Book Reviews

The Future of the Printed Word: The Impact and Implications of the New Communications Technology. Edited by Philip Hills. Westport, Conn.: Greenwood, 1980. 172p. $25. LC: 80-1716. ISBN: 0-313-22693-8 (lib. bdg.).

The character of this volume is as much that of a topical journal or annual review as that of a monograph. A dozen authors have contributed thirteen chapters, all but one prepared especially for this publication. Ten of the chapters are by British authors, two by Americans, and one by European Community personnel located in Luxembourg. An amusing *Punch* satire about BOOK (Built-in Orderly Organized Knowledge) is reprinted as an unnumbered fourteenth chapter.

In an excellent opening essay, John M. Strawhorn notes: "In this book, the expression *printed word* is construed very broadly, to include words in any kind of display: paper, microforms, CRT's, plasma panels and so on." His essay is a terse but pointed review of the organization of information transfer, some current trends, factors affecting acceptance of new technologies, and some broad projections for the future.

Provocative essays by Maurice B. Line and P. J. Hills, editor of the volume, explore the printed word from the points of view of a bookperson and an educator. In one of the most elegant metaphors to appear in information science literature, Line suggests: "The printed butterfly will emerge from its electronic chrysalis, but it will also return again to it in due time. The vast majority of documents will thus be stored in electronic (chrysalis) form, but the majority of those used at any given time will be in their printed (butterfly) form."

Two incisive and thorough chapters on official information by Patricia Wright systematically explore the use of old and new technologies for forms, leaflets, and signs. Wright makes acute and useful observations on how technology can hinder or help gathering and dispersion of governmental information.

The Graphic Information Research Unit of the Royal College of Art has done excellent work in recent years in exploring how various display options affect comprehension. Linda Reynolds provides a good essay, "Designing for the New Communications Technology," based on that research.

The review of prospects for electronic journal publishing by Donald W. King is a good overview, especially for beginners. A chapter on Euronet DIANE describes problems in creating an online database capability in the European political environment. Chapters on printing technologies, microforms, and videodiscs cover all major alternatives but suffer from brevity. Two brief but competent speculative essays, which add little, complete the volume.

The work lacks a general index, but the organization of chapters makes this a minor flaw. Use of presumably common British acronyms without explanation, especially in credits and citations, is an irritant for non-U.K. readers.

The work would make an excellent supplementary text for a course on the history of the book. Practitioners in publishing or library and information science will find much of interest.—*Brian Aveney.*

Turnkey Automated Circulation Systems: Aids to Libraries in the Market Place. Edited by Judith Bernstein. Chicago. American Library Assn., 1980. 332p. $10.50.

When my library entered the marketplace for an automated circulation system, I searched the literature for aids. Had I found this book at that time I would have been disappointed. What I would expect from a 332-page book with a subtitle, "Aids to Libraries in the Market Place," would be numerous examples of what had been done

before. I would expect samples of the analyses that other libraries had done to justify entering the marketplace, samples of the RFPs that had been sent to vendors, and samples of the contracts that had been signed. I would like to see a case study (or two) of the complete process of procurement. Admittedly, this expectation is somewhat of an ideal, but these are "aids" that we searched for and that other libraries now ask from us.

What does this book provide? An editorial introduction gives a sense of the difficulties of the marketplace and the frustrations encountered in it. A two-page bibliography gives a reasonable selection of readings to provide a background for decision making. A discussion titled "Hiring a Consultant—Why and How," is a very useful enumeration of details to be considered in the decision to hire a consultant and in the agreement with a consultant. A model request for proposal is a good synthesis of the details to be included in almost every library's RFP and thus provides a starting point for the library new to the marketplace. All of this is what I consider to be the substance of this book, and it ends at page 40. The remaining 292 pages are devoted to the "profiles" of individual libraries which have installed automated circulation systems. The profiles are intended to assist in the identification of libraries to be contacted for further information, but provide little useful information by themselves.

My primary objection to this book is the misleading nature of the citation. One expects more than three hundred pages of "aids" and finds a directory with a forty-page preface. But for the librarian new to the marketplace it may be worth the price.—*Alan E. Hagyard, Yale University Library, New Haven, Connecticut.*

Archives and the Computer, by Michael Cook. London: Butterworths, 1980. 152p. $29.95. LC: 80-41286. ISBN: 0-408-10734-0.

Michael Cook recognizes the special predicament of the archivist whose job consists of trying to satisfy three contradictory needs: (1) the need to arrange and describe archives by their provenance, (2) the need to store them most efficiently by shape and size, and (3) the need to access them to answer inquiries that are mostly subject-oriented. The solution to these conflicting requirements may come from the computer. As Cook says, "The speed and variety of computerized lists and indexes derived from a single data base could solve this problem by producing finding aids in all possible sorts of order."

In a very handsomely produced, sturdily bound book, *Archives and the Computer*, Michael Cook, archivist of the University of Liverpool, reports on various computer systems serving the needs of the archivists. His book starts with a general discussion on the nature of automated systems and their relation to manual ones. This is followed by the description of a select group of archives systems—some still in use, others put to their well-deserved rest after a few years' use. He covers records management systems (i.e., the area of handling current records) and archives management systems (i.e., the handling of noncurrent documents). In the final chapter Cook moves the discussion away from computer processing of traditional, familiar forms of archival material, focusing instead on processing archives that are themselves machine-readable data files. How does the archivist accomplish all of the necessary tasks if the archives are not readable by the human eye? How does he appraise, arrange, describe, and access them?

I like Mr. Cook's cautious and sober attitude. Talking about system design, he remarks, "At this stage decisions will be made which will be irrevocable in practical terms, and may cause much trouble later." About implementation and testing, "computer systems should help people to work more effectively in a more interesting environment; if they fail in this, or appear to fail, there is something wrong, and it would perhaps be better not to introduce the change."

The records management systems he describes are used by British county and city record offices. An interesting feature in one of them, a system called ARMS, is a printout that tabulates for each class of documents the number of requests in a year, per year stored. This printout could be very helpful in modifying established retention periods on the basis of experience.

The following archives systems are described: PROSPEC (adopted by the Public Record Office of London), NARS A-1 (used by the National Archives of the USA), SPINDEX (first used by the National Archives and the National Historical Publications and Records Commission), SELGEM (used by the Archives of the Smithsonian Institution), STAIRS (an IBM system, used, among others, by the House of Lords Record Office in London), PARADIGM (developed and used at the University of Illinois), MISTRAL (used by the National Archives of Ivory Coast), and ARCAIC (used and abandoned by the East Sussex Record Office). Of all these systems, I found the description of SELGEM the most educational. Besides listing the fields making up a computer record, Cook shows an example of an actual record as it appears in the master list, and as it appears in the printed guide to the archives. He also includes an actual segment of the name/subject index.

Although there is a brief mention about the choice between networking versus isolated, separate systems, the book does not speculate about the possibility of a network of many institutions building a common database. Nor does the author discuss the much debated and very timely question of whether archivists could possibly agree on a uniform computer record for the description of manuscripts and archives, similar to the way in which librarians have agreed on using the MARC formats for the description of their materials.

A glossary of technical terms, a "select directory" of archival systems, and a "select bibliography" are useful additions to the main text.

This book is more recommended to the archivist looking for a computer system than for the systems analyst who wants to learn how archives are processed.—*Suzanna Lengyel, Yale University Library, New Haven, Connecticut.*

The Library and Information Manager's Guide to Online Services. Edited by Ryan E. Hoover. White Plains, N.Y.: Knowledge Industry Publications, 1980. 270p. $29.50 hardcover, $24.50 softcover. LC: 80-21602. ISBN: 0-914236-60-1 (hardcover); 0-914236-52-0 (softcover).

Hoover and seven colleagues provide an overview of the main issues and techniques involved in starting and managing an online retrieval service. The emphasis is on a library setting—the implicitly broader focus conveyed by the title is not matched by any specific coverage of, for example, the online search activity of the for-profit information brokers, where funding, staffing, publicizing, and the search process itself are handled differently than in libraries.

The three large, general search services (Lockheed, SDC, and BRS) are used throughout for the descriptions and search examples, and their bibliographic databases inevitably receive the most attention. There is a noticeable slant toward the two agencies with which several of the contributors are or were affiliated—the University of Utah (which doesn't detract from the book's objectivity) and SDC (which does).

The chapters are of uneven quality and scope. Most of the obvious areas are covered—the available search systems and databases; equipment needs; search techniques; managing an online service in a library; training searchers; promoting service; and measurement and evaluation. Taken as a whole, the book is a good state-of-the-art report, even though it is already becoming outdated in terms of industry facts. The numerous charts and tables serve to flesh out the text, but do we really need six photographs of terminals (two of them showing the same searcher at the same terminal, the only difference being that in one there is an onlooker) to illustrate that "some searchers prefer to have the user present"?

Brief chapters on the growing network of online user groups, and on the future of online services (largely derived from Lancaster) end the text, and the book has a serviceable bibliography, glossary, and index.

Six years ago I reviewed one of the first KIPI publications—it was in typescript, comb-bound, a little more than one hundred pages, and it cost $24.50. This is a much better production and, considering inflation since 1975, it represents vastly better value for money. It should serve as a useful handbook for those of us in the field, as well as those just starting, for another

year or two.—*Peter Watson, California State University, Chico.*

Basics of Online Searching, by Charles T. Meadow and Pauline Atherton Cochrane. New York: Wiley, 1981. 245p. $15.95. LC: 80-23050. ISBN: 0-417-05283-3.

The use of online information retrieval services is becoming widespread throughout the information community, whether in traditional libraries or in business, industry, or government offices. The need for trained searchers is evident by looking at the job advertisements and at the quantity of training programs being offered around the country. The programs presented by the Machine-Assisted Reference Section (MARS) of the Reference and Adult Services Division of ALA are always packed. The librarians attending ALA Annual Conferences seem to be hungry for any information available about online information retrieval services. This text fills an obvious need for the professional who attended library school before course offerings in online information retrieval were available. Although online information retrieval is now being taught in most library and information science curriculums, there have been only a few attempts at providing a textbook for beginning students, and none of those has been very successful since the Lancaster and Fayen *Information Retrieval Online* in 1973.

Basics of Online Searching is a text intended "to teach the principles of interactive bibliographic searching . . . to those with little or no prior experience. The major intended audiences are students, working information specialists and librarians, and end users, the people for whom all this searching is done." Because the authors have done an excellent job of targeting their audience and sticking to that target, this text will be useful at the introductory level. The authors cover the elements of interactive searching including the reference interview, Boolean logic, search strategy development, telecommunications and equipment, basic database structure, selective dissemination of information, and how to get help from search-service vendors.

The text is relatively free of jargon and does a good job of defining in context new terms as they appear. The authors begin with basic definitions and a brief overview of the process of interactive searching. The reference interview and search strategy development is covered adequately, first with an introduction and then in a later chapter providing more detailed information. Telecommunications and computer equipment are covered in enough detail for the novice. The next five chapters cover search language, databases, various types of text searching, and how to get on and off the computer. This section of the book uses examples that show the different approaches to the same process on three different systems—BRS, ORBIT, and DIALOG. The authors do not lose sight of their intent to demonstrate the principles of online searching. There is a brief chapter on selective dissemination of information (SDI) and cross-file searching. The chapter explains how SDI is used and gives examples of constructing and saving a search for SDI on each of the three systems. The last chapter of the book, "Search Strategy," is especially good. There seemed to be something beyond the basic elementary information of the preceeding chapters. The authors clearly demonstrate concept development and search strategy formulation.

The authors do an excellent job of integrating the discussion of the three major search service vendors, Lockheed's DIALOG, System Development's ORBIT, and Bibliographic Retrieval Services, Inc. Examples are used from each of the services with a discussion of the differences. The book does clarify the similarity of the services by showing how each function can be accomplished on each system. Searchers using only one system now might use this text to see how easily their knowledge could be transferred to another system.

Problems with the text do not abound, but there are some that should be brought to the attention of the reader. There is a slight problem with the format of the examples. The reviewer found herself searching for the completion of a paragraph of text on a few occasions. The examples are very good and clear; they are simply not separated from the text adequately for easy reading. There were a couple of instances of unnecessary redundancy. There were two separate

discussions, one on truncation and one on searching word fragments, which could have been improved by integration into one section. There was a repetition of "steps in the presearch interview and the online search" in chapter 3 and then again in chapter 12. This is almost a page of steps, which are very good, but a simple reference back to the earlier list would have sufficed. But the biggest problem with the text in the eyes of this reviewer is that of omission. There was no discussion of citation searching, evaluation of search results, and no mention of the various training options available for the novice searcher. This reviewer would like to have seen more information on where to go next as guidance to the novice. The one hundred pages of appendixes seem unnecessary and will soon be out of date. Library school teachers planning to use this as a text would do well to request free, up-to-date materials rather than relying upon the documents in the appendix, which are more than a year old at the time of this writing. Most every book on this topic has made the same mistake of reprinting search-service and database-producer literature.

Overall, however, the authors have succeeded very capably in their intended endeavor "to teach principles, rather than the detailed mechanics of any particular search system." There is a place in the literature for this very basic text, which is well written, uses clear examples, and teaches in an understated way. For those people who are afraid of automation, afraid to touch a computer terminal, and are insecure about their ability to do online searching, this book will relieve most of those fears and insecurities. The authors acknowledge their desire to give simple instructions and offer a chapter called "Assistance" for people who need more help. Novices might assume they could read this book, purchase a terminal, get a password and system manual, and begin searching. As a matter of fact one could do this, but the results would likely be a discredit to the search-service vendor because of a lack of system-specific training on the part of the searcher. Most people, like this reviewer, can conceptualize a new process, but would feel more comfortable with some type of formal hands-on training—even for half a day. There are too many little things that can be an impediment to success.

The reviewer would heartily recommend this book to inexperienced searchers and library school students but would warn the experienced searchers that there is nothing new for them.—*Carolyn M. Gray, Western Illinois University, Macomb.*

Quick*Search Cross-System Database Search Guides. San Jose, Calif.: California Library Authority for Systems and Services, 1980. 21 charts. $75 (CLASS members), $95 (nonmembers). ISBN: 0-938098-00-4.

The CLASS On-Line Reference Service (COLRS) is a cooperative program for public, academic, and special libraries offering training and consultation on almost any aspect of online reference searching through the major commercial vendors of databases. This service is a part of CLASS, the California Library Authority for Systems and Services, and acts as a contact point for searchers and the database industry through vendor-training sessions, database training, and the coordination of large group contracts with DIALOG Information Services and Bibliographic Retrieval Services (BRS). This close relationship to the online industry gives CLASS a unique position from which to supply information on databases from a multiple search-system perspective. The publication of the *Quick*Search Cross-System Database Search Guides* is a natural outgrowth of the COLRS program in training and consulting.

The twenty-one charts in *Quick*Search* show the formats used to search for information in a specific database across the two or three vendors offering the database commercially. The databases were selected as the most commonly searched through the major commercial search services: Bibliographic Retrieval Services, DIALOG Information Services, and System Development Corporation Search Service (SDC). Eight databases in the sciences, eight in the social sciences, and five multidisciplinary files are included in the complete set. Two subsets of the science and multidisciplinary files, and the social science and multidisciplinary files are available for $60 for CLASS members

and $80 for nonmembers. The eight science databases are BIOSIS, CAB Abstracts, COMPENDEX, ENERGYLINE, ENVIROLINE, Food Service & Technology Abstracts, INSPEC, and Oceanic Abstracts. The social science files are ABI/INFORM, ERIC, Exceptional Child Education Resources, Library and Information Science Abstracts, Management Contents, Psychological Abstracts, Social SCISEARCH, and U.S. Political Science Documents. The multidisciplinary databases are Conference Papers Index, Comprehensive Dissertation Index, NTIS, PAIS International, and SSIE Current Research.

The stated purpose of the *Quick*Search Guides* is to aid the experienced searcher who must use databases from more than one search service by showing the formats for each vendor of a database side by side for comparison. Because most searchers tend to use a database on only one system, the *Guides* are really more appropriate to an organization where several searchers may be using the same database through different systems and a "universal" quick-reference chart is needed. Because each *Guide* covers only one database, the level of detail shown is much greater than in the simple-command comparison charts previously published.

The *Guides* are arranged to show particular features of the databases as they are used on the different search systems. The file label used to access the database and those fields that are searched when a term is entered with no restriction (the basic index) are shown at the top of each chart. The fields used in subject searching follow and show the field codes used to restrict subject searches, along with the format used online to enter search terms. The typical fields illustrated are title, subject descriptor, identifier, abstract, and category or section code. These fields vary according to database, but include the majority of subject access points used in the file. The balance of the chart is used to illustrate the field codes and formats used to retrieve information from other access points in the database such as author, journal source, language, publication date, document type, report numbers, or update code. These alternate access points vary widely by database, but each chart provides information on limiting searches by date, language, or update code at a minimum. The *Guides* supply a useful amount of information for the experienced searcher needing a prompt on a form of entry for the fields available in a database, but a good understanding of the search system is required to use them properly.

Given the close contact CLASS has with the database producers and online vendors, it is somewhat surprising to find inaccuracies and some misinterpretation in some of the *Guides*. In the preface, for instance, the editor states, "In many BRS files, UJ and UN are paragraph labels used in addition to DE, MJ, and MN. They are used to indicate major (UJ) or minor (UN) single word descriptors, similar to the DF in DIALOG and IW in ORBIT." It is true that DF is used in DIALOG to indicate a single-word descriptor, but in ORBIT the code is IT. In BRS, UJ and UN mean the term so restricted is an "unbound" part of a multiword descriptor—not a single-word descriptor (see BRS/ERIC database guide, p.14). The use of IW in ORBIT retrieves "unbound" words from the IT field. The most trouble in the charts appears to be in the ORBIT sections. The basic index is misrepresented in several files and the IW field is only irregularly listed, even when it is present in the SDC version of the database. Suggestions on the use of SENSEARCH and STRINGSEARCH are not consistently illustrated for fields that cannot be directly restricted in some databases on ORBIT, such as abstract or supplementary index terms. Many times the suggested search entry would not restrict retrieval to the field indicated on the chart. These inaccuracies would probably not doom an experienced searcher to failure in using a database, but they are annoying and do little to inspire absolute confidence in the information presented.

CLASS is to be complimented on the graphic representations in *Quick*Search* and the heavy stock used for the *Guides* (the paper will probably outlive the information printed on it). Addenda are planned for those databases changed or reloaded since the preparation of *Quick*Search* in October 1980, and a second edition is already under consideration. The *Quick*Search*

Guides are not meant as a replacement for vendor or database documentation and, in fact, are simply repackaged versions of the basic file descriptions available from the online vendors. Considering the price of this publication, organizations would do well to consider investing instead in detailed user guides and updates for their searchers in order to provide the most accurate and current information on databases on a specific system.—*Rod Slade, University of Oregon Library, Eugene.*

Viewdata and Videotext, 1980-81: A Worldwide Report. Transcript of Viewdata '80, First World Conference on Viewdata, Videotex, and Teletext, London, March 26–28, 1980. White Plains, N.Y.: Knowledge Industry Publications, 1980. 623p. $75 softcover. LC: 80-18234. ISBN: 0-914236-77-6.

Videotex 81. Proceedings of Videotex '81 International Conference and Exhibition, May 20–22, 1981, Toronto, Canada. Northwood Hills, Middlesex, U.K.: Online Conferences Ltd., 1981. 470p. $85 softcover.

Viewdata '80 and Videotex '81 were two state-of-the-art conferences for the emerging videotex field. Videotex is the generic name for mass-market, consumer-oriented information retrieval systems of low cost and relative ease of use. Videotex, as a technology, is divided into teletext systems and viewdata systems. Teletext systems sequentially broadcast information using a portion of the television signal. Subscribers, using a special decoder, can select individual pages from the several hundred offered. Viewdata systems, on the other hand, are quite like online information systems except for their use of a television as a display device, their simplicity, and their broader range of transactions and information.

These conference proceedings will be of interest to a limited audience. They are not for the complete beginner. Nor will they provide hours of entertaining reading. Neither meets academic publication criteria; many of the papers are fluff, outlines, or sales pitches. Both proceedings have their share, unfortunately large, of uninformative articles.

But if you are seriously interested in videotex's technology, uses, and social implications, then by all means at least skim the 1981 conference papers. The proceedings *do* describe the state of the art. Moreover, the two proceedings, taken together, show some of the changes in the videotex field in the last year . . . and not only in the spelling of "videotex."

As state of the art, the Viewdata '80 conference proceedings are already superseded. Most of the material has been adequately covered by now in other publications at a much lower cost. There are two exceptions to this, both worth noting. The proceedings has several excellent articles on the Japanese Captain system, the best published on that system. Of additional interest is a report on Control Data Corporation's (CDC) market test of their PLATO educational system. Their report suggests a large consumer market for high-quality educational services even at a relatively high price.

The Videotex '81 conference proceedings are, of course, more current. There are four major topics of interest in the proceedings. Firstly, there are several good presentations on videotex services, such as electronic publishing, retailing, and banking. There is an excellent discussion on what videotex means to newspapers, both in opportunities and threats.

Secondly, and particularly recommended, is a paper by Tydeman and Zwimpfer of the Institute for the Future. The paper outlines some of the social changes and problems that may result from large-scale videotex implementation.

Thirdly, there are updates on the existing videotex technologies and efforts from the French, Japanese, Canadian, and British groups. The British are perhaps the most interesting since they have a year of operational experience with their viewdata system, Prestel. They state that most usage was from the business community, and their reports suggest that services are shifting to attract that market. If this is the case, it is a significant change from the original consumer orientation. There is also a good article on a Prestel information provider's first year. Of additional interest is that Prestel-compatible databases and systems are being constructed in Britain. Thus, people will be

able to access different systems using the same protocol.

Finally, there are numerous fascinating papers on American efforts. The Americans, in contrast to the British, seem very unsettled; there is still a multiplicity of designs. (AT&T's decision on a modified Telidon standard, not reported in the proceedings but a major event of the conference, may ameliorate that.) The papers indicate overall that the "classic" definitions of viewdata and teletext will crumble or will be supplemented in the face of 100-channel, two-way cable systems. Several papers document how these new cable capabilities will provide channels for large amounts of information to be delivered by teletext, viewdata, or hybrid systems. A paper by Simon notes that cable will not only provide large audiences for information services but will also eliminate some of the traditionally defined viewdata functions. For example, people will not buy commodity prices from a viewdata service if that same information is available on a cable channel at a lower price.

Unfortunately, there are some topics missing from the 1981 conference proceedings. Consumer-oriented educational services are mentioned little. System-performance or human-factor considerations are rarely analyzed. There is much discussion of what services should be offered, but there is little discussion of how those services should be offered. No presentation is made on how to design very large databases for ease of use.

Particularly distressing is the relative omission of the word "quality" from the American papers in both proceedings. One cannot expect every home to be wired to access the entire Library of Congress. Nonetheless, one can hope that videotex will not become merely a medium for used-car advertising.—*Mark S. Ackerman, Department of Computer and Information Science, Ohio State University and OCLC, Inc., Columbus.*