

# Book Reviews

**Designing the User Interface, Strategies for Effective Human-Computer Interaction.** Ben Shneiderman. Reading, MA: Addison-Wesley; 1987: 448 pp. ISBN 0-201-16505-8.

This book presents a wide spectrum of pertinent issues in designing, implementing, managing, maintaining, training, and refining the user interface of interactive systems. It offers a strong presentation of the numerous factors involved in developing a system with an effective user interface. The intended audience includes designers, managers, and evaluators of interactive systems. Researchers who are interested in human performance issues relative to interactive systems will also benefit from this book.

The introductory portion provides an appropriate background to interactive interfaces by presenting an overview of human-factor principles in the use of computer and information systems. Guidelines for dialog design, error prevention, data display, and acceptance tests are presented in a concise and informative manner. The author lists the primary goals of workers in human-computer interaction as (1) influencing academic and industrial researchers, (2) providing tools, techniques, and knowledge for commercial system implementors, and (3) raising the consciousness of the general public. A list of potential research directions applying to numerous disciplines including computer science, industrial engineering, psychology, and education are provided.

The second part of the book is devoted to examining the implementation issues of five general interaction styles: menu selection, form fill-in, command language, natural language, and direct manipulation. Advantages, disadvantages, and appropriate usage of each style are discussed. In a menu-selection system, the user chooses an item from a specific list, initiates the action, and then observes the action. Guidelines for menu content and organization, acceptable response times, and selection mechanisms are provided. The form fill-in style implies that the user moves a cursor among fields and enters the needed data. Design issues and guidelines for form fill-in are included.

The third interaction style, command language, provides flexibility and power to the user. It is most commonly used for text editing. Issues such as meaningful name selection, consistent structure, effective abbreviation techniques, and quantity of commands are discussed. The natural-language approach is based on the ability of the computer system to respond to natural-language sentences or phrases. Limitations and possibilities of this approach are presented.

The last interaction style, direct manipulation, suggests a natural representation of the tasks and commands. It implies visibility of the objects and actions. Systems based on the direct manipulation style are generally easy to learn and easy to retain. However, specific hardware such as a graphics display and pointing devices may be needed.

The third part of the book is devoted to numerous issues that impact an interactive system. It includes a discussion of display technologies and their impact on line sharpness, brightness, resolution, and refresh rate. A beneficial treatment of the effect of response time and display rate, including empirical evidence, is presented. Discussion of other issues including system message composition, effective screen color, manuals, and tutorials provides a comprehensive view of the diverse facets of effective interactive system design.

The book concludes with a discussion of testing and evaluation techniques, management issues, and social impact of interactive systems. It includes a comprehensive user questionnaire for evaluating an interactive system.

The author has successfully combined human-interface theory with empirical work. Both a practitioner's summary and a research agenda are included at the end of each major topic. The research agenda presents pertinent areas for further research. In addition, each chapter contains an extensive list of references pertinent to the topic.

This book is clearly written and easy to read. While it includes information relevant to designers, managers, researchers and evaluators of interactive systems, it is especially recommended for the system designer. The comprehensive treatment of the vital design issues regarding human interfaces makes the book worthwhile reading.

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**A Difficult Balance: Editorial Peer Review in Medicine.** Stephen Lock. (The Rock Carling Fellowship, 1985) London: Nuffield Provincial Hospitals Trust, 1985 (Dist. in U.S.A. by ISI Press) 172 pp.

The Rock Carling Fellowship was established in 1962 to support work in the sociological aspects of medicine. Previous productions have addressed priorities, abortion, and communications between physicians and patients, among other topics.

The present volume, written by Stephen Lock who edits the *British Medical Journal*, is an eloquent, literate attempt to describe the peculiar workings of scholarly journal publishing. It is an activity in which many of our readers have been involved—from the point of formal refereeing to the reaction of the reader who wonders about editorial decisions that have allowed a piece of nonsense to be published in a journal that has rejected the results of their own original research.

The process of peer review attempts to ensure the quality of a journal's offerings to a scholarly public. How well this process occurs, though, is a subject of great debate and concern. Lock draws on his substantial experience as an editor of a major medical journal and on research into the sociological aspects of journal production. It is an excellent survey of the significant literature of the field which is enhanced by the author's ability to write serviceable English and to draw meaningful conclusions.

This, like earlier volumes in the Rock Carling Fellowship series, emphasizes the "state-of-the-art" review of the literature. Unlike some earlier productions, this goes beyond the mere cataloging of research to attain the status of a research project itself. Of particular interest is Chapter 5, "Research: a Personal Survey," in which he tests several hypotheses concerning the value of various

forms of gatekeeping on a sample of articles successfully and unsuccessfully submitted to the *British Medical Journal*.

Lock's contribution does suffer in the American market from some of the problems that characterize British efforts, but his well-balanced treatment and the nature of the research effort with which he deals make this volume much more useful than most. Indeed, this stands as an excellent supplement to the recently published *Getting Into Print: The Decision Making Process in Scholarly Publishing* (University of Chicago Press, 1985). It will be accessible to upper-level undergraduates, graduate students, and particularly to scholars who are unsure of why their own research and publishing program is not being recognized by a high acceptance rate in the journals they approach.

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**Macrothesaurus for Information Processing in the Field of Economic and Social Development.** 3rd ed., prepared by Jean Viet. New York: United Nations, Department of International Economic and Social Affairs; 1985: xiv + 347 pp. (U.N. publication sales No. E.85.I.15)

In his chapter on evaluation of thesauri, F. W. Lancaster indicates that these tools may be examined from an information-science point of view—in terms of their formal characteristics—or from a subject point of view—to determine whether they include all requisite terms [1, p. 155]. This review takes the former approach, given the reviewer's lack of expertise in the subject domain of the thesaurus.

The *Macrothesaurus* includes a lengthy introduction detailing its history and noting the roles of the many corporate bodies involved in its development—both within and outside the United Nations—which accounts for the term *Macrothesaurus*, i.e., a tool that integrates the term lists of many specialized agencies. A separate section in the prefatory matter explains the organization of the tool and its use in indexing and information retrieval.

The body of the thesaurus is divided into four sections: Alphabetical Thesaurus (with each term translated into French and Spanish), Descriptor Group Display, Hierarchical Display, and KWOC Index. A serious flaw in the format of the work is the lack of running heads, given users' notorious failure to consult tables of contents and to read prefatory matter explaining the purpose of each section and the complementary relationships among them, as well as the possibility of erroneously assuming, e.g., that the KWOC Index constitutes the primary alphabetic display (given the redundant information contained in it, as noted below).

This reviewer further contends that four sequences in a thesaurus are unnecessary. The alphabetic display and the KWOC display of the *Macrothesaurus* are partially redundant. If, as the preface states, the KWOC Index contains "all the significant words that make up the descriptors," these may be integrated into the alphabetic display by inversion, thus enhancing the entry vocabulary and making consultation of a separate sequence unnecessary.

It is redundant for the KWOC Index to contain the descriptor group codes, as this leads to the possible erroneous assumption that it constitutes the basic display. An additional type of redundancy found in this section is the repetition of single word descriptors under Keyword, especially when the entire display contains only the Keyword, e.g.:

The Descriptor Group and Hierarchical Displays are also redundant to a considerable extent. The inclusion of the "top term" in the alphabetic display, which leads to the hierarchical display, obviates the need for broader/narrower term relationships in the alphabetic portion of the thesaurus.

It has been demonstrated that the most efficient thesaurus structure is one in which only equivalence (synonym) and associative (related term) relationships are included in the alphabetic component of the thesaurus, with each authorized term assigned a unique notation which is expressive of the hierarchy [2]. *Medical Subject Headings* is the best example of such a structure. The *Macrothesaurus* classified its vocabulary with a notation that features a maximum of three levels of breakdown. The full hierarchical display includes as many as six levels—but without notation. Had the thesaurus designers developed a complete notation, the powerful search capability known as *explosion* would have been made possible, in which all of the narrower terms encompassed by a thesaurus term at any level are automatically searched. This would be particularly advantageous in a multilingual environment. The introduction states (p. xi) that the purpose of the detail in the hierarchical chains is "to permit more efficient on-line information retrieval," but without notation, it is necessary to enumerate all the narrower terms, linking them in a search by Boolean OR.

This reviewer also takes issue with the use of the term "hierarchical index" in the introduction (p. xi), as the essence of the definition of *index* is a tool that leads from a *known order* of symbols to an unknown order of information [3]. The classification of the thesaurus terms is unknown to the user; thus one might argue conversely that the "top term" information in the alphabetic display serves as an index to the hierarchical display.

The use of the term "facet number" for subject code on the same page of the introduction is also debatable; a classification scheme may be based on the analysis of facets or aspects of a subject, but a synthesized class number is not a "facet number."

One final terminological point: since the so-called "hierarchical display" is arranged alphabetically by "top term," it is actually an *alphabetico-classed* display; the descriptor groups arranged in logical order exemplify a true hierarchy. The relationship between the two is fuzzy, however. For example, AID IN KIND is a subdivision of DEVELOPMENT AID in the Hierarchical Display, but is placed in a separate class in the Descriptor Groups. This renders it difficult to comprehend the statement in the introduction that the descriptor group system "derives from the vocabulary itself to the extent that it has been . . . shaped by the semantic relationships of the descriptors" (p. xi).

The introduction indicates that this edition contains 1500 additions and 2000 changes. Yet there is no list of these in the thesaurus, and no term-history information is included in the main alphabetic sequence, which will seriously affect those that have indexed and searched from previous editions.

An additional comment worth quoting from the introduction is that the thesaurus is used as "primarily an indexing tool, while its potential for information retrieval is overlooked." In this reviewer's analyses of searches (in a project funded by the National Science Foundation), little use of thesaurus descriptors has been encountered, and one of the explanations proposed has been that many information specialists fail to understand their structure [4]. The production of thesauri with multiple, partially redundant sequences only serves to exacerbate this problem.

Another flaw in the format of the Descriptor Group Section is the failure to provide feature headings for all except the primary and secondary divisions of the classification. For example, we are told that 01.01 represents INTERNATIONAL COOPERATION, but cannot determine the meaning of 01.01.01, even if we flip back to the section entitled "subject category fields," which contains the outline of the classification, as it includes only the first and second

The integration of proper names into the thesaurus is highly commendable, as opposed to the separate maintenance of partially or uncontrolled identifier lists. The *Macrothesaurus* sets a limit of 35 characters on the length of descriptors to accommodate fixed field systems. In light of this, the use of all upper case is unfortunate because of the difficulty of distinguishing acronyms for corporate bodies from topical subjects, e.g., ACAST. Wellisch has demonstrated that semantic information is lost when there is a failure to use both upper- and lower-case type in bibliographic databases [5]. The alphabetic display would also have benefited from additional typographic variation, e.g., for the French and Spanish equivalents of descriptors.

The *Macrothesaurus* represents a gargantuan international effort and is undoubtedly an important subject authority for those working in the fields of economic and social affairs. Its format, however, merits critical examination by information scientists, indexers, and searchers in terms of efficiency, redundancy, and intelligibility. Lancaster, in his new manual on thesaurus design, includes examples from the *UNBIS Thesaurus*, which has the identical structure as the *Macrothesaurus*, merely noting these alternative forms of display [1, pp. 74-81]. In this reviewer's opinion, information scientists should be capable of recommending the *best* structure for thesauri and criticizing those that are not well-designed tools.

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1. Lancaster, F. W. *Vocabulary Control for Information Retrieval*, 2nd ed. Arlington, VA: Information Resources Press; 1986.
2. Weinberg, B. H. "The relationship between term specificity in MESH and Online Postings in MEDLINE." *Bulletin of the Medical Library Association*. 73(4):365-372; 1985.
3. *American National Standard for Library and Information Sciences and Related Publishing Practices-Basic Criteria for Indexes*. New York: American National Standards Institute; 1984. (ANSI Z39.4-1984).
4. Cunningham, J.; Weinberg, B. H. "Search Strategy in the Field of Engineering: A Statistical Approach." *National Online Meeting Proceedings*. 117-123, 1985.
5. Wellisch, H. H. "Capital Games: The problem of compatibility of bibliographic citations in the databases and printed publications." *Database*. 6(1):54-57; 1983.

This is a nontechnical book on a highly technical subject. The targeted audience is the business computer user who may need to make decisions on local area networks (LAN), or simply needs a

On the down side, by the middle of chapter three, the reader will find himself swimming in a sea of acronyms. Upon reaching chapter six these waters are deep indeed, although they recede thereafter. This is to some extent unavoidable in an area where condensing word strings to character strings is ubiquitous, but it is annoying to have to leaf backwards to rediscover meanings as often as required here. In general, however, the text is quite clear.

Most libraries will want this book. It will be useful in public libraries because of its nontechnical nature, and in academic and special libraries because those whose expertise is in other areas still need a basic understanding of telecommunications in today's working environment.

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**Libraries and Information Science in the Electronic Age.** Edited by Hendrik Edelman. Philadelphia: ISI Press, 1986. Price: \$39.95. ISBN 0-89495-058-4. LC 86-3064.

This is the first volume to be published in the Samuel Lazerow Memorial Lecture Series which is essentially a festschrift to a distinguished librarian who served the National Library of Agriculture, the National Library of Medicine, the Library of Congress and upon his retirement from government service joined the Institute for Scientific Information. In short, Lazerow had a distinguished career and served as a seminal influence on librarianship. Therefore, it is quite fitting that this initial volume be a collection of lectures given by distinguished information professionals who knew or were in some manner colleagues of Samuel Lazerow. This reviewer is struck by the high quality uniformly through the lectures which comprise the first twelve given from 1983 to 1985 at seven library and information science schools in the U.S. The twelve lecturers and their topics were (in order of the lectures): Frederick G. Kilgour, Public Policy and International Networks; Carlos A. Cuadra, The Coming Era of Local Electronic Libraries; Richard De Gennaro, Shifting Gears: Information Technology and the Academic Library; Herbert B. Landau, The Challenge of the Emerging Information Society: Are We Ready?; William O. Baker, Modern Techniques Linking Knowledge to Action; Toni Carbo Bearman, Learning to Learn: The Role of Libraries and Information in Improving the Quality of Life; Lillian M. Bradshaw, Alternative Funding for Public Libraries: Public-Private Partnerships; Allen Kent, Let the Chips Fall Where They May; Lester Asheim, Means and Ends in Librarianship; Carol A. Nemeyer, Library of Congress Services to the Nation; William Paisley, The Convergence of Communication and Information Science; and Glenn C. Bacon, Forces Shaping the New Information Paradigm. The common theme which runs through the lectures is the advance of the electronic or information age but with differing perspectives from the special viewpoints of these lecturers who

cross the boundaries of information and library science disciplines. Cuadra discusses "downloading" and the real problems publishers perceive, urging creative solutions. De Gennaro, from the viewpoint of a distinguished academic librarian, urges the theme of thinking big but quoting the right price. Asheim reaffirms the belief that libraries are agencies of communication while Kent continues to question whether librarians are really ready and able to accept new technologies as fast as they are appearing to be ready for practical application. This reviewer found much to agree with in Kent's lecture from twenty years on the front lines as a pioneer proselytizer and consultant in library automation and computer technologies. And, certainly, if more academic librarians would believe as De Gennaro, perhaps our large research libraries might be the stronger for it today. For both newcomers to the information professions and old timers alike this book is very informative, puts in one place considerable thoughts of a dozen luminaries in the field and on top of that is written in a uniformly oral style fitting the fact that these were lectures given before live audiences. The book is like a front row seat at all of these lectures. Every library and information science collection should acquire this volume and hopefully as these lectures continue, the subsequent volumes will be much looked forward to as well. Those individuals who collect in library and information science trends, philosophy and futures should seriously consider this for their collections. Finally, to complement all of this the book is attractively laid out, printed on quality paper with a truly eye catching red cover simply designed to make a reader pull it from the shelves, particularly if surrounded by less colorful covered materials. In sum, the ideas presented in this book are worth the \$39.95.

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**Information Online 86: Proceedings of the First Australian Online Information Conference.** Library Association of Australia, 1986. 481 pp.

All 41 of the papers presented at the first Australian Online Conference are included in this proceedings volume. As with any proceedings, the length and quality of papers varies, but taken as a whole this is a useful addition to the proceedings of the two US and the London ("International") online meetings. In addition, it provides a summary of the Australian online scene.

Papers in the volume are arranged by session, and therefore, by broad topic. Between two and four papers are included under the 12 topics: Electronic Publishing, Marketing Online Services, Training and Education, Database Critiques, Business and Professional Access to Online Information, Business Databases, Health and Medicine Databases, Videotex, Legal Databases, Database Developments, Searching Techniques, and Microcomputer Developments. In addition, there is a conference opening paper, a keynote address, and a concluding address. Most of the authors are Australian librarians or other Australian information professionals, with the exception of the keynote paper by Roger Summit, President of DIALOG Information Services, Inc.

The several papers that describe current (as of January 1986) databases in a particular subject are the most likely to be out-of-date and of the least continuing interest. A majority of the papers in this volume address larger issues, however, and will retain value

over time. These papers include many that have universal interest, as well as those that describe situations specific to Australia.

Several papers provide good overviews of and insights into universal online issues. Carmel McGuire presents a concise and informative review of research on the use of full text databases. Derek Wiblin summarizes experiments in using simulations or emulations for online training in the U.K., US, and Australia. Tony Smithies and Johanna Plante provide a plan for integrating online searching into the electronic office. Johanna Richardson briefly reviews the literature on command language development. Dagmar Schmidmaier reports on an experiment to test the success and reactions of academic end-users to online searching.

What makes the Australian Online 86 proceedings unique are the papers that present information about online searching in Australia. There are interesting papers on: Videotex in Australia (healthier than in the US), export opportunities for Australian online information (expect to see more Australian databases and systems worldwide), training online users at the National Library of Australia, and Australia's role in telecommunications development.

Two papers provide an excellent and fascinating overview of the current status of the Australian online community. "The Typical Online Searcher in Australia," by Alex Byrne and "The Development of Australian Databases," by Diana Killen both draw on information gathered for the compilation of the *Directory of Online Search Services in Australia* (Adelaide: AUSLIB Press, 1984, 2nd. ed. 1986).

Byrne compiled personal information about online searchers to draw a profile of the "typical" Australian searcher. By presenting data analyzing searcher characteristics, Byrne concludes that the typical online searcher in Australia is "very likely to be a woman and probably under 36 years old. She was almost certainly a qualified librarian with considerable experience. She probably also had a degree in a subject other than librarianship which was most likely to be humanities or social science." Most work in special libraries in the major cities and are usually the only searcher in their organization. DIALOG is used by 87% of Australian searchers, followed by ORBIT (53%), AUSINET (52%), and MEDLINE (36%).

Killen, of the Australian Database Development Association, describes the other part of the Australian online community, the database producers and online vendors. The 1984 edition of the Directory listed 101 Australian databases that were publicly available. The new edition is expected to list between 150 and 200, created by over 70 database producers. Both private and public sector producers are included. Australian databases are of all types: bibliographic, full text, numeric, and factual. Only about half have printed equivalents. They are on all topics, with the strongest showing in business and legal subjects.

Online vendors in Australia are also increasing in numbers; the new edition shows an increase of at least 14 vendors. The cost of accessing online systems has increased at the same time.

"Futures of the Online Industry in Australia," by Ian McCallum, President of the Library Association of Australia, is the concluding address. It summarizes the Australian online scene from its beginnings in 1977. In that time online searching has been introduced in 10% of Australian libraries. McCallum predicts that number will continue to increase, especially if librarians develop services to meet the future needs of Australia's population. The role of the librarian is expected to continue to be an important one in database access.

Proceedings of the Second Australian Online Information Conference (1987) will be available this year.

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## Items Received but not Reviewed: July 1986–June 1987

*Ada: Managing the Transition.* Peter J. L. Wallis, ed. New York: Cambridge University Press, 1986. 280 pp. \$39.50 hardcover. (ISBN 0-521-33091-2).

*Adult Education, Literacy, and Libraries.* Darlene E. Weingand, ed. Champaign: University of Illinois Press, 1986. 345 pp. \$8.00 soft-cover. (ISSN 0024-2594).

*Advances in Librarianship, Volume 14.* Wesley Simonton, ed. Orlando: Academic Press, 1986. 320 pp. \$37.50 hardcover. (ISBN 0-12-024614-7).

*The ALA Yearbook of Library and Information Services: A review of library events 1984.* Robert Wedgeworth, ed. Chicago: American Library Association, 1985. 393 pp. \$65.00 hardcover. (ISBN 0-8389-0434-3; ISSN 0740-042X).

*Alternative Library Literature, 1984/1985: A Biennial Anthology.* Sanford Berman and James P. Danky, eds. Jefferson, NC: McFarland & Company, Inc., 1986. 247 pp. \$35.00 soft-cover. (ISBN 0-89950-234-2).

*An Insider's Guide for Medical Authors & Editors.* Peter Morgan. Philadelphia: ISI Press, 1986. 111 pp. \$14.95 soft-cover; \$21.95 hardcover. (ISBN 0-89495-076-2).

*Annual Review of Information Science and Technology, Volume 21.* Martha E. Williams, ed. White Plains, NY: Knowledge Industry Publications, Inc., 1986. 432 pp. \$52.50 hardcover. (ISBN 0-86729-209-1; ISSN 0066-4200).

*Appraising the Records of Modern Science and Technology: A Guide.* Joan K. Haas, Helen Willa Samuels, and Barbara Trippel Simmons. Cambridge, Mass.: MIT, 1985. 96 pp. \$9.00 soft-cover.

*BASIC: Programming Fundamentals and Applications.* Robert Spear. Columbus: Merrill Publishing Company, 1987. 367 pp. \$24.95 soft-cover. (ISBN 0-675-20553-0).

*The Bottom Line: A Financial Magazine for Librarians.* Betty J. Turock, ed. New York: Neal-Schuman Publishers, Inc., 1986. 52 pp. \$36.00 individuals; \$45.00 institutions. (ISSN 0888-045X).

*Business Software Directory.* Ruth K. Koolish, ed. Glenview, Illinois: Information Sources, Inc., 1986. 2258 pp. \$175.00 soft-cover, volumes 1 and 2. (ISBN 0-943906-4; ISSN 0887-9478).

*Classification Schedules As Subject Enhancement In Online Catalogs.* Carol A. Mandel. Washington, D.C.: Council On Library Resources, Inc., 1986. 24 pp. Free.

*Computer Basics For Human Resource Professionals.* James Hall-Sheehy. New York: John Wiley & Sons, 1986. 245 pp. \$24.95 hardcover. (ISBN 0-471-84002-5).

*Computer Organization.* Michael Andrews. Rockville: Computer Science Press, Inc., 1987. 556 pp. \$37.95 hardcover. (ISBN 0-88175-114-6).

*Computer Systems for Process Control.* Reinhold Guth. New York: Plenum Press, 1986. 346 pp. \$59.50 hardcover. (ISBN 0-306-42386-3).

*Computers in Medicine.* Michael Anbar, ed. Rockville: Computer Science Press, Inc., 1987. 314 pp. \$29.95 hardcover. (ISBN 0-88175-080-8).

*Contemporary Classics in Clinical Medicine.* James T. Barrett, ed. Philadelphia: ISI Press, 1968. 390 pp. \$39.95 hardcover. (ISBN 0-89495-054-1).

*Contemporary Classics in Plant, Animal, and Environmental Sciences.* James T. Barrett. Philadelphia, PA: ISI Press, 1986. 371 pp. \$39.95 hardcover. (ISBN 0-89495-066-5).

*Contemporary Classics in the Life Sciences Volume 1: Cell Biology.* James T. Barrett, ed. Philadelphia: ISI Press, 1986. 368 pp. \$39.95 hardcover. (ISBN 0-89495-053-3).

*Contemporary Classics in the Life Sciences Volume 2: The Molecules of Life.* James T. Barrett, ed. Philadelphia: ISI Press, 1986. 282 pp. (ISBN 0-89495-075-4).

*Digital Phase Modulation.* John B. Anderson, Tor Aulin, and Carl-Erik Sundberg. New York: Plenum Press, 1986. 504 pp. \$65.00 hardcover. (ISBN 0-306-42195-X).

*Directory of Libraries and Information Centers of the Academies of Sciences of Socialist Countries.* V. A. Filov, ed. Moscow: Nauka Publishers, 1986. 120 pp.

*Directory of Online Databases, Volume 8, Number 1.* Cuadra/Elsevier. New York: Cuadra/Elsevier, 1987. 552 pp. \$56.00 soft-cover. (ISSN 0193-6840).

*Encyclopedia of Information Systems and Services, seventh edition.* Amy Lucas and Kathleen Young Marcaccio, eds. Detroit, Michigan: Gale Research Company, 1987. 3 volumes, 2218 pp. \$360.00 hardcover. (ISBN 0-8103-2492-X; ISSN 0734-9068).

*Executing Temporal Logic Programs.* Ben C. Moszkowski. New York: Cambridge University Press, 1986. 125 pp. \$14.95 soft-cover. (ISBN 0-521-31099-7).

*Fees for Library Service: Current Practice & Future Policy.* Arthur Curley, ed. New York: Neal-Schuman Publishers, Inc., 1986. 61 pp. \$14.95 soft-cover. (ISBN 1-55570-000-4).

*The First Arab Bibliography: Fihrist al-'Ulum.* Hans H. Wellisch. Champaign: Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign, 1986. 42 pp. \$3.00 soft-cover. (ISSN 0276-1769).

*Foundations of Business Telecommunications Management.* Kenneth C. Grover. New York: Plenum Press, 1986. 196 pp. \$18.95 soft-cover. (ISBN 0-306-42249-2).

*Free Resource Builder for Librarians and Teachers.* Carol Smallwood. Jefferson, NC: McFarland & Company, Inc., 1986. 319 pp. \$15.95 soft-cover. (ISBN 0-89950-221-0).

*Ghostwriting and Other Essays.* Eugene Garfield. Philadelphia: ISI Press, 1986. 540 pp. (ISBN 0-89495-057-6).

*Information Behaviour: A Multidisciplinary List of References.* Mairead Browne. Lindfield, NSW, Australia: School of Library and Information Studies, Kuring-gai College of Advanced Education, 1985. 117 pp. (ISBN 0-909177-53-8).

*Information Enterprises in Australia: A First Profile.* Mairead Browne. Lindfield, NSW, Australia: School of Library and Information Studies, Kuring-gai College of Advanced Education, 1985. 136 pp. \$16.00 soft-cover. (ISBN 0-909177-52).

*Introduction to Higher Order Categorical Logic.* J. Lambek and P. J. Scott. New York: Cambridge University Press, 1986. 293 pp. \$49.95 hardcover. (ISBN 0-521-24665-2).

*Libraries in Prisons: A Blending of Institutions.* William J. Coyle. New York: Greenwood Press, 1987. 141 pp. \$29.95 hardcover. (ISBN 0-313-24769-2).

*Library and Reference Facilities in the Area of the District of Columbia*, 12th edition. Margaret S. Jennings, ed. White Plains, NY: Knowledge Industry Publications, Inc., 1986. 309 pp. \$43.00 soft-cover. (ISBN 0-86729-151-6; ISSN 0191-2798).

*Library Hi Tech Bibliography, Volume 1.* C. Edward Wall, ed. Ann Arbor: Pierian Press, 1986. 190 pp. \$39.50 soft-cover. (ISBN 0-87650-219-2).

*Library Instruction: A Bibliography, 1975 Through 1985.* Tian-Chu Shih. Jefferson, NC: McFarland & Company, Inc., 1986. 112 pp. \$14.95 soft-cover. (ISBN 0-89950-236-9).

*Numerical Derivatives and Nonlinear Analysis.* Harriet Kagiwada, Robert Kalaba, Nima Rasakhoo, and Karl Spingarn. New York: Plenum Press, 1986. 201 pp. \$35.00 hardcover. (ISBN 0-306-42178-X).

*Organizing Nonprint Materials*, second edition. Jay E. Daily. New York: Marcel Dekker, Inc., 1986. 301 pp. \$49.75 hardcover. (ISBN 0-8247-7504-X).

*Parallel Processing Techniques For Simulation.* M. G. Singh, A. Y. Allidina, B. K. Daniels, eds. New York: Plenum Press, 1986. 301 pp. \$49.50 hardcover. (ISBN 0-306-42409-6).

*Planning for the Archival Profession: A Report of the SAA Task Force on Goals and Priorities.* Society of American Archivists. Chicago: Society of American Archivists, 1986. 42 pp.

*Privacy, Secrecy, and National Information Policy.* Robert H. Burger, ed. Champaign, IL: University of Illinois Press, 1986. 182 pp. \$8.00 soft-cover. (ISSN 0024-2594).

*Progress in Communication Sciences, Volume VIII.* Brenda Derwin and Melvin J. Voigt, eds. Norwood, NJ: Ablex Publishing

Corporation, 1987. 306 pp. \$45.00 hardcover; \$29.50 soft-cover. (ISBN 0-89391-392-8).

*Selection of Library Materials in the Humanities, Social Sciences, and Sciences.* Patricia A. McClung, ed. Chicago: American Library Association, 1985. 405 pp. \$49.00 hardcover. (ISBN 0-8389-3305-X).

*The Self-Help Sourcebook: Finding and Forming Mutual Aid Self-Help Groups.* Edward J. Madara and Abigail Meese, eds. Denville, NJ: Saint Clares-Riverside Medical Center, 1986. 120 pp. \$8.00 soft-cover. (ISSN 8756-1425).

*Smart Modems for Personal Computer Communications.* William Saffady. Westport, CT: Meckler Publishing, 1986. 84 pp. \$16.95 soft-cover. (ISBN 0-88736-081-5).

*User Charge Estimation in Numeric Online Databases: A Methodology.* Kalervo Jarvelin. Tampere, Finland: University of Tampere, 1986. (ISBN 951-44-2014-4; ISSN 0496-7909).

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