the enlightened librarian to stop thinking only in compartmentalized fashion and to start thinking on a higher plane of abstraction where connections between seemingly diverse phenomena can be recognized. Enlightened librarians will no longer document isolated behaviors as an end in themselves but will now look for research opportunities that will advance theory.

Ironically, Poole hopes to introduce the reader to his method of theorizing from a reworking of findings from the use studies he condemns. Documenting and discussing virtually every procedural option, marching the reader through the weeding out of this or that type of study, Poole presents as complete a baring of his thought processes and as extended a treatment of the sources for his ideas as the most critical reader could ever want. Poole's eventual procedure was to write a summary of each study in his sample. He indicated which "abstract information use concepts the data seemed to embody." He then works up a formal proposition in sentence form. A summary might mention: "Low use of a card catalog was due to the difficulty experienced by patrons in getting to the library from their offices." The conceptualized propositional statement might be: "Information channel use is an inverse function of perceived cost." While the working librarian might find this transformation a bit strained at first glance, Poole shows that when a seemingly different incident is subjected to this same treatment, a higher relationship can be discovered between the two incidents. An example might be the findings of a study that shows that less experienced scientists prefer simpler indexes, even when more complicated indexes might actually cover more material. Here the enlightened librarian can see that an index, too, can be an "information channel," and that those channels that are difficult to use (have a "perceived high cost") will see less use (an inverse function). Poole works through eleven examples and goes on to provide a good deal of tabular material on the frequency of some concepts and propositional statements. He then examines those that are frequent enough and are

May 1986

sufficiently well documented for possible "theoretical import." Poole then outlines his options for a resulting "middle ground" theory: least effort, pain avoidance, and combination least effort/pain avoidance. While it is arguable that these theories are testable and grounded in fact, it is not clear that the librarian portion of information science will refocus their working lives and research efforts around them. Moreover it seems unlikely that librarians will gain the respect of chemists or physicists in announcing that these theories formed some of the basis of information science. (I do not doubt that a sociologist might be impressed). Of course Poole is only working up the theory that can be specifically based on his sample of articles, but these meager results seem so obvious and so above "middle" ground in terms of generality as to leave the reader feeling unrewarded for his or her considerable efforts in making it to page 89 to arrive at these conclusions. Indeed in this booklength version of what might very well be a dissertation with an important message about seeing the forest, not just the trees, most readers will probably get prematurely tired of chopping all that wood. Or, in Poole's terms, use of this information channel (by working librarians at least) will be inversely proportional to its cost in pain. Of course exceptionally devoted information thinkers like Poole might well reply with yet another "middle range" theory: "No pain, no gain."-Tony Stankus, Science Library, College of the Holy Cross, Worcester, Massachussets.

Haas, Joan K., Helen Willa Samuels, and Barbara Trippel Simmons. Appraising the Records of Modern Science and Technology: A Guide. Cambridge, Mass.: MIT, 1985. 96p. \$9 (\$7 to SAA members). (Dist. by the Society of American Archivists.)

For archivists, the concept of documenting a discipline is a vastly different problem today than it was a hundred years ago. The volume of material at hand is, for once, masses more than is necessary rather than less; the disciplines to be documented have changed as well. The fact that archivists are thinking in terms of



"But thanks to the ISI® Grant Program, we can afford the big library coverage and the currency of the Science Citation Index[®], the Social Sciences Citation Index[®], and the Arts & Humanities Citation Index[™]."

For over ten years, the ISI Grant Program has been helping "small" libraries just like yours purchase ISI's major indexes at significant discounts. Today, libraries at California State College at Chico, Massachusetts General Hospital, Middlebury College, the Minneapolis Public Library, Portsmouth Polytechnic in England, and Mexico's Universidad Nacional Autonoma de Mexico are just a few of the institutions that own ISI indexes as a direct result of these discounts. Thanks to the ISI Grant Program, these libraries can now afford the thorough, precise literature search capabilities of the Science Citation Index, the Social Sciences Citation Index, and the Arts & Humanities Citation Index.

Isn't it time *your* library discovered the ISI Grant Program? To find out how your library can qualify, just call our Customer Services Department at 800-523-1850, extension 1371. In Pennsylvania, call collect 215-386-0100, extension 1371. We'll send you a free, no-obligation evaluation form that will help us determine your library's eligibility.

@1985 ISI

Customer Services Department, 3501 Market Street, Philadelphia, PA 19104 U.S.A. Telephone: (215)386-0100, ext. 1371, Cable: SCINFO, Telex: 84-5305 "documentation strategies" reflects the new concern. As is now apparent, in order to develop even documentation of a subject, the archivist needs to take a hand in the creation, selection, and disposition of the records.

This work follows on the heels of Understanding Progress as Process, the final report of JCAST, the Joint Committee on the Archives of Science and Technology, published in 1983. Recognizing the new and powerful role of science and technology in modern society, JCAST evaluated the state of the corresponding historical documentation. The upshot of the report was that these areas were not being adequately documented and, thus, the committee recommended recourse for reconstructing the information. Appraising the Records of Modern Science and Technology: A Guide is in effect a response to the JCAST report, offering techniques to improve deficient archival skills. The particular tool that is treated in this volume is that archival function upon which all others are based: appraisal. Facility with it provides the framework for deciding whether to acquire a collection or not, how to process the materials and for records managers, assistance with setting retention guidelines.

The authors certainly know whereof they speak. Helen Samuels was a member of the original JCAST team; she and her colleagues Haas and Simmons partially constitute the archives staff at the Massachusetts Institute of Technology, a major scientific and technical university. From that base, they carried out research for the Guide, consulting with members of the scientific, engineering, and archival professions. While Haas and the others readily admit their primary experience is with academic archives, they have tested the Guide in such a way as to provide a resource that has applicability in government and industry archives as well.

The Guide is intended for use by archivists and is based upon traditional archival principles and practices. With that as a framework, the authors identified the component activities of science and technology and described their processes. The authors theorize that they will "demystify" the subject if they are able to describe

it, although they admit that the process is "rarely neat, orderly and predictable." The Guide describes, for example, the concept of research and development, what activities compose this, and what records are generated from it. The other areas similarly treated are personal and professional activities, the administration of research and development, and the dissemination of information. By way of explaining the absence of precise appraisal guidelines, the authors remark that [although] "we may long for absolute and easy answers in appraisal . . . there are none because appraisal is carried out in specific institutional settings where space, staff and resources and particular subject interests temper all decisions."

One of the successes of the Guide, as well as the significance of "documentation strategies" for other subjects is the degree to which original records are perceived as a part of a larger whole. This broad approach requires the archivist to consider all formats of information available (artifact, papers, published material, oral or audiovisual) when deciding what to retain. A particular strength of this guide is its capacity to suggest when the published and thus more readily obtainable material is sufficient, to recommend when only the original documents will do, to specify when preserving a scientific instrument would be helpful, and to outline when the archivist must actually create a record in order to complete the documentation. Of course the net result of this is improved documentation for all purposes.

Although the authors state that the *Guide* is only a starting point, it is indeed a very important starting point. It broadens the technical literature for archivists, and it reminds us of a collecting responsibility we have for science and technology. Finally, the *Guide* encourages archivists to work in consort with librarians and museum curators. If we view our responsibility as a joint one, in the long run the past will be much more soundly documented.

The attractively designed volume is illustrated and has a short bibliography at the end. In addition to its full index, the *Guide* also contains a comprehensive and

BETTER COMMUNICATION... THE DREAM LIVES ON

Since that particular day in March, 1876, when Mr. Bell used his new invention to call for his assistant, information management hasn't been the same.

Today's information manager is a communications specialist. And when you provide information on demand, you demand support from people who pursue excellence as avidly as Mr. Bell.

EBSCO, for its part, has explored the application of international telecommunications to the world of serials. And put people with experience at the other end of the line.

For contemporary subscription services that reach the highest levels of accomplishment, communicate with EBSCO.



P.O. Box 1943

Birmingham, Alabama 35201

205-991-1182

useful list of discipline centers. Although they are primarily in the science and engineering fields, the centers are fine examples of the success and logic of "documentation strategies."—*Elizabeth C. Stewart*, *Folsom Library, Rensselaer Polytechnic Institute, Troy, New York.*

Neway, Julie M. Information Specialist as Team Player in the Research Process. Westport, Conn.: Greenwood, 1985. 194p. (New Directions in Librarianship, No.9). \$29.95. LC 85-5488. ISBN 0-313-24508-8.

Using a case study approach, Julie Neway examines information services established in nonlibrary environments and serving staffs from such diverse fields as business, the social sciences, and both the pure and applied sciences. Under the auspices of a variety of funding sources, information services were tailored to meet the special needs of the target groups and were determined by direct interviews and other forms of information-need assessment. Quite frequently services included SDI, database searching, and document delivery.

The author, an advocate for proactive librarianship, provides a rough methodological framework for service development and implementation. She believes that establishment of such services may be crucial to the survival of this profession. In essence, Neway argues that information specialists, i.e., librarians, be attached to research teams in order to improve their individual or collective performance.

Significant portions of the monograph are based upon the author's doctoral dissertation (University of Illinois at Urbana-Champaign, 1982). As such, the narrative is heavily footnoted, reflecting the extensive literature review common to the medium. The book is organized into eight chapters with accompanying index and bibliography. The majority of the text is devoted to histories of specific services. The length of these descriptions varies greatly. Most noteworthy is the review of Neway's own experience with the Department of Microbiology at the University of Illinois at Urbana-Champaign. For roughly one year in the early 1980s, the author assessed the impact of an information scientist's presence as a member of the research team. The study included a user evaluation of provided services. Use of a control group allowed the author to determine changes in information use behavior.

Undoubtedly aided by her background in biology, Neway became well integrated into the scientists' environment, attending weekly lab meetings, assessing individual information requirements, evaluating computer-based literature searches, and the like. The service required nearly twenty hours per week in order to fulfill the information requirements of approximately forty scientists. Nearly four hundred information requests resulted in about twenty-five hundred documents delivered at an average cost of \$5, which included the salary of the information specialist. The information-use habits of the control and experimental groups manifest some interesting contrasts. Neway observes that the scientists favored with the service spent less time skimming or browsing in favor of reading requested materials in depth. Also, this same group apparently spent less time in discussion with their colleagues.

This monograph encourages librarians to develop advanced information services based upon client-articulated need. In this sense, she shares common ground with certain elements of both the bibliographic instruction and collection development movements that have significant numbers advocating elaborate outreach or liaison activities.

The book wisely reviews service failures as well as success. Additionally, the author provides a useful review of the literature of information-use behavior of various disciplines and professions. Unfortunately, it remains unclear why so many apparent useful information services cannot attract ongoing support. Cost, of course, is a factor since the services described are not without significant fiscal impact. One wonders if any university would absorb the cost of such services if they were extended to the entire faculty. More important is the question of benefit. Current management science often re-