BOOK REVIEWS

Writing for Technical and Professional Journals by John H. Mitchell. John Wiley & Sons, Inc., New York, London and Sydney, 1968, 405 pp.

This book reprints, describes, summarizes or refers to every item in what has to be the world's largest scrapbook of material relating to professional publication. The last 240 pages (three-fifths of the total) include "sample" style guides from the IEEE, *Management Science,* AIBS, ACS (including seven or eight pages of abbreviations used in *Chemical Abstracts*), AIP, the GPO, NASA, the Modern Language Association, the American Mathematical Society, the American Medical Association, the APA, the *American Sociological Review,* the *American Economic Review,* the *Hispanic American Historical Review,* the NEA, and sundry others. In almost every case, the excerpted or complete style guide is followed by an illustrative article. I would doubt that any other such compilation exists.

The chapters which precede this anthology discuss more general aspects of writing for professional journals: design and approach, the collection, correlation, selection and arrangement of data, and the elements of journal articles. The text in these chapters is crowded with material of the most varied and unexpected kinds: disquisitions on logic, formal organization, outlining, interview techniques, information retrieval, the Dewey decimal system, the EJC Thesaurus, and much, much more.

There is only one problem in all of this, but it is a serious one, epitomized by the quotation from Robert Louis Stevenson which Mitchell uses as motto for his first chapter: "If a man can group his ideas, he is a good writer." This real treasury of reference material is all but inaccessible to the reader. Titles of the five chapters are not very descriptive, and the index is not organized as a retrieval device. If one knows *where* in the book to look, he can find very useful information, but just leafing through the pages is neither efficient nor easy. It is made particularly difficult, in fact, by the striking lack of editorial judgment exercised in the design of the book. There is no differentiation between the author's comments and the examples and illustrations which he reprints (unless, as in some cases, the typography of the original has been reproduced). Headings within chapters, where they exist at all, are confusing—and again, it is often difficult to determine whether they are part of Mitchell's organization or part of some quoted work.

As a result, it is hard to say who should buy this book and even harder to say how it might be used. Professor Mitchell, who "was elected Teacher of the Year by the students of the University of Massachusetts" in 1965, is presumably able to make selections from the contents and to present them effectively in a classroom. Perhaps the publishers might atone for

their abnegations of responsibility in preparing this book for the press by prevailing upon its author to write a supplementary, and much-needed, User's Guide to its contents.

A. J. Goldwyn

Computer Peripherals & Typesetting by Arthur H. Phillips. London, Her Majesty's Stationary Office, 1968. 665 pp. $28.80.

The appearance of a comprehensive volume on computer composition is a boon to librarians as it comes at a time when progress with MARC and other complex data bases calls for printing and other output capabilities which exceed those now commonly available with computers. Recent advances in photocomposition technology now make possible printing of graphic arts quality at acceptable costs for certain types of computer produced library publications, such as book and periodical catalogs whose basic input includes upper- and lower-case and a full range of diacritical marks. With these advances librarians need no longer accept the limitations of character sets and image quality imposed by present line printers. A quality product is needed for outputs which are destined for publication. Some pioneers have already made good use of this advanced technology to produce quality catalogs and lists; this book will help others to travel the same road.

The volume is a comprehensive reference compendium of data on computer peripherals which is not otherwise available in convenient form. It gives special emphasis to the coding and keyboarding of alphanumeric texts and describes how the computer can be used for text processing with a typographic output. It also gives an appreciation of the problems involved and the techniques and equipment that are available to those who are preparing to enter this important field. The text is arranged in three sections. The first is an introduction to computer processing of alphanumeric data which is intended for printing in typographic quality. The second describes many types of computer peripherals and gives considerable attention to the various codes used for computer and printing equipment data input. The third section describes alphanumeric text composition and the available graphic arts composing equipment. The text is supplemented by many illustrations, diagrams, and tables plus an index and a glossary of terms.

While much of the material in the volume will become outdated within a short time, a substantial portion of it is sufficiently basic to retain its value for a longer period. This handsome book is intelligently conceived and well-written by one of England's leading authorities on printing and computer typesetting. For anyone seriously interested in the subject the volume is essential and worth its price.

Richard De Gennaro

Coordinate Indexing, by John C. Costello, Jr. Rutgers Series on Systems for the Intellectual Organization of Information, Volume VII. Edited by Susan Artandi. The Rutgers University Press, New Brunswick, N.J., 1966. 218 pp.

This paperback book is the result of a seminar meeting on coordinate indexing held April 28 and 29, 1966, under the sponsorship of the Rutgers Graduate School of Library Service. The volume consists of a detailed presentation of the subject by John Costello of Battelle Memorial Institute, followed by a discussion of the presentation by four panelists.

The objectives of the book as given in the preface are: to offer a description, discussion, critique, and collection of facts and data on coordinate indexing as one of the systems which may be used to intellectually organize information contained in documents. Basically an introductory description of the subject is offered. However, the principles of coordinate indexing are included so that the material has value for anyone interested in the topic. With examples offered primarily from metallurgy and engineering, the emphasis is on the handling of technical documents. About half of the presentation is devoted to input, with storage, searching, and output comprising the other half. Discussion by the panel (Dr. Susan Artandi, Moderator; Dr. Charles L. Bernier; Dr. Vincent E. Giuliano; and Dr. I. A. Warheit) is not given verbatim, but summarized by the Editor.

Although the Table of Contents is quite detailed, an index would make the book more useful. The inclusion of a selective bibliography is valuable, but unfortunately it is almost never referred to in the text. The bibliography is of course now somewhat out-of-date.

Laura K. Osborn

Libraries of the Future, by J. C. R. Licklider. The M.I.T. Press, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1965. Third Printing, September 1966. 219 pp. $6.00.

This remarkable little book is rapidly becoming a classic in the field of information science. (Note that it is now in its third printing.) It analyzes the concepts and problems of libraries of the future, "future" being defined as the year 2000.

The book is the culmination of a two-year research project on the future of libraries sponsored by the Council on Library Resources. The study was conducted by Bolt Beranek and Newman, Inc. between November, 1961, and November, 1963.

The first part of this book describes man's interaction with recorded knowledge in what Mr. Licklider calls "Procognitive systems." The author assumes man will be reacting to segments of the entire body of recorded information within a vast hierarchical information network. He estimates

the present world corpus of knowledge could be stored in 10^{15} bits of computer memory. The rate of increase is $2 \cdot 10^{6}$ bits per second.

Part two explores the use of computers within the procognitive system. Subjects touched upon include syntactical analysis of natural languages, quantitative aspects of the representation of information, information retrieval effectiveness, and question-answer systems. Some time is spent with studies of current computer techniques. In general, part two is a trifle dated as it deals with specific techniques in a field where technological obsolescence is precipitous.

Mr. Licklider's writing is both intellectually stimulating and delightful. In discussing the future computer console, "... the concept of 'desk' may have changed from passive to active: a desk may be primarily a display-and-control station in a telecommunication-telecomputation system—and its most vital part may be the cable (umbilical cord) that connects it, via a wall socket, into the procognitive utility net." A footnote goes on to say, "If a man wishes to get away from it all and think in peace and quiet, he will have merely to turn off the power. However, it may not be economically feasible for his employer to pay him full rate for the time he thus spends in unamplified cerebration."

Serious students of information or library science should consider this book required reading if for no other reason than the jolt it provides one's imagination.

Gerry D. Guthrie