with others, and mount pilot projects designed to test in a scientific manner recently acquired knowledge. This Corporation is not quite as fictional as Mann indicates, for in its function as a repository it is very similar to many data-retrieval systems now being funded by the U.S. Office of Education under the name of ERIC, and its concern with carrying out research seems to be represented, in the field of education, by the regional education laboratories now coming into existence and the planned communication networks between these, the research and development centers, and ERIC.

I was disappointed that the book does not live up to its advertisement as "the first comprehensive account of modern scientific explorations into the

alteration and enhancement of human behavior," but another reader from a different background might find much of value in it.

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Organic Nitrogen Compounds

The purpose of **The Chemistry of Open-Chain Organic Nitrogen Compounds** [Benjamin, New York. Vol. 1, *Functions Derived from Ammonia: Amines, Amides, Nitriles, Isocyanates, etc.* (368 pp., illus. 1965. \$19.50); vol. 2, *Derivatives of Oxidized Nitrogen: Hydrazines to Nitrates* (543 pp., illus. 1966. \$35)], by Peter A. S. Smith, is "to give an interpretative as well as a descriptive survey of the chemical behavior of functional groups containing nitrogen." The 15 chapters include inorganic nitrogen compounds, aliphatic amines, aromatic amines, amides, nitriles and isocyanides, derivatives of carbonic acid, ammonia derivatives of the carbonyl group (vol. 1), and hydroxylamine derivatives, hydrazine derivatives, nitrogen functions with adjacent unsaturated nitrogens (diazonium, azo, and so on), chains with three or more nitrogens, nitroso compounds, nitro compounds, and nitrogen oxyacids (vol. 2). Emphasis is placed upon nomenclature, properties, reactions, and preparative methods. A restricted bibliography is appended to each chapter, and a limited subject index concludes each volume. All this material has been compiled selectively, not encyclopedically. The discussion of the reactions and the presentation of the molecular structures harmonize with the conventional organic chemistry of a generation or two ago and are easily followed.

The title of these volumes is easily misinterpreted. "Open-chain" refers to the nitrogenous functional groups, not to the organic skeleton of the molecules. Chapter 3 of volume 1, for example, is devoted to the aromatic amines.

The index in each volume is inadequate. Many important, extensively discussed substances, aniline and benzal imine, for example, are not entered.

The author warns that he was forced to select his material. The prospective reader should be advised of some of the omissions. As may be inferred from the subject matter of the chapters,