Health, Education, and Welfare, this conclave focused primarily upon two questions which may be stated generally: (1) what media are used for instruction by whom, for what reasons, and with what results, as revealed through the literature and research; and (2) what research is needed to provide more definitive answers to question one?

Fourteen participants, expertly conversant with and knowledgeable of communication materials and techniques, educational practice, and research methodology, converge upon the questions through as many papers. These analytical and evaluative discourses comprise the major portion of the volume. A preliminary summary of recommendations, more or less general in nature, is augmented by a concluding enumeration of 112 recommendations, specifically cited in the texts of the presentations, which suggest pertinent research of varying scope and depth.

Through the individual topics explored by the participants, the use of materials for instructional purposes is surveyed from the standpoints of educational level, type of material, and related influences. The first three papers cover the areas of elementary education, secondary education, and college and university education respectively, and are written by two professional educators and a university librarian. The next six contributors consider numerous types of materials used for instruction. These include general books, textbooks, encyclopedias, and bibliographies; reference books; periodicals, newspapers, pamphlets, etc.; audio-visual materials: exhibits, models, and graphic materials; and motion pictures. A professor of librarianship, a practicing librarian, two professional educators, a research director, and a journal editor review the instructional uses of these materials.

The impact of various media upon communication and social structure; instruction in the use of the library and library use by students; the use of trade books, children's books, and paperbounds as instructional media; implications of curriculum trends, methodology, and content for educational publishing; and possible application of documentation and information retrieval

for instructional purposes; are the topics treated by the five remaining participants. Authors of these papers include two professors of librarianship, a museum director, and two representatives of the publishing industry.

The volume supplies a much needed overview of what is known as a result of research with respect to the uses of many kinds of printed and nonprinted materials as instructional vehicles. It is a treasure trove of ideas from which research aspirants and, indeed, seasoned investigators may draw when initiating future studies relative to the instructional efficacy of contemporary media or to conditions influencing their use.—Marion B. Grady, Ball State University.

Documentation and the Organization of Knowledge. By Jesse H. Shera. Hamden, Conn.: Archon Books, 1966. xxi, 185p. \$6.50.

This is a volume of fourteen essays by Dean Shera, and it follows its companion volume entitled "Libraries and the Organization of Knowledge" by less than a year. The essays were written between 1950 and 1965 and with the exception of one essay, have been previously published. They deal in whole or in part with the history of classification systems and of documentation, information gathering habit studies, coordinate indexes in general and the machinesearched coordinate indexes developed at Western Reserve in particular, automation of various library operations, education for librarianship, recruiting of technical information specialists, and the role of the library in society. There are several recurring themes in the essays: the argument for the essential unity of librarianship (Shera believes that librarianship and documentation are or at least should be one), the need for librarians to be more involved with bibliographic organization, and the large potential benefits of automation in libraries.

In the introduction of Libraries and the Organization of Knowledge he notes that "... one's writings set forth in vulnerable array [are] an invitation to the slings and arrows of the outrageous critic." The slings and arrows have found some but only small

targets in this particular review. Reference to the history of classification systems is certainly appropriate in several of the individual essays but the reader might tire (and be tempted to skip) reading about Dewey and his classification system, particularly when the explanation is intended for nonlibrarians. There is perhaps too much optimism about machine-searched indexes in one essay written in 1961. Shera lists examples of searches on pages 90 and 91 that can be done by machine "as child's play" (his words) and it may be just such a fantasy unless we learn to overcome problems in the selection of documents to be indexed, in indexing, in formulation of search strategy, and in evaluation of search results. But this particular essay was written during our years of innocence in machine searching; we can point to other examples of machine literature searching with few documents included in the index and with extrapolation of results based on too small a sample.

It is interesting to speculate why most of Shera's essays are still fresh and to the point. Is it because of his wisdom in choice and/or treatment of topic, or is it because librarianship has been slow in changing? My guess is that it is a combination of these factors. Jesse Shera has suggested a number of changes that made sense at the time of writing and make sense now. There is still much to be done to achieve standardization among bibliographic services, there is still insufficient cooperation among professional societies in our field, and there is still need for an increased pace of fundamental and applied research in librarianship. Shera's words on automation in the library deserve special attention. He warns us not to close our eyes to automation—it will not go away. Automation has stimulated systematic analysis of library operations and offers the hope of a better understanding of what we are doing. Automation also offers the promise of library service on a higher level to be provided by librarians, if we are prepared to meet the challenge.

Dean Shera writes wisely and well, and, what is rare in our field, with considerable humor. Librarians in research libraries should read or reread what he has to say.—
G. Jahoda, Florida State University.

Resources of Missouri Libraries. Ed. by Robert B. Downs. Jefferson City: Missouri State Library, 1966. 190p.

The origins of this study lie in the desire of college librarians for a study complementary to the survey of Missouri public library resources made by Gretchen Schenk in 1962. This study, however, reports again on public libraries and on school and special libraries as well as two-year, four-year, and graduate institutions of higher learning. It, like the Schenk report and the Community Studies, Inc., survey of public library service in metropolitan St. Louis and Kansas City released a year ago, has been sponsored by the Missouri State Library.

Although Robert Downs lists a survey staff of ten librarians, the materials for this study seem to have come primarily from a lengthy questionnaire submitted to approximately one hundred and twenty-five libraries. Librarians submitted a quantitative breakdown of collections in various subject areas along with the kind of information submitted recently to HEW. They also checked their holdings against a list of one hundred currently published periodicals and Choice's "Opening Day Collection" of basic reference books. There were opportunities in the questionnaire also for librarians to make qualitative judgments on their own libraries.

The over-all picture shows that while Missouri librarians have been working for a long time to establish county—and, now in more recent years, regional—library systems, there are still far too many small libraries with inadequate tax bases. Most of the private institutions of higher education have financial problems which are shown in the support of their libraries. Its public institutions reflect the fact that Missouri, in terms of its per capita income, has not supported higher education well. A Robert Downs is needed to show Missouri how its libraries look to an experienced eye from the outside.

Wisely, the work begins with his "Goals for the Future: Summary of Recommendations" because much of the subsequent chapters comprise raw material from the questionnaires analyzed by means of cur-