one section would be remarkable in any library, the Southern Historical Collection.

The survey reports the university's achievements in building up library resources. While that is sufficient justification for the time and effort which went into the book, it leaves unanswered the question of how valuable a contribution to library literature this survey is. It is vulnerable to criticism in several respects. Textually, it betrays poor proofreading by an error on every second or third page. It usually fails to mention the number of volumes in a given field. A quantitative statement gives some indication of the quality of a collection, as it does about the library as a whole, since duplication is infrequent in a university library and because larger holdings serve more kinds of use. Few standard bibliographies were checked to determine how well the books cover the subject. Library resources can be described by one person or by a group. Whichever method is adopted, the survey is open to criticism for not following the other. Like the volumes describing resources at the universities of Chicago and Pennsylvania, this survey was written by many The editor, Charles E. Rush, authors. avoided the extremes of the other two. He did not rewrite his contributors' papers, like Raney, but he achieved greater uniformity than in the Pennsylvania volume.

The result gives librarians another ex-

ample of how to describe, in the mass, those individualities, books and manuscripts. What else is it good for? Who uses a survey of resources? Librarians can use it as a findinglist for interlibrary loans, but they will find themselves handicapped by the lack of a title index. Scholars can use it to find out beforehand whether a trip to Chapel Hill is necessary or desirable. Like all resources surveys, it has some value as a compact, classified bibliography. Library school teachers will find it useful, along with other resource studies, in the training of university librarians. Judiciously circulated on other Southern campuses, it may arouse a desire to emulate North Carolina, as Professor Hamilton's activities have. Unquestionably, however, this book will find its principal justification on the North Carolina campus, where it will serve as a guide to the library, a stimulant to the faculty and administration, and a tract for prospective donors.

Its utility elsewhere might be greater if it indicated the size of individual collections, the percentage of titles in standard bibliographies, what studies have been made from the materials (theses are noted in some instances) and what other studies could be made from them, the accidents of personality and university history which gave each collection its peculiar quality, and comparisons with other libraries.—John VanMale.

The Future of the Research Library¹

Fremont Rider's The Scholar and the Future of the Research Library, which exploded like an atomic bomb in the library profession, has not only aroused a sensation among bookmen, but has also caught the imagination of the layman of the popular magazine and of the daily newspaper—an unprecedented event in the history of library literature. It dazzled its readers with the prospect of a new era of undreamed-of potentialities, an era which will enable the average college library to acquire research resources nearly as complete as those of the larger university li-

¹ The editors consider this paper of interest to all readers who have been following earlier discussions in *College and Research Libraries*. It is therefore reprinted here, with revisions by the authors, from *The Classical Journal* 41:108-12, December 1945.

braries, without the attending problems of processing and housing, and with a catalog which will, literally and actually, place the resources of the library at the fingertips of the readers. This is made possible by an idea of Mr. Rider, an ingenious idea yet so simple as to make the inventor wonder why it has been by-passed by others all these years.² The idea is to reproduce, by means of microphotography, the texts of books on the blank backs of their catalog cards. Thus, when a library has bought a catalog card, it has also acquired the "book" itself; when it has filed the card in the catalog, it has al-

² In a very interesting review to appear in a forthcoming issue of *Isis*, Dr. W. J. Wilson indicates that the Belgian bibliographer Paul Otlet anticipated a similar idea as early as 1906.

COLLEGE AND RESEARCH LIBRARIES

ready "processed" and "shelved" the "book;" and when the reader has identified a title or titles in the catalog, he has also located the books he wanted to see or read.

Vital Idea

This is not only an interesting and exciting idea, but one of vital importance to the future of the research library. It is Mr. Rider's solution to a problem, or rather complex of problems, which grimly confronts the administrator of a research library. These problems include: the extensive research resources required by the scholar and the difficulty and high cost of their acquisition; the high cost of cataloging which has shown an unchecked tendency to increase and has become the bane of large libraries; the cost of binding which attaches even to publications received free by the library; and, finally, the problem of housing the library's collections which, in the past, have shown a tendency to double in size about every sixteen years-a prospect which must be appalling to the research librarian who contemplates his library a bare one hundred years hence. To illustrate the concrete meaning of these problems, Mr. Rider points out that, if the situation is to continue unchanged, the Yale Library will, by the year 2040, have approximately two hundred million volumes occupying over six thousand miles of shelves, a card catalog of nearly three-quarters of a million drawers occupying some eight acres of floor space, and an annual increase of twelve million volumes requiring a staff of over six thousand catalogers. Mr. Rider discusses the measures proposed or taken to meet these problems and points out the inadequacy of these measures. He then sets forth his solution, which he christens the "microcard," as one answer to all these problems. The microcard, combining the catalog entry on its face with the micro-text of the book on its back, will, at the author's estimated cost of five cents per card, make available to the research library books in a form that will require no further cataloging, classification, marking, binding, labeling, shelving, and no space whatever for housing, and will be handy for immediate use by the scholar as soon as identified in the catalog.

However, Mr. Rider's revolution does not end with the microcard. Having changed the shape of the library's books, Mr. Rider proceeds to change also the shape of the library's catalog so as to expand vastly its potentialities and increase its usefulness to the scholar. The changes affect the make-up of the individual entries as well as the constitution of the whole catalog. The individual entry will contain a briefer description than that given at present on Library of Congress cards but will include, in addition, an abstract which will "try to provide the would-be user with some clue as to the author's scholarly competence, viewpoint, and background . . . to indicate the scope, and to summarize the subject matter, of the text." And the catalog will seek to bring together for the scholar "in one single place, in one single card catalog . . . everything that the library has on his subject," first, by the employment of "classificational subject headings" in place of the present specific subject headings-i.e., "Chemistry-Inorganic-Potassium—Ferricyanide" in place of "Fer-ricyanide"—and, second, by the cataloging of individual "periodical articles, pamphlets, government documents, committee reports, society proceedings, and the like," which are of primary interest to the scholar but which are not now individually recorded in our catalog. Carried to their logical conclusion, Mr. Rider's proposals promise a veritable research paradise to the scholar. At the touch of a drawer the microcard catalog will hold out to the scholar a complete and up-to-date bibliography of his subject and the related subjects, with an account of the authors, with the contents of the works conveniently digested for him, and with the books themselves at the tips of his fingers, on the backs of the cards, ready for use at his pleasure.

The vista is very enticing, but the road which leads to it bristles with obstacles which may prove as difficult to surmount as the problems which Mr. Rider set out to solve. These obstacles are now the concern of a special Microcard Committee and need not here be considered. The intriguing features of Mr. Rider's plan, nevertheless, invite reflection.

The addition of abstracts will undoubtedly increase the potentialities of the catalog. One may doubt, however, their justification for microcards, which are to represent titles of a very limited use. The prospective returns would appear disproportionately small for the enormous investment required. And one may

feel uncertain about the merit of making the abstracts part of the catalog entries. As part of the entries the abstracts will be made to fit the size of the cards rather than fit the contents and character of the books. They will also be wasteful of the precious space which Mr. Rider endeavors to conserve, being repeated on every edition of the title and on every entry for the edition, in addition to repetitious author information on the various entries for the author. And lastly, abstracts are ordinarily read and used like books by those who wish to survey, or keep abreast with, the literature in their fields. And a drawer of cards is not an appropriate medium for such purpose.

"Classificational Subject Headings"

The proposal to use "classificational subject headings" for the microcard catalog, in order to enhance the bibliographical value of the catalog by bringing together not only the books on a given subject, but also related subjects, has since been withdrawn by Mr. Rider.³ One will readily realize that the effect of such subject headings would be to bring together tens of thousands of entries under the main subjects, like "Chemistry" in the above illustration, thus making the location of a given entry, or group of entries, very difficult for both the scholar and the catalog filer. These headings also present difficulties of design, application, and up-to-date maintenance. They have been tried in our libraries and abandoned, and Mr. Rider was wise to withdraw this proposal.

Analyticals

(Catalog entries for individual articles, chapters, or other parts of a larger bibliographical unit.)

Mr. Rider is also right when he points out that the scholar's research materials are more frequently found in the form of articles, essays, reports, etc., forming part of a book or title, rather than in the form of individual books, and that our catalog, neglecting to record these individual pieces, fails to provide for the interests of the scholar. To appreciate the full implication of his proposal, however, it should be observed that the recent annuals of the Agricultural Index, Art Index,

³ College and Research Libraries 6:182, March 1945.

and Engineering Index contain accumulations of some twenty-five thousand entries each, the Bulletin of the Public Affairs Information Service and the Education Index some thirty thousand entries each, the Industrial Arts Index some seventy-five thousand entries, and the Quarterly Cumulative Index Medicus some one hundred thousand entries-and these cover only part of the periodicals that the research library would possess under Mr. Rider's plan. This prospect moved Mr. Metcalf, of the Harvard University Library, to point out in his excellent appraisal of Mr. Rider's plan that under this proposal the Yale catalog in the year 2040 "instead of being ten times the size of the card catalog . . . might easily be forty times as large. It would then have thirty million drawers of cards which would occupy three hundred and twenty acres of floor space, or just half a square mile. If they are all stored on one level, the catalog would occupy a building some fifteen times the size of the Harvard Yard ... and Yale, instead of having a cataloging staff of over six thousand persons, would have a filing staff of somewhat similar size."4 In his reply Mr. Rider states that he had never meant "that analytics, if they were made at all, would be made in any such flood as Mr. Metcalf proposes. Only a minority of volumes would ... require analytics at all...."5 But this qualification really brings back the microcard catalog to the condition of our present catalog. The microcard catalog, like our present catalog, will function essentially as a record of the library's books or titles. For individual articles, essays, etc., the scholar will have to rely, as heretofore, on bibliographies and indexes. and on his own ability to compile a working bibliography.

The Microcard

This brings us to the principal feature of Mr. Rider's plan, the "marriage" of the catalog entry and the micro-text of the book. The idea is full of romance, and the present reviewers are not immune to its appeal. An intimate analysis of the character of the catalog and the books themselves, however, will cast a doubt on their compatibility. To begin with, the function of the catalog is to describe and identify the books in the library's posses-

⁴ Ibid., 172. ⁵ Ibid., 181.

COLLEGE AND RESEARCH LIBRARIES

sion at all times, whether or not the desired book or books are at the moment of inquiry available for use. This information is necessary to the scholar in order to determine whether or not the library has the exact book he wants, and to the staff in acquisition, cataloging, and reference work. In the microcard catalog, whenever a "book" is withdrawn its record is withdrawn with it. Perhaps this is not serious, since the charging slip replacing the withdrawn entry may direct the reader to the other entries for the book in the catalog: and, the microcard materials being of infrequent use, it is probable that the drawers containing the other entries will not then be in use by one studying their abstracts. Nevertheless, there is an element of incompatibility which may prove irritating. Conversely, the books themselves require custodial protection which will preserve them safely and in a condition adequate for their ultimate use. The catalog scarcely provides such protection. In the microcard catalog the materials themselves will be exposed to the thumbs of the catalog users, to the fingers of the abstracts' readers, and to the elements of nature and human nature, and may be rendered unusable when they are ultimately needed. And here is another element of incompatibility of unpredictable importance.

Physical Incompatibility

Equally inauspicious is the physical incompatibility of the entries and their micro-texts. The entries of the catalog admit of a uniform physical size and have been satisfactorily reduced to 3" x 5" cards. The materials themselves do not admit of a uniform physical size. The materials issued by the La Follette Civil Liberties Committee, for example, range from three pages to more than seventy-five volumes. To make an individual microcard for the former is not to use effectively the microprint space in the catalog. To make 3" x 5" microcards for the latter is to clog the catalog with numerous text cards which will intervene between the entries and further decrease its precarious efficacy. Moreover, an entry without the micro-text on its back permits the recording of several related bibliographical units and the indication of their relationship on the same entry-for example, the several editions or issues of a title, or a title and its supplement, index, etc. In the

JULY, 1946

microcard catalog this entry would be split in several entries and separated by the intervening texts, and the relationship of these entries would be obscured. In other words, given a separate catalog and a separate collection of texts, related bibliographical items can often be effectively combined on the same entry even if their texts cannot. And vice versa, various micro-texts could be combined on one card even if their entries could not-for example, miscellaneous publications of small size. Lastly, the micro-text of the book is final in shape for the book represented; but the entry of the book is always subject to change on discovery of new bibliographical information, which, in the past, has proved to be fairly frequent. Here, the stability of the text and instability of the entry does not augur well for the wedding.

External Circumstances

Finally, external circumstances are bound to disturb the felicity of the union. Since the microcard catalog is to be limited to materials of relatively infrequent use, the library will continue to acquire most of its current publications, for its own and the readers' convenience if for no other reason, in the form of books, which it may or may not later replace with microcards having already incurred their cost of acquisition, cataloging, and processing, and perhaps also binding. The future library will thus contain some of its materials in the form of books and some in the form of microcards, with two corresponding catalogs. Since, however, the scholar does not come to a library for books or micro-texts, but for materials he needs in whatever shape the library may have them, the two catalogs will have to be integrated, functionally, if not physically, if the scholar, and also the library staff, are not to be confused or misled by them. Thus, while the materials themselves may be separated for custody and kept in the form of books and micro-texts, the catalog cannot be so divided satisfactorily if it is to remain a reliable guide to the library's research resources.

In sketching the problem of the research library, Mr. Rider has ingeniously reached into the future and produced a staggering picture of growth of the library's collections and catalog. He depicts "a veritable tidal wave of printed material," mounting higher and higher "yearly, monthly, daily, hourly," and threatening to engulf not only the library but civilization itself. He repeats an earlier warning: "We seem to be fast coming to the day when, unless it is afforded the most expert sort of bibliographical service possible, civilization may die of suffocation, choked in its own plethora of print." This is a serious condition requiring surgical operation. But Mr. Rider is willing to content himself with a He suggests a microcard which palliative. will reduce the physical size of the mass of print. But the real threat of the "plethora of print" lies in its quantity, not in the size of its paper container, and Mr. Rider's microcard does not reduce this quantity. This condition is properly the problem of the scholar rather than the librarian, and the scholar should be urged to suggest a remedy. It is possible that the condition is due to an atavistic habit of the days when there was a scarcity of recorded facts and when every record discovered filled a vital gap in our knowledge. In these days of overabundance of print the problem is not in filling gaps but in preventing obstructive mountains. The problem of the librarian and of the scholar is not in the acquisition of all printed "records," but in the selection of representative records-i.e., records exhibiting the contents and characteristics

Official Publications of Latin America

U.S. Library of Congress. A Guide to the Official Publications of the Other American Republics. James B. Childs, general editor. Washington, 1945. (Its Latin American Series, no. 9, 10, 11.) Contents: I. Argentina; II. Bolivia; VII. Cuba.

The compilation of guides to the official publications of the other American republics is a project undertaken by the Library of Congress to meet an urgent need for securing adequate information about an area of publication which, while difficult of access, is, nevertheless, of vital importance to those concerned with the study of administrative, economic, social, and cultural conditions in Latin America.

The three sections published in 1945, namely, Argentina (Section I), Bolivia (Section II), and Cuba (Section VII), were prepared under the general editorship of James of numerous existing variants-so that the library will be spared the task of preserving mountains of print of dubious, though possible, value, and the future scholars will be spared numberless hours of futile search in illusive "treasures."

The profession owes a profound debt to Mr. Rider for throwing a glaring light on the starkness of the research library problems and for dramatizing the great potentialities, and also the great need, of microprint and centralized cataloging in meeting the problems of space and cost. These reviewers incline to envision the future research library as containing materials in various forms-books, films, microprints, and other media which may yet be developed-each form used for the materials for which it is most suitable and kept in the special conditions required by it; specialized authoritative bibliographies prepared by scholars to guide other scholars in the literature of their fields and librarians in their task of purposeful acquisition; and a catalog which will guide the inquirer to the library's resources, in whatever form they may be available. The catalog will be cooperatively produced for the good of all libraries, and its ultimate shape is still in the lap of the future .- Herman H. Henkle and Seymour Lubetzky.

B. Childs and have been issued as a part of the program of the Department of State's Interdepartmental Committee on Scientific and Cultural Cooperation. The project is the outgrowth of preliminary and special studies made by Mr. Childs, the earliest of which appeared in 1932.¹ The value of this early work was recognized at once by those inter-

COLLEGE AND RESEARCH LIBRARIES

¹Childs, James B. Bibliography of Official Publi-cations and the Administrative Systems in Latin American Countries. Washington, D.C., 1938. (Re-printed from Proceedings of the First Convention of the Inter-American Bibliographical and Library As-contains. sociation.)