ed, but unfortunately, are carried to extremes—such as thirty-three pages of targets used for microfilming. Such examples illustrate the attention to detail apparent throughout this manual.

Criticism of specific procedures would be both unfair and unwise. In the larger context, many ideas contained within the manual are applicable to other archival institutions. Yet, a large degree of success with archival organization is rooted to the pragmatic qualities exhibited by the head of the archives department. Thus, procedures that might be applicable to specific institutions with certain characteristics may not be workable at another institution. Future archival procedural writers hoping to glean insight into archival organization and processes should keep in mind that this manual represents procedures developed for a medical archives and that such an archival collection is somewhat restricted in both scope and size compared to many college and university collections. Nonetheless, the manual will provide guidance to those attempting to produce a procedural manual for their own institution-especially if used in conjunction with Forms Manual, published by the College and University Archives Committee of the Society of American Archivists (1973). One hopes that archives with procedural manuals will respond positively to Washington University Medical Archives' suggestion to make them available for outside examination. The creation of more such manuals will help standardize procedures and will lead directly to the improved control, service, and benefit of an archives-and most importantlyconsistency .- Charles R. McClure, Head, History-Government Department, University of Texas at El Paso Library.

Boyer, Calvin James. The Doctoral Dissertation as an Information Source: A Study of Scientific Information Flow. Metuchen, N.J.: Scarecrow, 1973. 129p. \$5.00.

Libraries acquire for use by their patrons only a small fraction of the doctoral dissertations written annually in the United States. If the research is not acquired extensively in its original format, do dissertations serve as information sources in other

traditional formal communication channels of open literature?

That question is addressed in this monograph, which was originally written for a Ph.D. at the University of Texas. The investigation was undertaken to determine to what extent dissertations serve as information sources and what are the characteristics of assimilation and diffusion patterns of dissertation contents. After all, with the average cost of each dissertation in the sciences being \$62,000, shouldn't the findings be available to a wider audience? Using the proper research methodology of defining the population and then selecting the sample, the author chose the four disciplines of botany, chemical engineering, chemistry, and psychology to prove his point. He further refined his sample to three universities, and his final sample included 441 dissertations. The original portion of the study is preceded by a brief history of the dissertation and a more lengthy review of related literature.

Boyer found through his literature search that dissertations as a form of literature represent a miniscule percentage of cited literature and that they represent an even more miniscule percentage of materials acquired by libraries.

In his research he found that most dissertation-based materials, in the sciences, appear in journals with an average of 1.43 articles per dissertation. Fifty-three percent of those had not been cited, and of those cited nearly two-thirds of the citations were made by persons known to the dissertation author, including 22 percent self-citations.

One weakness of the research, readily admitted by the author, is that examination was made of the formal written communication channels only—including journal articles, books, or chapters of books. It completely excludes oral communication in seminars, conferences, symposia, interpersonal communications, and closed literature such as preprints, reprints, and technical reports. Therefore this study covers only one part, perhaps the less important one, in the communication process.

Another point which should not be overlooked in the information flow is that, particularly in the sciences, the value of the content may be transitory or the quality may be questionable.

The author has posed an important question and examined one aspect of it. Hopefully someone will take the topic from there and examine other aspects.—Robert D. Stueart, Graduate School of Librarianship, University of Denver, Denver, Colorado.

Fussler, Herman H. Research Libraries and Technology: A Report to the Sloan Foundation. Chicago: Univ. of Chicago Pr., 1973, 91p. \$5.95.

In 1970 the Sloan Foundation established a program in educational technology which included "library technology" as one of the areas to be studied. Dr. Herman H. Fussler of the University of Chicago was commissioned to do this study. Upon receipt of the report the foundation felt that it deserved general circulation. The published work is basically the same report that was submitted as an "internal document" not addressed to librarians (preface). The question remains, "What is the purpose of the report and to whom is it addressed?"

The report contains the thoughts of Dr. Fussler, a nationally known and respected library technologist, concerning some of the problems facing large, research-oriented university libraries. The title is slightly misleading since the author has been self-selective in reporting on only a few problems and issues. In addition, there are problems with the report's focus and scope, as well as a scarcity of definitions of frequently used terms.

After a nondescript foreword and an anemic preface, chapter one, "Libraries and Technology from Several Perspectives," contains a review of a few selected studies of technologies used by libraries within the last decade. Chapter two, "Some Current Aspects of the Large University Library," switches from an emphasis on specific technologies to problems involved in library costs. This is the only chapter containing tables, all of which are extracted from existing reports and studies. As noted by the author, a new book by Professor W. J. Baumol, entitled Economics of Academic Libraries, was about to be published. It is now available, and it contains a more comprehensive treatment of this topic. Chapter three, "Bibliographical and Library Process-

ing Functions," is seven pages in length and attempts to do the impossible by combining a discussion of bibliographic access and library processing functions. References to more detailed accounts covering these topics are lacking. Chapter four, "Shared Resources, Photocopying, and Facsimile Transmission," combines the conceptual topic of shared resources with the specific technologies of reprography and facsimile transmission; it is at best confusing and at worst inadequate. In addition, there are three paragraphs devoted to copyright problems. Chapter five, "The Computer and the Library," is a sound general discussion of how computer technology can be used to confuse and defuse problems in the management of information systems. Chapter six, "Examples of Computer Applications in Library Operations and Information Access," complements the preceding chapter by giving a brief description of specific locations: Columbia, NLM, Northwestern, OCLC, Ohio State, MIT, Stanford, and Chicago. Each description was based on information supplied by the institution. Chapter seven, "Some General Observations and Conclusions," amplifies the confusion concerning the focus of the report. On page 73 the author states that the report is "limited essentially to the problems of literature and information access" when, in fact, the emphasis is on internal operations and functions of the library. Following the last chapter there is a section containing fifty-nine references, "acknowledgements," and an index. The index contains at least one error (p.89-National Advisory Commission on Libraries, 18 should be 17).

In conclusion, the author has made a report to the Sloan Foundation; he has raised many relevant and poignant points concerning the problems and issues facing the large, research-oriented university library. There are useful parts to this report, especially the up-to-date references made to more complete and empirically based studies and reviews; however, these parts are interspersed with less useful monologues. The remaining unresolved question in this reviewer's mind is, "Who will read this internal document?"

This book is recommended to the reader with the initiative, interest, background, and time to analyze the author's opinions