

braries. To date, Robert D. Desmond, its editor, and the Library of Congress have done an outstanding job of developing this tool. With the help of this survey they should be able to enhance the value of NST for the effective bibliographical control of serials in the future.—*Joseph H. Treyz, University of Michigan.*

Bookplates for Libraries; Contemporary Designs for School, Public, College, and University Libraries. By Edward H. Shickell, with an introduction by William R. Holman. Austin, Texas: Roger Beacham, 1969. 69p., illustrated. \$12.95.

The evolution of bookplates since the fifteenth century, and particularly their collection, categorization, and admiration since the latter part of the nineteenth, occupies a substantial literature, much of it privately printed. Add to this a smattering of earlier books on bookplate design, and this handsome new volume of original designs for libraries stands out as unusually fresh and attractive.

It is to some degree complementary to Mr. Holman's *Library Publications*, a 1965 Beacham publication distributed by John Howell Books, and is, like this larger and earlier volume, published to stimulate more interesting and imaginative printing for libraries and their clientele.

Mr. Shickell's seventy-two specimen plates make use of a number of the better typefaces and his own skillful calligraphy rendered in four colors suitable to library plates. Although their range of both color and form is limited by the fact that they are one man's work, he is both imaginative and eclectic, and his variety and taste cannot but be stimulating to librarians seeking to design bookplates.

Mr. Holman's introduction presents both encouragement and practical advice, including the suggestion that if all else fails to produce a work of art the reader may violate Mr. Shickell's copyright a little by lifting a design direct from the book. The type faces used are carefully identified, and an index leads you to the plates in which they appear.—*David Heron, University of Kansas.*

Evaluation of the MEDLARS Demand Search Service. By F. W. Lancaster, Bethesda: National Library of Medicine, 1968. 276p. (available from NLM Office of Public Information).

Of all the automated information retrieval systems which are currently in operation, the MEDLARS (Medical Literature Analysis and Retrieval) System of the U.S. National Library of Medicine has perhaps most captured the world's imagination and attention and has put both the United States and medicine as a subject discipline in the forefront in the use of computers as an aid in solving problems in information transfer. MEDLARS is a machine system designed to serve several purposes including the monthly production and printing of *Index Medicus*, one of the world's primary medical indexing media. It has as well the capability to produce and print subsets of a large file of literature citations either on a continuing basis for special subject groups or on demand for individuals. The system inherently must, therefore, possess some of the trade-offs that are inevitable in any multi-purpose system.

This study is not an evaluation or description of the entire MEDLARS system; (such a description is being currently published by the National Library of Medicine, under the title: *Description and History of MEDLARS*). It is rather an attempt to evaluate its "demand search module," a component designed to produce, by computer, comprehensive bibliographies on many-faceted subjects on request. Nevertheless, in the process of studying this report, a reader can learn much about the construction and use of the entire MEDLARS system. In fact, some of the problems and prerequisites explored in the study have relevance to all kinds of literature searching, manual as well as machine.

There do not seem to be any particularly new methodological approaches offered in this study. They are essentially modifications and refinements of those developed by Cleverdon and others. Nevertheless, the misgivings expressed by Alan M. Rees

in his thoroughgoing review of the general subject of evaluation in the second volume of the *Annual Review of Information Science and Technology* ("Evaluation of information systems and services") in which he predicted that ". . . difficulty will probably be encountered in attributing recall and precision failures to the indexing process, indexing language, search formulation and so on," do not seem to have been warranted. The basic problem, of course, is not resolved, and that is the central position of "relevance," the basis upon which both precision and recall are evaluated, and which in the end must remain largely a personal and a subjective judgment. Another problem is that to some extent the recall ratio (percentage of known relevant articles retrieved) and precision ratio (percentage of retrieved articles which are relevant) is in effect not only an evaluation of the system under study but of the effectiveness of the parallel search.

Testing and evaluation is a responsibility of any management producing a product for consumers, in order both to control quality and to improve the efficiency of the system. Since this is one of the few large systems using controlled vocabulary techniques, it has perhaps an unusually large onus of this kind of responsibility, in view of the proliferation of KWIC and other systems in which input is largely automated and do not depend as much on the human factor which although it can be more insightful can also be more erratic

than the machine. The findings that the MEDLARS demand search module is operating on the average of about 58 per cent recall and 50 per cent precision do not provide any comparisons with other information retrieval systems either machine or manual because no other system to this reviewer's knowledge has been as rigorously and thoroughly examined. Nor do Lancaster's conclusions and recommendations offer much promise that these ratings can be substantially improved for performance of the entire system.

The configuration of the next generation MEDLARS system now under active development is still not known to us, but if it is still committed to the use of a controlled vocabulary and human indexing, some of the cautionary and advisory conclusions of this study will still be valid, *e.g.*, the necessity for continual quality control, the expansion in the use of sub-headings (which should also substantially benefit the manual system), and publication of the entire entry (cross-reference) vocabulary. On the other hand, the recommendation on restricting foreign language material seems rather parochial particularly since the study is based only on U.S. investigators, and in view of the development of MEDLARS decentralized centers in other parts of the world.

This study deserves detailed examination by anyone interested in information storage and retrieval either as a producer or a consumer.—David A. Kronick, *University of Texas*.