the *Directory* so obviously fills a need that we look forward to more of the same.— *Phyllis A. Richmond, University of Rochester.* 

Catalog Card Reproduction. Report on a Study Conducted by George Fry & Associates, Inc. Chicago: Library Technology Project, ALA, 1965. (LTP Publications, no. 9), xii, 81p. Illus. Cloth, \$8.50. (65-13196).

Those librarians who noticed the press releases from the American Library Association and the Council on Library Resources on May 21, 1961, announcing a grant for study of library catalog card reproduction looked forward to an aid in comparing and choosing a cheaper, quicker, or clearer way to prepare catalog cards. Now, four years later, the results of this study by the management firm of George Fry & Associates of Chicago are available. If the estimate in that release is accepted, that one hundred million cards a year were then produced by individual American libraries, and if a factor for everyday explosive growth is also permitted, then we can estimate roundly the number of cards that have been generated in the interval at half a billion. And who dares say how many more fiches will be spawned before we each have read, absorbed, and put to use the simple instructions of this slim green volume?

Like Gaul, this guide is divided in three parts. First is a listing of the problems of card reproduction, with a summary of the most economical techniques that were found in use by small and larger libraries cataloging fewer or more than 2,000 titles per year. Total costs for twenty requirement levels are given in a table for an arbitrary standard set of four cards produced by thirteen different processes and one variation. Some makers of cards will be satisfied, especially if it reinforces what they are now doing, to read no farther.

For others, the second part is a description of the common card reproduction processes. The information provided is sufficient to differentiate the processes, but is no substitute before a final decision for the more extensive explanation found in such compilations as H. R. Verry's *Document Copying and Reproduction Processes* (London, Fountain Press, 1958. 328p.). The absence of a bibliography in *Catalog Card Repro-*

duction, with the exception of some references in passing (see pages 14 and 58), may foster too much dependence on the judgment of the Fry report. Numerous illustrations are given, but too many are devoted to the manufacturers' courtesy shots of their big black boxes. The more useful ones are originals showing special techniques or the results obtained. A profuse index is provided.

The third part takes up cost data and comparison of processes. All methods were found capable of producing "good," as opposed to "perfect quality." The report urges the acceptance of "good quality" for the substantial savings in staff time and, therefore, money. Lack of uniformity between methods used in existing catalogs was found to be "far more noticeable and much less pleasing esthetically than the quality of cards produced by even the poorest of the processes described here." Need for an objective measure of over-all reproduction quality, such as resolution charts provide for photographic methods, is apparent. Other qualitative tests are possible, as shown by W. J. Barrow's investigations of paper permanence, but were not developed. There seems to be a basic prejudice against the subject's importance, expressed in the report's first paragraph, which prevented refinement of the product to the same degree as reduction of the time and cost in disposing of it.

A procedure is given, and blank work sheets are provided, to help the librarian calculate the total costs of his card reproduction operation and compare it with others. Standard costs are given for equipment (as of May 1, 1964), for materials (with allowance for variation in titles processed and cards required), and for operation (to be calculated at local rates from hours of staff time per one hundred titles). For the librarian with experience in only one or two of the processes, the provision of these "normal times," corrected for fatigue, performance differences, and unavoidable delays, may well be the most important contribution of the study. While examining processes in use at seventy libraries, project staff exposed about fourteen thousand feet of 16mm motion picture film. The times for operations were developed by counting frames of film, but the results were tempered with subjective analysis of

interviews and process charts. These represent the best guesses to date, not to be used slavishly, but with some confidence and a willingness to refine them in the light of future experience, just as the other cost

elements must be kept current.

The study has widely refrained from identifying the libraries which use these processes. Librarians will continue their search for improvement in a dynamic technology. They well may wonder if any method will endure through the five to ten years it takes to amortize purchased equipment. Use of rental, leasing, trade-in, processing center, and service bureau arrangements reflect this growing desire for flexibility. The study does not mention the changing role for catalogs in card form in the face of impending shifts to book catalogs or eventual console conversion. Nor does it look with any prophetic vision at the greater depth of control achievable over small units of information, even the individual character or its component bits, when using a digitized system such as the automatic tape typewriter. The power to select and re-order information stored in paper tape for multiple purposes which is afforded by the Friden Selectadata unit, the special-purpose automation of the Crossfiler, or the general capability of any computer, all introduce valid considerations outside the apparent scope of the study. The report is basically a search for lowest isolated cost among those methods presently available to libraries for accomplishing a very prescribed task. By subtracting least cost from another, it is possible to obtain a fair measure of how much annual cost is attributable to intentional choice of a system over the minimum that would have to be paid in any case to get the job done the cheapest way. Librarians should be aware that they now have some useful comparative data where before there was none, but they should not feel hindered from going against or beyond its advice for good reason.—Earl Farley, University of Kansas.

Moving Library Materials. By Peter Spyers-Duran. Rev. ed. Chicago: Library Technology Project, ALA, 1965. 63p. \$2.50 (65-23947).

This study is based on a bibliography of the subject which covers the years 1930 to 1961, and on a questionnaire which included thirty-one library moves in the range of 8,000 to 700,000 volumes. As the author points out, it is difficult to find a single comprehensive analysis of the techniques of moving library materials. The present work is designed to outline the theoretical and practical requirements for moving books and library materials in libraries of every type and size.

The arrangement of the study falls into three broad topics. The first section deals with the major steps involved in planning and scheduling the move. This analysis includes a time and motion study. In the second section, the author discusses critically four types of moving methods. The last section is a collection of model specifications and contract forms. The use of such forms is necessary when a library move is being offered to professionals on a competitive basis.

The text is clear, concise, and thorough in treatment, and is supplemented by a large number of tables and illustrations. Table I is particularly useful in that it presents an analysis of the questionnaires returned by the libraries. The bibliography emphasizes articles that have appeared since 1950. Unfortunately, several of the citations in the text are not entered in the bibliography.

This study is deceptive in its simplicity. It should prove to be a valuable handbook to all librarians contemplating a move, especially those who wish to compare several possible methods, or those who have had no experience with operations of this kind.— Michael Bruer, University of Notre Dame.

Libraries of the Future. By J. C. R. Licklider. Cambridge, Mass.: M.I.T. Press, 1965, xvii, 219p. \$6. (65-13831).

It can be an illuminating exercise in imaginative fantasy to extrapolate from present technology in order to describe the library of the future. This book is one of the best of these exercises. Author Licklider describes the "procognitive" system (the successor to the library?) of the year 2000. Although explicitly stated as not the objective of this book, the question is apparent on every page: how do we get from here to there? This is a problem that every librarian must face in the next decade, for technology