computer science areas.—*Audrey N. Grosch, University of Minnesota, Minneapolis.*

Current Research on Scientific and Technical Information Transfer. Abstracts and Full Text of Papers Delivered at Three 1976 Seminars Sponsored by the National Science Foundation, Division of Science Information. A Micropapers Edition. New York, Jeffrey Norton Publishers, 1977. 24p. + 7 microfiche in pocket. $12.95. LC 77-9216. ISBN 0-88432-007-3.

This publication contains the proceedings of three seminars organized toward the end of 1976 by the Division of Science Information of the National Science Foundation. The seminars were intended to make known the results of twenty-one research projects on scientific and technical information and to provide a forum for an exchange of ideas between the original investigators and the seminars' participants.

The first one, "Alternatives to Traditional Information Transfer Mechanisms," reported results from nine projects that "investigated ways of improving electronic storage, publication formats, and dissemination methods." Included are reports relating to SCATT, IEEE publishing experiments, the northern California public library DIALOG use project, and various other studies of modes of information dissemination.

The second seminar, "The Use of Scientific and Technical Information among Scientists and Engineers," included seven presentations on formal and informal communication patterns among scientists and engineers.

The third seminar, "Planning Data for STI Managers," provided findings from five projects and analyzed the impacts of selected trends in U.S. scientific and technical communication activities, including a forecast of the scientific journal in the year 2000. While a number of the studies have important implications for academic librarians, not least because scientific and technical acquisitions are swallowing an increasing portion of the materials budget, the emphasis is on improved productivity and efficiency of industrial information systems.

The format is also worthy of comment; a "Micropapers Edition," it consists of ten pages of introduction and contents, fourteen pages of abstracts, and seven microfiche (in a back pocket and of good quality) containing the full text of twenty of the reports (one being unavailable for inclusion). Of the abstracts, seven are reasonably informative of the results, while thirteen are descriptive only; perhaps predictably, there is unevenness in content and length of these author-produced abstracts. The presswork is uneven; the hard binding is sturdy and attractive. The running title on the fiche headers omits the first word of the actual title, which may cause some cataloging and public service furor should the fiche get separated from the book. Each fiche header gives the titles of its respective papers and the row on the fiche where each begins; but browsing among the papers takes a bit of doing, since no identifying headings appeared on the typed manuscript pages.

And the price: Is $12.95 right for twenty-four pages plus seven fiche where the content is a gift of and paid for by a government agency? Perhaps allocation toward publishing costs of a small part of the original twenty-one-project research investment would have really borne out NSF's announced "policy to facilitate timely and broad dissemination of research results."— *Irma Y. Johnson, Massachusetts Institute of Technology, Cambridge.*
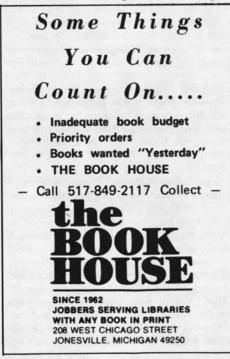
Houghton, Bernard, and Convey, John. *On-Line Information Retrieval Systems: An Introductory Manual to Principles and Practice.* London: Clive Bingley; Hamden, Conn.: Linnet Books, 1977. 160p. $10. LC 77-21858. ISBN 0-208-01660-0.

As in North America, library schools in Britain are now developing courses in on-line bibliographic searching, and also as in North America, some of the first generation of pedagogical material is finding its way rapidly into print. The present work is derived from courses taught by the authors at the Liverpool Polytechnic library school and is essentially aimed at the British market.

Part I (about forty pages) has four chapters sketching in the background and development of on-line systems, the fundamental techniques of automated searching,

and some present and projected impacts upon librarianship of on-line methods of reference service.

Part II (the remaining hundred pages of text) reproduces the laboratory exercises used in teaching practical search skills. A feature of particular interest to the teacher or librarian specializing in this area is that five systems are covered: As long as this reflects classroom exposure to multiple systems (as it apparently does here) and not the substitution of comparative-theoretic study for actual hands-on training, it is to be welcomed, for it both widens the knowledge and sharpens the discrimination of the student.

The systems are discussed in two groups: first, Lockheed's DIALOG and the European Space Agency's RECON—these are similar in being direct descendants of the original Lockheed RECON system; and, second, SDC's ORBIT, NLM's ELHILL, and the British Library's recent crucial effort, BLAISE (British Library Automated Information Service). However, all the BLAISE examples are drawn from its first on-line operation, i.e., MEDLINE using ELHILL III C and, apart from the log-on

procedures, are combined with the NLM MEDLINE examples.

The book contains a fair number of incomplete or misleading statements, especially in Part I. "Display terminals normally operate at 30 cps" (p.16). "The costs involved in on-line access to bibliographical data-bases can be divided into the capital expenditure of acquiring the terminal, and the actual costs of searching" (p.30). There are also frequent careless errors with reference to U.S. agency, place, and personal names, and the authors overindulge that fatal tendency to present sample searches on the topic of computerized information retrieval systems. Somehow, the points always come across more clearly when they use examples like "Shrimp Fishing" or "Hypoglycemia" or "Disadvantaged Youth."

I doubt that this work could serve its primary purpose, i.e., as a textbook, in the U.S., but it may be of interest to specialists in, and teachers of, on-line systems for its comparative approach.—*Peter G. Watson, California State University, Chico.*

Running Out of Space—What Are the Alternatives? Gloria Novak, editor. Proceedings of the Preconference, June 1975, San Francisco. Sponsored by the Buildings for College and University Libraries Committee, Buildings and Equipment Section of the Library Administration Division. Chicago: American Library Assn., 1978. 160p. $14. LC 78-1796. ISBN 0-8389-3215-0.

Conference proceedings, unless they are drastically edited for publication in book form, usually come out something like minutes of a meeting—not very good reading. This volume is no exception, especially in records of discussion at the end of each series of speakers. Although the presentations by the speakers are reasonably well organized, discussions are often recorded as disjointed comments made by a mixture of program speakers and conference attendees. The latter are sometimes identified only by surname.

Looking at the substance rather than the form of this volume, the following alternatives to running out of space are examined: (1) Book storage (at Harvard and University of Washington); (2) microforms; (3) compact