# THE <br> UNIVERSITY LIBRARY <br> ITS ORGANIZATION ADMINISTRATION AND FUNCTIONS 

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THE UNIVERSITY OF CHICAGO PRESS CHICAGO • ILLINOIS

## PREFACE

THE increase in university library resources since 1900 has been one of the most distinctive aspects of modern university development in the United States. In spite of this fact and of the corresponding increase in the extent and complexity of university library administrative procedures, there has been no systematic study of the principles and methods which characterize library organization and administration in the major universities of the United States or any formulation of generalizations concerning them.

The need for such a study has long been apparent. The present volume has been prepared to meet this need. Specifically, the purpose of the authors in the preparation of the volume has been to consider systematically the principles and methods of university library organization and administration and to formulate generalizations concerning them which may be useful to university librarians in the effective performance of their highly important task of aiding scholars in teaching and research. While this is the major purpose of the authors, it is also their hope that the study may prove of value to university administrators who are largely responsible for obtaining financial support of the library, to members of university faculties and learned societies who make extensive use of university library materials, and to students of library science who are preparing to cope with the problems of university library administration.

In the preparation of the volume the authors have received generous assistance from many university librarians and university administrators. They are especially indebted to Andrew Eaton, Raynard Swank, and Harold Tucker, who have served as research assistants in collecting statistical and bibliographical information, and to Mrs. Doris Flowers, who assisted in seeing the volume through the press. They are likewise indebted to Ralph A. Beals, Leon Carnovsky, Donald Coney, Carleton B. Joeckel, Guy R. Lyle, and John Dale Russell, who have read the manuscript in part or in whole and have been most generous in constructive suggestion and criticism.

L. R. W. and M. F.T.

Chapel Hill, North Carolina, and Chicago, Illinols

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## INTRODUCTION

THE modern university in the United States, with its large faculty, its tremendous enrolment, and its very extensive financial and physical resources, has assumed a position of commanding prominence among the universities of the world. Through the development and achievements of its universities in the fields of science and technology, of, the humanities and the social sciences, and of the professions and in many branches of research, the United States has made one of its greatest contributions to the civilization of the Western world.

Although the present-day university had its beginning, in a number of instances, in the Colonial college or in the state institutions, called "universities," that were established in several states between the Revolutionary War and the Civil War, it had its real beginning in the establishment of Johns Hopkins University in 1876. Since that date it has largely assumed its present organization, characteristics, and functions. Its growth since 1900 has been particularly rapid, and its organization and activities have become correspondingly diverse and complex.

Some of the evidences of this rapidity of growth and diversity and complexity of organization may easily be pointed out. In the autumn of 1900 Harvard University had the then largest enrolment of any American institution of higher learning. Its full-time students numbered 4,288. ${ }^{x}$ In 1940 the University of California had the largest full-time enrolment among the state universities25,899 students at Berkeley and Los Angeles; and Columbia, a private institution, enrolled 14,384 . The total enrolment of undergraduate and graduate students in public and private universities, colleges, and schools of technology increased from 115,271 in 1900 to $1,347,146$ in 652 institutions in 1940; and the faculties engaged in teaching and research, totaling 14,908 in 1900, numbered 123,677 in 1938. The physical plants required to house such universities are

[^0]likewise so extensive and complicated that a description of them cannot be attempted here. Frequently branches of a given university are located on several campuses in different sections of a city or state or even in other states. In 1940 New York University had to provide facilities for 35,623 full-time and part-time students at various locations in New York City. The University of Chicago maintains an astronomical observatory in Wisconsin and is associated with the University of Texas in staffing an observatory in Texas. Funds for endowment and research have likewise grown in the four decades. Johns Hopkins had an endowment fund of $\$ 2,428,000$ in 1900 ; in 1940 the amount had grown to approximately $\$ 31,000,000$. Harvard had $\$ 12,600,000$-an amount which had increased more than tenfold by 1940.

The most significant growth, however, has been in the fields of professional education and of graduate study and research. The graduate school, the professional schools in various fields, and in. stitutes for highly specialized investigation in many subjects-all embraced within the university's organization-have developed on an extensive scale and absorb a large percentage of the total ex. penditures for university purposes. The record of growth in the number of graduate students and advanced degrees awarded has been particularly notable. In $1890,2,383$ students were enrolled in graduate schools. In 1920 the number had grown to 15,612 ; in 1940, to approximately 100,000 . In 1890, 70 Master's degrees were granted; in 1920, 3,873; and in 1940, 23,000. Doctorates awarded for the same period were 164 in 1890, 532 in 1920, and 3,088 in $1940 .{ }^{2}$

Information concerning expenditures for research is not easily acquired, because the largest investments for this purpose are made by industry and government. But the role of the university is impressive in that it is the principal trainer of investigators: of the $\$ 220,000,000$ spent for research during 1936-37, at least $\$ 50,000,000$ was spent by universities. Business and industry spent $\$ 100,000,000$; the federal government, $\$ 70,000,000$. Of the total spent by universities, one-half, or $\$ 25,000,000$, was spent by $\mathrm{I}_{4}$ institutions, $\$ 20,000,000$ by 50 , and $\$ 5,000,000$ by 60 . In order to insure the publication of the results of investigation, the university press has been highly developed in many universities, and through it many significant publications are made available to the scholarly world.

[^1]Nineteen of these presses published from 5 to 98 volumes of a scholarly nature in 1940; and one regularly issued as many as 17 scholarly journals.
The American university library has shared in this growth. In fact, the increase of its resources and of its service to scholars has been one of the most pronounced aspects of university development. In many instances these resources and services have furnished the basis for much of the instruction and research of the institution. The rapid rate of growth has made the problem of providing facilities for both library materials and students one of the most perplexing that confronts the university administrator and librarian. Within the last four decades the holdings of many university libraries have generally increased at least fourfold; in some instances, tenfold or more. In 1900 Harvard was the only university library to have over 500,000 volumes. At that time Yale had only 360,500 ; the University of Illinois, 42,314 ; and the University of North Carolina, 31,000. By 1940 these 4 libraries possessed 4,159,606, $2,219,642,1,209,977$, and 386,390 volumes, respectively; and 23 universities had collections of more than 500,000 volumes.

This tremendous expansion of resources has been accompanied by greatly increased demands for space and personnel for the selection, acquisition, and use of library materials. Rooms for special collections for undergraduates; general reading rooms for reference materials and periodicals; seminar rooms, cubicles, and studies for graduate students and faculty members; space for bibliographical apparatus and service for the reproduction and use of special types of material; quarters for all the administrative and technical operations; and special libraries in departments, institutes, and professional schools have been provided on a scale commensurate with the university's total program of activities and carefully adjusted to its needs.

To complicate the problems of the library still further, new responsibilities have been placed upon it. These have arisen in various ways. First of all, the character of materials acquired by libraries has undergone remarkable change. Journals, government documents, near-print, manuscripts, newspapers, pamphlets, phonograph records, prints, maps, films, photostats, and other forms of material have to be secured on an unprecedented scale; and major collections of a highly specialized nature have had to be acquired, housed, and serviced. Chinese collections at Harvard, Hispanic-American ma-
terials at Tulane, Western history at California, Near East objects and materials at the University of Chicago, collections of archives at Virginia, and the seemingly endless variety of materials available in recent years through microphotography and other forms of reproduction suggest the range and complexity of these materials and the problems to which their acquisition and use give rise.

Card distribution by the Library of Congress and other libraries; the publication of union lists of serials, manuscripts, newspapers, and catalogs of major world-famed libraries; the development of local, regional, and national union catalogs; the formation of groups to aid in library acquisition; the establishment of library schools upon university campuses and usually within university libraries; the development of co-operative undertakings in the fields of specialization, documentation, and bibliographical service; participation in international conferences and organizations which are concerned with the facilitation of co-operation between American and foreign libraries-all have placed new responsibilities upon university libraries which were all but unknown in 1900.

In consequence of these responsibilities there has been added the further necessity of integrating the library in the general administrative and educational policies of the university. Obviously, to insure its maximum assistance to the university, the library must be fully acquainted with the total educational program of the university and must be able to adjust its administrative procedures to those of the university whose interests it undertakes to advance.

This, in brief, is the situation which confronts the university librarian today. The problems which naturally grow out of these conditions are those with which the librarian must deal. The principal difficulty which he experiences in attempting to deal with them is the lack of a systematic review of information concerning organizational and administrative procedures essential to their proper solution. Some information is, of course, available. Library literature contains many articles which deal with certain aspects of university library administration. Information is likewise available through correspondence and through conference and personal visitation. The establishment of the Association of Research Libraries in 1931 and of the Association of College and Reference Libraries in 1938; the recent publication programs of College and Research Libraries, the American Archivist, and the Journal of Documentary Reproduction; and the publication of the results of surveys of a number of university libraries, of regional and national
bibliographical undertakings, and of conferences on co-operation and specialization have relieved the situation somewhat. But, in spite of this increase of available information, the field of university librarianship has not been subjected to a systematic scrutiny, and no extensive body of generalizations concerning it has been developed.

The purpose of the present volume grows out of this situation and bears repeating and emphasizing here: it is to review the changes which have taken place in the university library in response to the demands made upon it by university growth; to consider systematically the principles and methods of university and library administration; and to formulate generalizations concerning the organization, administration, and functions of the university library to the end that it may serve its clientele more adequately and efficiently than it has in the past. It is also intended to aid the university administrator in understanding the role of the library in the total administration of the university, to acquaint faculty members and members of learned societies with the problems which adequate service to them involves, and to make available to students of library science a body of principles and methods bearing upon the specific problems of university library administration.

It will be observed that, while much has been done in developing university librarianship, there is still a good deal to accomplish. Criticism of library practices, by both librarians and nonlibrarians, makes it necessary for administrators to reappraise constantly technical procedures and readers' services. Undoubtedly, there is danger of some librarians becoming so engrossed in technicalities that they lose sight of the purposes of their work. There is also the danger that some librarians, engaged in a day-by-day task of operating complex library systems, will neglect to realize fully the implications of the assumption that knowledge is indivisible and that the pattern of librarianship inevitably reflects the pattern of educational policy. Finally, librarians should not overlook the fact that in many of the larger aspects of university librarianship the problems are universal, rather than local, and require cooperative, rather than individual, planning and action.

The information upon which this study is based has been drawn from many sources. These have included studies such as the Survey by the American Library Association (1926); College and University Library Problems, by Works (1927); Circulation Work in College and University Libraries, by Brown and Bousfield (1933); Principles
of College Library Administration, by Randall and Goodrich (1936 and 1941); and descriptive and administrative surveys of the libraries of the University of Chicago (1933), of seven western and northwestern state universities (1938), and of the universities of Georgia (1939), Florida, Indiana, Mississippi, and Pennsylvania (1940). Other publications and theses concerning all aspects of library co-operation, resources for research, reclassification and recataloging, microphotography, special resources for national defense, library buildings, and other subjects, which have appeared in increasing numbers in the past half decade, have likewise been drawn upon extensively. Such information has also been supplemented by personal visits and by extensive correspondence.

The libraries considered are university libraries. Although universities in the United States invariably include undergraduate students, the principal emphasis is placed upon the problems of the university library in its effort to provide its major service-research -to the upper divisions and to the graduate and professional schools and the special institutes of the university. The problems of the junior and senior colleges of the university are considered only as they are involved in the larger program of the university library.

In carrying out the study, a number of difficulties have been encountered which have limited its possible usefulness. The lack of full-length treatments of various aspects of the subject has already been indicated. Another and very serious limitation has been that of comparable data covering the same institutions for a fairly long, continuous period. The data which appear in the statistical compilations of the American Library Association and of the U.S. Office of Education are frequently incomplete, or their nature has been modified from one date to another. This is particularly true in the case of financial data-a difficulty which is increased by the fact that a number of universities do not permit the publication of certain types of information. Another limitation which should be noted relates to the date of much of the material used. In most cases the statistical data cover the period through $1940-4 \mathrm{I}$ and do not attempt to deal with issues growing out of the war since Pearl Harbor.

These limitations will obviously affect the usefulness of the volume adversely. However, the volume has been prepared with the expectation that, once the general field has been considered, other studies will follow which will deal with the limitations and suc. cessfully remedy them.

## CHAPTERI

## THE FUNCTIONS OF THE UNIVERSITY AND ITS LIBRARY

SINCE this volume is intended to deal with the organization, administration, and functions of the university library, it is important that consideration be given to the functions of the university and that the relation of the library to the university, from which the objectives and the significance of the library stem, be clearly shown. It is also important that any confusion which may exist in the reader's mind concerning the terms "college" and "university" be removed at the outset.

## THE FUNCTIONS OF THE AMERICAN UNIVERSITY

Prior to the American Revolution, institutions of higher learning were known as "colleges." It was not until the constitution of the state of Massachusetts was adopted in 1780 that Harvard College was referred to as "the University at Cambridge." The College and Academy of Philadelphia became the University of Pennsylvania in 1791, while Brown University adopted its present name in 1804, after having been known as the College of Rhode Island for thirtynine years. The term "university" was first used to designate an institution that incorporated an extensive group of courses into its instructional program and maintained one or more professional or technical schools. Although several of the early institutions assumed some of the characteristics of present-day universities as early as the second half of the past century, they did not adopt the name "university" until comparatively recently. Princeton University did not change its name from the College of New Jersey until 1896. King's College, which became Columbia College in 1784, did not become Columbia University until 1912, and Queen's College (Rutgers College, 1825) did not become Rutgers University until 1924.

Various definitions of the "university" have been formulated. For the purposes of this volume the definition given by Marsh is used. As defined by him, "a university in the United States is an
educational institution comprising an undergraduate college of liberal arts and sciences, professional schools, and a graduate college or school which provides programs for study and research beyond the levels of the baccalaureate and first professional degrees." ${ }^{\text {r }}$

The term "university" has been frequently used to describe institutions which do not comply with these conditions. Sometimes the name "university" is officially used by a small college by virtue of its charter. At the same time, there are other institutions which retain the title "institute,". or "college," which offer graduate studies and confer advanced degrees. Bryn Mawr College, the Massachusetts Institute of Technology, the Colorado School of Mines, and the Claremont Colleges are examples. Library problems in institutions of this type are similar to those encountered in institutions officially designated as "universities."

The functions of the privately and publicly supported universities have been discussed at length in educational literature by Learned, Flexner, Hutchins, Foerster, Dewey, and many others. It is beyond the scope of this volume to trace in detail the different and conflicting viewpoints regarding these aims. R. Freeman Butts, in his recent volume, ${ }^{2}$ has presented a full discussion of the strange contradictions that may be observed in the controversies regarding the "true function" of the American college and university. Moreover, he has shown that the introduction of new courses of a practical or utilitarian nature is not a thing of the immediate present but a matter of evolution in the curricular development in institutions of higher education. The rise and expansion of land-grant colleges, state universities, state-aided universities, and municipal universities show the trend of institutions of higher learning to

[^2]assume a more practical or utilitarian slant. While many educators and institutions have endeavored to retain the traditions of classical education, universities in general, and state universities in particular, have not held firmly to these traditions. Education for democracy and for practical and professional purposes appears to be a definite part of most university programs.

Whatever the controversialists may consider the true functions of institutions of higher learning in the United States, a historical analysis of the objectives and activities of universities will reveal that they have been and are now concerned primarily with six functions or activities. These may be described as (1) conservation of knowledge and ideas, (2) teaching, (3) research, (4) publication, (5) extension and service, and (6) interpretation. Each of these functions is not wholly discrete and may be dealt with from the point of view of both the university and the university library.

Conservation of knowledge and ideas.-There can be little question that the university, during the last five hundred years, has been the chief conserver of knowledge and ideas accumulated by man in his struggle to conquer the physical world, to relate himself effectively to the society of his fellow-men, and to develop his intellectual and spiritual capacities. Through laboratories, libraries, and museums the university, in conjunction with other social institutions, has conserved the heritage of the past essential to the education of the individual and to the interchange of ideas. The processes of social change are interwoven in the facts, ideas, and inventions of man; and each new idea or invention grows out of accumulated and conserved knowledge.

Teaching.-No university, however, is merely a conserver of the past. Through its instructional staff the knowledge and ideas conserved by it are revitalized and put to use in the education of the youth who are to be the leaders in society and workers in the field. of research. The preservation of the physical object called the "book," for example, may not be in itself important. What is important is for the university to transmit to the oncoming generation the ideas which the book contains. The determination of which youth shall be taught the more important ideas, what methods shall be used in the process of instruction, and who shall do the teaching may well be matters of opinion and debate. However that may be, teaching is an inescapable function of the university; and it is not restricted to the undergraduate junior college or liberal
arts college levels but extends to the graduate and professional levels as well.

Research.-The most distinctive difference between the college and the university is found in the latter's emphasis upon research. Through the nethods of research the student is given an opportunity for independent work, and the laboratories and libraries become indispensable aids in an activity which is directed at the expansion of man's fund of knowledge. Through the Master's essay in a limited way, the doctoral dissertation generally, and special investigations by faculty members and research workers the university continuously attempts to gain for man a full comprehension of his physical and social universe. And while the university makes this direct contribution to the advancement of knowledge, it serves as the principal training ground for those who carry on investigation in government, industry, the sciences, and other fields. Of the 40,000-60,000 individuals engaged in research, one-fourth are associated with colleges and universities.

Publication:-Not only does the university actively engage in research and train research personnel, but it offers to the scholarly world and the public generally the results of investigation through the medium of publication. Through the maintenance of a press, members of the university staff and other scholars are provided with an instrument by which reports on research in the various fields of knowledge may be disseminated. Robert F. Lane, ${ }^{3}$ in his study of the history and development of the university press, ascribes the establishment of the first American university press to Cornell University in 1869. By 1898, 16 university presses had been founded; and by 1939, 60 institutions were publishing scholarly journals and books which served as important sources for statements of scientific research. The publication of the results of research has not been the sole contribution which the university press has made to scholarship. By providing an agency near at hand through which publication can be assured, it has stimulated scholars to undertake investigations. It has likewise been notably successful in effecting an extensive documentation of special subject fields or regions and in rounding out and giving a cumulative effect to the university's entire educational program.
Extension and service.-Extension and service have been among the recently developed functions of the university, and they have

[^3]been more extensively developed in publicly supported than in privately supported universities. Through this combined function the university assumes a position of leadership in the endeavor to raise the cultural level of the whole community. The university may serve as the head of the entire educational system of the state and as a court of final authority on all educational matters within the range of its experts. Both private and public universities participate actively in industrial, business, and governmental affairs through members of the faculty and research staff. Their research facilities are often specifically utilized in the solution of community social problems, and service to the community is offered on the university campus through institutes and short courses. In addition, the university often goes beyond its immediate campus boundaries and, through such means as extension courses, correspondence courses, agricultural extension, radio talks, adult education programs, and research through experiment stations, contributes actively to the furtherance of the education of individuals and society in general.

Interpretation.-The value of research is obviously limited unless its results are made available not only to other scholars but to the public generally. Consequently, the faculties and research staffs of universities constantly attempt to interpret the results of their investigation to society in various ways. No sharp line of demarcation, therefore, can be made between the functions of teaching, publication, and extension, on the one hand, and that of interpretation, on the other. All are involved in the dissemination of the new knowledge which the university discovers and contributes to the modification and refinement of present practice and to the development of future theory.

## ESSENTIALS OF A UNIVERSITY LIBRARY PROGRAM

Any discussion of the organization, administration, and functions of the university library should be related to the institution whose objectives it is intended to advance. However, such a discussion cannot be maintained under the identical rubrics used above. In the following consideration of the essentials of a university library program, such a regrouping of ideas has been effected as seems best to insure a proper presentation of the library's role in the attainment of the university's objectives.

The essentials that are fundamental to successful operation of
the library and the implementation of its program with the teaching and research program of the university may be presented under eight heads: (1) resources for instruction, research, and extension; (2) a competent library staff; (3) organization of materials for use; (4) adequate space and equipment; (5) integration of the library with administrative and educational policies; (6) integration of the library with community, state, regional, national, and international library resources; (7) adequate financial support; and (8) a workable policy of library government. They may be considered briefly in the above order at this point. Each will be expanded in detail in later chapters.

Resources for instruction; research, and extension.-In the first place, the library must possess adequate resources for carrying out the objectives of the university in the fields of instruction, research, and extension. These resources imply the existence of the function of preserving the accumulating source materials necessary for scholarly pursuits. The specific objectives of the library are determined by the university and are stated explicitly or indirectly by the institution in its various catalogs and announcements and in other ways. Once they are determined, the library must provide the bibliographical apparatus, books, journals, manuscripts, and other materials necessary to their attainment. The library's acquisitional policy should constantly be directed toward the support of the various phases of the work of the institution and should be extended to support programs in such additional subjects as may be determined from time to time by the university.

It should not be necessary to labor this point. Whenever a change is made in the curriculum, or a new course, a new staff member, or a new department, school, or institute is added, or an extensive new program of investigation is planned, these changes, additions, and plans almost inevitably involve the use of library materials, whether proper provision is made for them in the library budget or not. Far too frequently, such provision is not made in the budget of the new undertaking or of the library, and the new undertaking suffers accordingly. The inauguration of the house plan at Harvard involved the equipment of 7 libraries of from 5,000 to 12,000 volumes each; and when the general courses were introduced in the College at the University of Chicago, an expenditure of $\$ 25,000$ for books to support the courses was necessary.

A competent library staff.-The second essential of a university
library program is a staff competent through training in professional and subject fields and sufficient in number to organize and administer the resources of the library at an effective teaching or research level, as opposed to the stripped-down administrative or housekeeping level at which libraries are usually forced to operate. Inasmuch as the library is concerned with graduate study and research, the training and experience of the staff should be carefully scrutinized for this exacting work. This means that a positive relation should be maintained between the amounts which are spent for staff and materials in a well-organized, functionally efficient library. An approximate formula, established through the experience of college and university libraries for determining the amounts which should be provided for the normal administration of university libraries, is $50-60$ per cent for personnel; 40-30 per cent for books, periodicals, and binding; and io per cent for supplies and other purposes. While this formula will vary from library to library, it is too frequently overlooked by administrators and faculty members, particularly when new programs of instruction or research are begun. Disregard of this formula often leads to unsatisfactory library performance and, in the end, defeats some of the special purposes which the new programs were intended to serve.

Too much emphasis cannot be placed on the fact that a high order of service cannot be maintained unless the library staff, through extended training in subject as well as in technical fields, understands the objectives of the university and can assist the university in making its work richly fruitful. Such an understanding must necessarily grow out of the systematic study, by the library staff, of the curricula of the university and of a knowledge of the spirit and methods of research as well as of the general administrative and educational procedures of the university. This implies that the university librarian must understand fully the objectives of the university in order to direct the library in such a way as to secure its greatest educational effectiveness. B. Lamar Johnson, in Vitaliz. ing a College Library, ${ }^{4}$ and Harvie Branscomb, in Teaching with Books, ${ }^{5}$ have written convincingly about this aspect of the teaching function of the library at the college level. The point might well be even more greatly emphasized when teaching, research, and

[^4]publication at the university level are involved, since the range and complexity of university library procedures are greater than those of college library service.

Organization of materials for use.-Organization of the resources of the library for efficient use by various groups of patrons is the third essential. For example, the books used by undergraduates in the college library of the university can be given simpler treatment than those needed by research workers. The proper interrelation of all kinds of library materials, of catalogs and classifications, and of the library's total services can be made to contribute to this effectiveness, just as failure to include in a central catalog the holdings of major collections located on the campus can defeat the maximum service of the library to its clientele. Even though a library may possess a wealth of resources, extreme centralization or decentralization of materials and administration and the lack of proper organization of service desks, catalogs, and bibliographical apparatus may seriously limit the service which should be provided. One of the most serious handicaps with which the users of a library may have to contend is the failure of the library to maintain an adequate catalog of all materials as they are received.

Adequate space and equipment.-The fourth essential-adequate space and equipment for the expeditious use of materials-can scarcely be separated from the third essential-organization of materials. The planning of the modern university library building, like that of buildings for industrial, commercial, and other purposes, must be carefully conceived if the maximum of efficiency in library use is to be attained. Consequently, the responsibility for the arrangement of space in the interior of the building or buildings devoted to library use should be placed upon the librarian, and the resulting organization of space and installation of equipment should express a complete understanding of the best functional organization of library materials and facilities. Adequate space for the acquisition and preparation of materials; for reference, bibliographical, and other services; for graduate reading rooms, seminars, stack cubicles, and faculty studies; for departmental, school, and divisional libraries; for administrative offices, stacks, and photographic laboratories; for special needs of undergraduate students; for reserves, browsing rooms, special collections, and rare books-adequate space for these and all other library purposes should be so planned as to secure the most effective integration possible.

Integration of the library with administrative and educational poli-cies.-The fifth essential of satisfactory library service is the close integration of the library with the administrative and educational policies and practices of the university. The library is not an end in itself. While it has to maintain a schedule of service and a number of essential technical processes, they should be kept, as far as possible, in the background and administered in such a way as to promote the attainment of the educational objectives of the institution. The major function of the library is to promote the administrative and educational policies of the university of which it is a part. If the library, however, is to perform this function properly, the staff must understand the institution's administrative and educational policies and maintain intimate contact with its activities. The mere granting of faculty status to the librarian or certain institutional privileges to members of the library staff will not insure the maintenance of all the contacts that are essential. Like the president, the librarian is a university officer who serves the entire university; and he should be so placed in relation to other administrative and policy-forming officers and bodies as to be informed concerning all the interests of the university which the library should foster. Consequently, if the university modifies the curriculum of its general college, the librarian should contribute to the discussions leading to the modification, as the contemplated change will necessarily affect the library. Matters of concern to the graduate faculty invariably have their counterpart in the library. The decision to establish a departmental library in a new building involves the provision of library equipment, personnel, catalog service, and the maintenance of other library relationships. The participation of the librarian in matters of this character is fundamental to coordinated, effective library administration.

Integration of the library with community, state, regional, national, and international library resources.-The close integration of the library program with that of the university may apply not only to university interests upon the immediate campus but to library interests within the community, state, region, and country and, to a certain degree, to research and scholarly interests throughout the world. The decade of the 1930's witnessed the wide extension of various forms of co-operation by college and university libraries. ${ }^{6}$

[^5]As a matter of fact, in a number of instances libraries have been the leaders in this new form of educational statesmanship in the field of higher education. This new movement may have been due in part to the depression. Primarily, it grew out of the realization by librarians, faculties, and representatives of educational foundations and learned societies that bibliographical apparatus and library resources within given areas and the nation at large could be greatly increased if emphasis could be placed upon co-operation in the acquisition and use of materials and the provision of bibliographical facilities, rather than upon rivalry and duplication. The extension of interlibrary loans, the introduction of films for research purposes, and the development of union catalogs and bibliographical centers further emphasize the point.
-Adequate library support.-Adequate financial support is fundamental to the maintenance of any program of library development and service that is to be significantly effective. To supply the necessary funds for the acquisition of materials for study and research, for the staff to administer the resources, and for buildings to house the materials is a responsibility of the university administration which is cognizant of the role played by the library in the academic program. The appointment of a qualified personnel should insure the wise expenditure of funds allotted for the administration of the library.

A workable policy or plan of library government.-The final essential in an adequate library program is a library policy or plan of library government which will insure the effective, functional operation of the main library and all its special units. In some American universities this phase of university administration is badly in need of specification and clarification. In such institutions the flow of authority from the administration to the librarian; the relation of the library committee to the library, the responsibility for the preparation of the budget, the selection of library personnel, the administration of departmental libraries, and the formulation of a well-conceived, comprehensive, long-term program of library development for the university as a whole-these and like con-

[^6]siderations that are basic to effective administration have been left largely to chance. Whatever policy exists has been allowed to grow according to individual interests or has been determined on a basis other than that of sound administrative principles. In order that the unfavorable conditions which naturally develop from such a situation as this may be obviated, it is fundamental that a policy be evolved and followed which will result in a well-organized, expertly directed library administration.

To summarize, it may be noted that the university is concerned with (1) conservation of knowledge and ideas, (2) teaching, (3) research, (4) publication, (5) extension and service, and (6) interpretation. The well-administered university library directs its activities toward the fulfilment of these functions. By accumulating and organizing books, manuscripts, journals, and other materials the university library serves as an invaluable aid in the conservation of knowledge and ideas and as an active force in the teaching, research, and extension programs of the university. Through direct assistance to the members of the faculty and research staff and through the service of members of the library staff as instructional officers the university library participates in the interpretative function of the university. Through its many bibliographical services the library aids individuals of the instructional and research staffs who are engaged in the preparation of materials for publication.

In subsequent chapters these essentials of the university library program will be considered in detail. The order of the chapters, however, will differ somewhat from the order of the essentials discussed above. In the following chapter the government of the university library and the relation of the library to the university administration will receive attention.

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## CHAPTERII

## GOVERNMENTAL AND ADMINISTRATIVE RELATIONSHIPS

THE various aspects of governmental and administrative relationships of the library fall into three categories: (I) those that have been formalized and expressed in constitutions, laws, charters, articles of incorporation, and judicial decisions; (2) those that have been codified and stated in the university's "constitution" or "statutes"; and (3) those that have not been specifically codified by the university but are generally applied in daily administrative routines and practices. The latter are the more extensive and account for a considerable part of the following discussion. In some instances some of them are formalized in interoffice directives. In the study of these three aspects of university library administration it may be said that clearly expressed codes of library policy or government such as fall into category (2) and are particularly essential to efficient library administration have been found to be the exception rather than the rule.
University libraries in the United States, even when they are parts of state systems of higher education, have generally been operated independently of one another. Unlike university libraries in pre-war France, which were operated directly under the control of the central Ministry of Education, American university libraries have not been placed under the control of the federal government. During the decades 1920 and 1930, however, as a result of greater concentration of governmental control in several of the states, libraries of state universities, in common with the libraries of state institutions as a whole, have been influenced by reorganization and consolidation of state institutions effected by state legislative enactment. This has been notably true in the case of the libraries of the institutions of higher education in Oregon and, to a lesser degree, in North Carolina, where important consolidations and reallocation of functions of higher institutions have been brought about by legislation. In Georgia, legislative action placing budgetary control of state institutions in the hands of the governor, as well as power
to change the membership of the governing board, resulted in direct control of several state institutions in 1941. These instances, however, have not modified to any considerable extent the fundamental difference between the management of libraries in universities in decentralized, as contrasted with centralized, governments. The libraries of the universities, both private and public, share in the freedom from centralized control enjoyed by the institutions of which they are parts.

## LEGAL BASES OF UNIVERSITY ORGANIZATION

In seeking for a pattern of university library organization and administration in America, recourse must be had to the laws of the various states concerning the institutions which the libraries serve. Although variation in pattern is to be expected, since the fortyeight states have dealt with the establishment of institutions of higher education in diverse ways, general patterns in the legal structure of the universities are evident and may be noted.

Private universities.-In the United States the privately supported university is regarded by legal authority as a public charity. Its establishment as a legal entity is provided for through a charter or through articles of incorporation; and the possible state reservation of the right to alter, amend, or annul the charter or articles of incorporation determines the degree of independence which may be enjoyed by the university. If no such reservation has been made, the private university is free, within the limits of its charter, to develop its policy and program of education as it wishes, for the charter in such instances has the force of a contract with the state and is not subject to interference by the state or federal governments. This relationship of the university to the state was definitely decided by the Supreme Court of the United States in the Dartmouth College case. In this decision the court maintained that the charter of the college constituted a contract between the college and the state and that the institution was consequently not subject to legislation which would in effect nullify the charter. This decision exercised a profound influence upon private colleges and universities and caused the states to pass general laws of incorporation by means of which certain controls are reserved to the states. It goes without saying that as an organic part of the university the library is directly bound up with the legal standing of the institution with which it is associated.

Since the privately controlled university is considered a public charity, tax exemption, as applied to property, is usually granted it. The income which the university library receives from benefaction and endowment, therefore, is usually free from taxation. ${ }^{\text {x }}$ Such immunities as limited liability for torts and damages are also usually granted to the university because of its standing as a public charity. Finally, the exercise of control over students in matters of discipline and regulation has usually been construed by state courts as a legitimate function of the university. These rights and privileges which are extended to the university as a whole naturally affect the library as well as other units.

Since higher education is largely a matter of state concern, state courts have been called upon to render decisions when universities are involved in litigation. This applies to private and public institutions alike. Libraries are likely to be subject to the same kind of control as that maintained over universities. This is exemplified by the control exercised by the director of libraries over all libraries in the state system of higher education in Oregon.

Public universities.-The state as a political unit has developed its institutions of higher education and has provided taxation for their support and operation. Legally, state and municipal universities are considered administrative units of government. As such, unless there is a constitutional provision to the contrary, they are subject to the will and action of the legislature and council. In some states, such as California, Michigan, and Minnesota, the governing bodies of the state universities are constitutional corporations and, in varying degrees, are free from interference by the legislature. ${ }^{2}$ In about one-half the states no constitutional provisions for state universities exist. In these cases the universities are creations of the state legislatures and, as such, are subject to the legislative will. Policies and programs of education are also limited and controlled by the legislatures through their power of appropriation of funds and control of budgets.

[^7]A state or municipal university in its capacity as a governmental unit enjoys exemption from taxation, is entitled to the right of eminent domain, and possesses certain immunities in the matter of torts and damage suits. It may be presumed that members of the library staff, just as professors and instructors, are considered by the courts as employees under contract rather than as public officers. The degree of independence maintained by the state or municipal university depends upon the state legislature or the city council, which may, unless restrained by constitutional provision, determine the policy and educational program, as well as the organization and administration, of the university.

This legal relation of the university to the state or city affects the university library. The program of the university library may be curtailed sharply if the appropriation of the university as a whole is reduced, or it may be expanded if the appropriation is increased. Moreover, the libraries of state or municipal institutions of higher education can be legally forced to contract or extend their services and activities. Minnesota thus requires the state university library to collect and preserve government documents. In Oregon the libraries of institutions of higher education have made radical changes in administrative organization. North Carolina and other states require the university libraries, along with other agencies of the government, to follow certain budgetary procedures and to purchase equipment and supplies according to specified routines. In some states civil service regulations are applicable to the university library.

Generally, a state university, in addition to being an administrative unit, also has a corporate existence. As such, it may enter into contracts, hold property in its own right, and undertake business ventures. The governing body of the university-the university board, the board of trustees, the board of regents, or any group of this type-may be permitted to issue bonds or borrow money as a direct obligation against itself. In some states, such action in the case of state institutions is prohibited by law. Repayment of funds secured through bond issues or loans must be pledged from future earnings from investments, proprietary enterprises, or from special funds. It should be apparent that this corporate status of public universities directly affects the libraries. For instance, it may be inferred that a new library building or an extension of an old structure could be financed through a bond issue or loans.

The governmental status of both private and public universities is not a static matter. Social and economic changes react upon the attitudes held by the public toward institutions of higher education. It is within reason to expect that these changes may result in changes in the legal status of universities. For example, tax exemption of private universities is not an inherent right; public opinion may alter to the extent that legislatures will modify or remove the exemptions. Obviously, any changes in the functions of universities, or the addition of new functions, affect the activities of libraries. Unless the university librarian is aware of the legal basis upon which his authority rests, unless he knows what special rights and privileges have been granted to the library and what its relations to the government are, it is likely that he will not administer his responsibility so fully or so effectively as he should. Since legal changes may be made which directly affect the financial basis of the library, knowledge of the present situation and of state laws should enable the librarian to scrutinize intelligently any legislation which might make the university library a more effective educational unit or might act as a barrier to the development of library services.

## LEGAL BASES OF UNIVERSITY LIBRARY GOVERNMENT

The legal bases of authority upon which the establishment and maintenance of the university rest have an important bearing upon the government of the university library, whether it is a part of a state, municipal, or private institution. These legal bases consist of constitutional provisions, charters, articles of incorporation, and general and special laws applicable to the university, as well as judicial interpretations of these instruments. In a few cases in which the university library is specifically mentioned in legislative enactment, legal provisions permit or direct the governing body of the institution to purchase such books and equipment and to appoint such officers as are judged essential for carrying on the work of the library. In the case of the University of Wisconsin, however, the state statutes specifically empower the regents to prescribe rules and regulations for the management of the library. Likewise, The Laws and Regulations of the University of Minnesota directly refer to such matters as the bases of library support, the powers, status, and responsibilities of the university librarian, and the various activities of units of the library.

The nature of the policy which governs the internal organization and administration of the university library depends, in most cases, on the prescribed regulations, by-laws, and proceedings of the governing body of the university or of the faculty or senate or other university body to which the governing body has delegated authority for formulating such policy. This is true of both public and private institutions. However, in a number of instances universities have not formulated such policies; or the formal regulations and by-laws which they have adopted for the government of their libraries fail to include such important matters as the scope and objectives of the library, the functions and responsibilities of the librarian and members of the staff, and the organic relationships of the library to other units and officials of the institution. In recent surveys of university libraries it has been found that lack of clarity on such points as these is usually attended by a corresponding lack of efficiency and adequacy of library service.

## INTERNAL GOVERNMENTAL POLICY OF THE UNIVERSITY LIBRARY

Thus far, attention has been paid to the relation of the university and of the university library to the state and to the governing body of the institution. It may now be appropriate to examine the essentials of a sound internal governmental policy for the university library. These essentials may be found in the practices of university libraries which have carried on successful programs. These practices indicate that the characteristics of a successful policy are usually as follows:
I. It defines clearly the relations of the librarian to the administration. Inasmuch as the librarian is an officer who is charged with the administration of a major unit of the university which maintains contacts with all other units and serves all schools, colleges, departments, and interests and assists them in the attainment of their various educational objectives, he should be nominated by the president and should be directly responsible to him, as are other chief administrative and educational officers. ${ }^{3}$
2. It makes clear what constitutes the library resources of the

[^8]university. These generally should include all books, periodicals, pamphlets, and other graphic materials obtained by the general library or by any other unit of the university through purchase, exchange, gift, or otherwise for university purposes.
3. It places the administration of these resources, wherever located and by whatever unit acquired, under the administration of the librarian. In actual practice, there are many exceptions to this principle, especially in the case of the libraries of certain schools and special services, such as schools of medicine and law and agricultural experiment stations. The fact that there are exceptions, however, may be attributed more to tradition than to any inherent defect in the generalization.
4. It sets forth the duties of the librarian. It holds him responsible for the selection of books and periodicals of a general character for the main library and for the maintenance of a well-organized procedure for the selection of technical and special materials desired by and purchased for the various schools, colleges, and departments of the university. It likewise holds him responsible for the selection and direction of the members of the library staff, for the expenditure of such funds as are earmarked by the university for library pur-

[^9]poses, for the acquisition and processing of library materials for the university as a whole, for the maintenance of adequate catalogs for the general library and departmental libraries, for the preparation of the library budget and its submission to the president, for the submission of an annual report or other reports, and for the performance of such other duties as are commonly embraced within university library administration.
5. It provides for a library committee or board to assist the librarian in the allocation of book funds and in the formulation of a broad, general policy of library development. This committee should be representative of the university; its members should be chosen for their interest in the development of the library resources of the whole university rather than of one particular part; and its functions should be informative and advisory rather than administrative and executive.
6. It defines the relationship of the librarian and the library staff to the administrative and educational units of the university in order that the library may be informed concerning all the administrative and educational policies of the university and may participate appropriately in their formation and execution. It likewise indicates the professional status of the librarian and the library staff and their relation to provisions of tenure, sabbatical leave, retirement, insurance, and vacations made by the university for its administrative, instructional, and professional members. ${ }^{4}$

Such a statement of principles is intended not to confer upon the librarian unusual or dictatorial powers but rather to give him the kind of administrative status which is usually granted to other officers of the university. It rests squarely upon the assumption that the librarian and library staff are competent to merit such responsibility and to serve the various university interests in a cooperative, efficient manner and that the activities of the library are sufficiently important to the university to require centralized, expert direction.

## RELATIONS OF THE LIBRARIAN TO GROUPS AND INDIVIDUALS COMPRISING THE UNIVERSITY ADMINISTRATION

The inclusion in the statutes of a university of legislation embodying a sound governmental policy for a university library, such as

[^10]has been described in the preceding section, implies that specific relationships exist between the librarian and various groups and individuals on the campus. This assumption is well supported, since an unusually large number of relationships center in the office of the librarian. The librarian, like the president, is an officer of the entire university and is concerned with the implementation of the teaching and research program of the whole university, so far as that can be effected by the library. Consequently, he has relations with all members of the university. The following list represents the various university and non-university groups, agencies, and individuals with which the librarian and his staff may have administrative, business, instructional, research, or service relations:

| Trustees | Union catalogs and bibliographical cen- <br> ters |
| :--- | :--- |
| President | Students |
| Legislative senate or faculty | Business office |
| Administrative board | Comptroller |
| Council | Auditor |
| Library committees | Purchasing agent |
| Deans | Buildings and grounds |
| Heads of departments | University press and publications |
| Faculty members | Bookstore |
| University committees | Rental library |
| Departmental librarians | General public |
| Professional school librarians | Faculty families |
| Research institutes | Employees of university |
| Extension service | Alumni |
| Home study | Friends' group |
| Library school | Visiting scholars and research workers |
| Other libraries in community |  |

Since these relationships are possible and do exist in many of the larger universities, it is perhaps useful to discuss them more concretely, in an effort to show what effects they may have upon either the objectives or the activities of the university library. The point which requires emphasis is that the university librarian must work in close co-operation with all these groups, agencies, and. individuals and must know how to adjust the library nicely to their varying requirements if it is to render maximum service to the university. Each of the relationships will be considered in the order noted above; but not all of the groups, agencies, and individuals will be discussed in detail. The order of the agencies and individuals listed does not represent hierarchical significance.

Trustees or governing body.-The board of trustees or governing body of a university represents the university as a legal entity and
assumes responsibility for the conduct of the institution. As an administrative body, it is primarily concerned with the formulation of the general policies of the university, with the control of the institution's finances, with' the selection of its president and chief officers of administration, and with the approval of recommendations and the confirmation of actions of administrative officers. In order that educational policies may be formulated in accord with approved educational principles and carried out effectively, the board selects the president and other important officers and delegates to them the duties of actually administering the institution.

Seldom does the governing board directly select the university librarian. Generally, it appoints the librarian upon the recommendation of the president, to whom has been delegated the power of selection of the faculty and of many of the administrative officers. This does not mean that the relationship between the trustees and the librarian is not important. Since the trustees control the budget, it is desirable that all avenues of keeping the board intelligently informed concerning the activities and needs of the library be maintained. When a library committee of the board exists, the medium of communication is direct. Otherwise, information concerning the library is usually made available to the trustees through the president. Thus, while there may be no direct relation between the librarian and the board of trustees, unless there is a library committee of the trustees, as at Brown and Duke universities, the governing body passes upon the annual budget, decides upon rules recommended to it for the use of the library, and considers any plans for buildings or material alterations. In no sense is it a wise policy for the trustees to interfere with the internal administration of the librarys

President.-The president or chancellor is the chief executive officer of the university and is responsible to the governing body for the conduct of the institution. The relationship between the librarian and the president is direct. Usually the president recommends the appointment of the librarian; and, while he, like the governing body, does not concern himself immediately with the internal management of the university library, recommendations made by the librarian concerning appointments, promotions, and dismissals of members of the staff are reviewed by him and, if approved, are transmitted by him to the board of trustees. He is kept informed concerning book funds; means employed in integrating the library
with instruction, research, and extension; building improvements; large expenditures for equipment; and new activities which call for modification of buildings or the unusual expenditure of funds. The librarian prepares the library budget and submits it to the president, makes recommendations to him for appointments to the staff, and generally seeks confirmation by him of decisions which alter the prevailing policies of the library in relation to other units of the university. No major university policy involving the library should be made without the knowledge of the president or any other interested officer. It is equally important that no major decision concerning other activities of the university which will involve the library, such as the establishment of new departmental libraries or the inauguration of extensive research programs, should be made without the knowledge of the librarian. Many instances of inefficient library administration may be attributed to the nonobservance of this policy.

The legislative senate or faculty.-The functions of the senate or, faculty of a university differ from institution to institution. Usually the senate or faculty is the legislative body to which the governing board delegates the responsibility of formulating educational policies and administrative procedures essential to the effective carryingout of the educational program.

The composition of the faculty or senate likewise differs in different institutions. The faculty is usually the more inclusive. However, in many faculties the privilege of voting is limited to members who have attained certain grades of academic rank. The senate is usually a smaller body than the faculty, and membership in it is more strictly limited or is based on some plan of representation.

The importance of membership in the senate or faculty of the university librarian should be obvious. The resources and services of the library affect every phase of the university's program. Membership in the senate or faculty of the principal officer of the library is therefore necessary if he is to be fully informed concerning the general policies of the university and is to administer the library most efficiently. Through his understanding of the problems of teaching and research and his knowledge of the ways in which the library may promote the ends of scholarship, he is in a strategic position to render his greatest service. Membership in these bodies by other qualified members of the library staff is likewise desirable, since the library must serve all the diverse interests of the university.

Administrative board.-Whereas the university senate is usually concerned with the formulation of educational policies, the administrative board devotes its attention to the administration or execution of them. The activities of the administrative board are usually subject to the veto of the senate. At the University of Chicago the general administrative board is composed of the various administrative officers of the university. It may alter or reverse the action of any university faculty or university board in any matter chiefly administrative in character. The director of libraries is a member of the general administrative board. As a result of his membership, he is able to participate in the discussion of any administrative problem which has a bearing on the library and to vote upon all measures, including those which have implications for the library. Such membership also insures the library's inclusion in the routing of information from the president's office to the administrative officers.

The organization and functions of the administrative board vary in different institutions. The board described in the preceding paragraph is not to be confused with another type of administrative board to be found in some institutions. At Columbia University, for example, administrative boards on the summer session, on extension and graduate studies, and on medicine are maintained. They control only their own units; and they, in turn, are subject to the control of the University Council, which has power over all boards.

In some institutions a council serves the same purpose as the administrative board. Usually the council's composition is similar to that of the administrative board, with the exception that members of the instructional staff, as well as administrative officers, are included. The council is usually empowered to review the activities of the faculties and to consider proposals intended to increase efficiency in the educational program.

Whatever types of administrative bodies may exist in the university, it is apparent that the librarian who wishes to make the library contribute effectively to the attainment of the university's educational and administrative policies should maintain intimate contacts with them. Measures affecting the library are often discussed at the meetings of these bodies. Consequently, it is of the greatest importance that the librarian participate directly in the discussions or that he be fully informed concerning them.

Library committees or boards.-In carrying out the responsibilities involved in the administration of a large university library the services of a library committee of the trustees, of the faculty, or of librarians have usually been found to be desirable. Whether or not these committees exist depends upon the type of organization and the complexity of the institution.

Few trustee committees on the library are found in American universities. It is probably a mistake to encourage board committees on the library or other units of the university. This takes the board into executive fields. It should be apparent, however, that the interest of trustees in the library is desirable, provided it is restricted to the general development of the library. It does not make for good administration if such a committee exists and takes an active part in the internal organization and administration of the library. The relationship of such a committee, as of other committees or boards on the library, should be informative and advisory.

A faculty committee or board on the library is usually found in most universities. Normally, it has few powers, as it is intended to serve in an advisory, rather than in an administrative, capacity. In co-operation with the librarian it concerns itself particularly with ( I ) formulating a library policy in relation to the development of resources for instruction and research; (2) advising in the allocation of book funds to the library and the various departments and schools; (3) advising on the policy of reproducing unique materials; (4) collaborating on decisions regarding allocation of library space needed by departments of instruction; and (5) developing a general program of library service for all the interests of the university. Acting in this capacity, it helps keep the librarian informed concerning the library needs of instructional and research staffs; and at the same time it assists the librarian in interpreting the library to the university. It can be useful in supporting proposals for increased book funds and for the extension of library service.

No uniformity exists in the method of selecting or designating members of such a committee or determining their number. In practice, the president, the deans, the university committee on committees, the faculty as a whole, or departmental or administrative groups have been responsible for such selection. Successful practice indicates that the responsibility is one which should be assumed by the president, and representation on the committee should be
carefully considered in order that the best interests of the entire university may be served. If any one criterion for selection is to be emphasized above others, it should be interest in the development of the resources and services of the library as a whole rather than interest limited exclusively to the special field in which the member happens to work. The librarian should be a regular or ex officio member of the committee, should meet with it, and should be responsible for the preparation of its agenda. It is also desirable that the president or some representative of the executive office sit with the committee. Representation from schools or departments, as such, is frequently avoided; and length of service, while not generally specified, should conform to standards of acceptable committee performance.

In addition to committees of the trustees and of the faculty on the library, the library often has relationships with other types of committees the members of which consist of librarians. Four types of such committees have been noted in university libraries; these are: (1) the library council of a unified system of libraries, (2) the committee of departmental and school librarians, (3) the librarians' committee within an individual library, and (4) the committee or committees of the library staff. Each of these committees ordinarily serves a different purpose.

Deans, heads of departments, and special committees of the faculty.The duties of the librarian inevitably bring him into administrative relationship with deans, department heads, and committees of the faculty charged with the administration of specific activities involving expenditures, personnel, and buildings for library use. These duties may usually be divided into two classes: (1) those that relate to the acquisition of materials and (2) those that relate to the administration of the departmental or school library.

In controlling expenditures for library materials for school, departmental, and committee purposes the librarian keeps the heads of the various units informed concerning the amount of funds allocated and spent for acquisitions. Routines are also established by the library for receiving properly authorized suggestions for purchases from each unit. The book interests of a school, department, or special committee are usually best promoted by having a member or a committee of the unit serve as library representative. Contacts between the unit and the library can thus be maintained. Frequently it is found advisable for these contacts to be main-
tained by a staff member or committee of the unit rather than by the head. The appointment of a representative or committee is made by the administrative head of the unit, and the representative secures suggestions from colleagues concerning materials to be ordered and transmits them to the library. In instances in which a departmental or school librarian is immediately in charge of the collection, contact is maintained through him.

These routines are followed in carrying on the normal procedures involved in the library and in the departments and schools. It is also important for the librarian to co-operate with the heads of the units or their representatives in meeting unusual demands for purchases or services when these cannot be met in the usual way. The value of the librarian to the university frequently evidences itself in the success with which he handles unusual situations of this character.

Matters relating to the employment and direction of library personnel in charge of school and departmental libraries or serving special committees are subjects for consideration by both the librarian and the administrators of the various units. Sympathetic, intelligent collaboration at this point makes for efficient administration. This aspect of the librarian's relations to administrative officers is reserved for fuller discussion in chapter iv, which deals extensively with the subject of administration.

Problems relating to the administration of library rooms or buildings for departmental or school libraries or to the planning of such quarters involve close co-operation between the librarian and the department or school concerned. In institutions in which a general governmental policy for the library has been adopted, provision is usually made for the handling of matters of this character. Obviously, it is to the advantage of the institution to utilize the expert knowledge of the librarian in planning the equipment of reading rooms, stack installations, and such other equipment and installations as will contribute to the most efficient use of the library. It is equally obvious that the library requirements of the unit concerned should be clearly and fully set forth by the responsible head in order that its needs may be fully understood and properly met. In such instances, close collaboration with the offices of the president and business manager, and possibly of the trustee or faculty committee in charge of buildings, may also be desirable. Lack of collaboration of this character is responsible for much of the poor planning which
is reflected in present library installations serving departmental and school libraries.

The faculty.-Mention has already been made of the administrative relationships of the librarian with the faculty. Important as this aspect of his office is, it is not more important than his role as a colleague of the teaching and research staffs in increasing library resources for their work, in providing bibliographical facilities for their use, and in improving the quality of service to them. In his capacity as colleague there are four kinds of service which the librarian can render. (1) He can assist all members of the faculty in planning for the acquisition of materials to support their activities. (2) He can keep them informed concerning the reference and bibliographic services of the library and the use of materials. (3) With members of the library staff whose competence justifies it, he may participate in the conduct of courses in bibliography and source materials in special fields open to students beginning graduate study and engaged in advanced study and research. (4) He can co-operate with other librarians, with representatives of the faculties of educational foundations and learned societies, and with governmental agencies in carrying out co-operative undertakings the object of which is to increase the service of libraries to scholars everywhere. The provision of all four types of service calls for a high degree of managerial ability and insight into the nature of scholarship and investigation.

University committees.-A tendency in some universities is to place the supervision of research and instructional work upon various committees of the faculty. The formulation of educational policies and the determination of fields in which research is to be undertaken are matters with which faculty committees sometimes deal before they are approved by the university. The policies of the institution concerning publication and extension are similarly developed. The carrying into effect of all such policies or programs involves the resources and the services of the library at some point. Consequently, the library should be fully informed concerning them.

The organization of the general courses in the College at the University of Chicago, the development of the house plan at Harvard, and the formulation of a program of institutional co-operation in building up library materials for teaching and research between North Carolina and Duke illustrate admirably the kinds of activities with which committees concern themselves and suggest the nature
of the demands which such undertakings make upon the library. At Chicago and Harvard concentrations of library resources' had to be provided for the support of newly organized programs of study. At Chicago extensive attention was devoted to the preparation of syllabi, an important feature of which was the selection of materials placed in the categories of "required" and "optional" readings. At North Carolina and Duke the whole program of library specialization in subject fields now engaged in by the two universities was based upon understandings to which the universities and libraries were committed through committee planning. The librarians were members of the committees which represented the two universities, and they participated actively in the formulation and execution of the co-operative program.

Other examples have involved different procedures. At Nashville the entire teaching and research programs of Vanderbilt University, George Peabody College for Teachers, and Scarritt College have been developed in connection with the library program. Faculty committees and the librarian worked together on all details of the planning. Competition for students by the three institutions was eliminated in undergraduate areas of the curriculums, and decisions were reached co-operatively concerning the departments which were to be strengthened for effective graduate work. The resources of the library were carefully scrutinized, and provision was made through increased library funds for building up appropriate collections in fields in which it was decided graduate instruction would be offered. At the University of Chicago, the official survey of the university libraries took the form of a co-operative checking of bibliographies by two hundred members of the various faculties and the library staff to determine the general adequacy of the various collections and particularly to discover what specific titles would be required to bring them up to full strength. In the recent surveys of the libraries of the University of Pennsylvania and of the city of Philadelphia there has been collaboration between librarians and faculty committees, but the faculty committees have assumed the chief responsibility for the studies undertaken.

Departmental and professional school libraries.-Few questions concerning university libraries have been more extensively debated and less carefully studied than the desirability of the centralized administration of special libraries for departments and schools. It is not proposed to discuss this question at this point, since it is considered
in chapter iv, which deals with the organization and administration of the library in general. It is important, however, to consider here the relation of the librarian to the departmental or school library in its effort to build up its collections and to facilitate the work of its specialists in instruction and research. The librarian has a function to perform whether the library concerned is under his direction or not.

The nature of this function is largely determined by the fact that the librarian administers an office which is supposed to serve all interests of the university. He is the university's expert in the field of acquiring library materials and facilitating their use. He is supposed to understand the needs of scholars; and, as a student and colleague, it is assumed that he is interested in making available the entire resources of his office in promoting the library interests of the campus, whether they come under his direct control or not. Acting in this capacity, the librarian can render several types of service to the special libraries.

The first of these may be direct assistance in the acquisition of unusual sets or collections. Frequently information concerning collections in special fields comes to his attention but not to that of the special library. Or he may be aware of the fact that other departments of the main library are interested in the materials concerned and that'a combination of funds can be effected for a joint purchase. Or the general library may have unrestricted funds which can be utilized for the acquisition of materials that cannot be purchased through the regular funds of the special library. The librarian may also find it possible to interest the administration or "friends of the library," either individually or collectively, in the acquisition of material that will give strength or distinction to the institution. It is in this field that some librarians have made their greatest contributions to the universities they have served. The presence of notable collections on many campuses may be attributed to the librarian's forcefulness in this activity.

The second type of service that the librarian may render the special library is that of providing the essential catalog facilities for the expeditious use of materials. Special libraries, if they are to be used satisfactorily, must be equipped with essential catalogs or other bibliographical keys. In many instances this service has not been provided, or it has been provided very inadequately. Again, it frequently happens that materials have been secured by special
libraries for which there are no records in the main library. It should be noted that in many cases donors would not make substantial gifts of rare materials unless the library staff and facilities were ready to support the departmental or professional school library in taking proper care of valuable gifts. In situations of this nature the librarian can be of very great use in integrating the total library resources and services of the university.

A third service may be rendered the special libraries through the use of the facilities of the general library for reproducing materials photographically or securing them from other libraries. The development of microphotographic laboratories and the exchange of materials through interlibrary loans have significantly contributed to the extension of the service which the general library can make available to all the members of a university community. The materials secured in this way through the managerial activities of the general library have added greatly to the permanent collections of a number of special libraries, as well as to the effectiveness of the research of many individual faculty members.

Research institutes.-The relations of the librarian to research institutes is not essentially different from those to departmental and school libraries. There is the one difference, however, that institutes are usually less firmly established than departments and schools. They may exist for a time and then be greatly modified, or they may entirely disappear. They may be established for a definite purpose which may be achieved within a given time. The managerial service of the library may well be employed by the institute in building up materials rapidly; and, if the work is of a temporary nature, distribution of the materials at the end of the period may be facilitated by the library. An important consideration which should be kept in mind by the director of the institute is the amount of money required for library materials and library personnel in carrying on the investigation. The librarian might well supply information concerning these requirements. They are frequently overlooked in estimating the total cost of the undertaking; and, if support is being secured from foundations or industry, items for this purpose should be included at the outset. The importance of preliminary studies of bibliographies in the field should not be overlooked, since they constitute the first step in many types of investigation.

Extension service.-The extension service of colleges and universi-
ties usually falls into the categories of university or agricultural extension. Both types of service embrace a wide range of subjects and activities, many of which require library support if they are to be carried on effectively. ${ }^{5}$ The former is usually provided by state universities; the latter, by land-grant colleges. The libraries of private universities rarely maintain extension service, though a number of them make loans of library materials to alumni and other groups.

Since comparatively few articles have appeared in library literature concerning university and agricultural extension services, their general nature may be considered briefly. University extension is usually provided through a regularly organized division of extension and is concerned with the conduct of formal courses and correspondence courses off the campus and with the assistance of individuals and groups through informal services of many kinds. Beneficiaries of such service have usually been teachers, members of clubs, alumni, and other individuals or groups engaged in individual or group study. The services include public lectures, radio talks, study outlines, package libraries, the loan of pictures, musical recordings, and professional literature, etc. The number of students enrolled in classes and of people served in various ways may run into the thousands.

Agricultural extension is provided through land-grant colleges and is supported in part by federal funds. Its scope and importance were considerably extended by the passage of the Smith-Lever Act of 1914. A large staff of specialists in various forms of agricultural extension is engaged in directing the work on the campus and in the various agricultural counties of each state. In the counties the work of this staff is supplemented by that of county agents and home-demonstration agents. Until recently the use of print in support of the educational work of the county workers has been limited almost entirely to farm- or home-demonstration bulletins. Greater use, however, is now being made of the resources of the library of the land-grant college and of local libraries. The potential importance of such library service may be inferred when it is realized that in a rural stateslike Georgia, while approximately $\$ 1,000,000$ is spent annually for agricultural extension, only $\$ 20,000$ is expended for publications to support the extension program; and this amount is devoted largely to the publication of bulletins.

Organized library extension service is in some instances ad-

[^11]ministered directly by the university library, as at North Carolina; in others, it is administered by the university extension service, as at the University of Florida. In the former instance the budget for the service is included in the library budget, and the staff has membership in the library staff. In the latter the budget and staff are separate from those of the library. At Iowa State College a librarian responsible to the head of the extension division and to the librarian organizes library service for specialists in the extension division and agricultural agents in the counties of the state. In state universities which include land-grant colleges, both university and agricultural extension services may be provided. Where this is true, the opportunity for service by the library is further extended. In all instances, whatever the administrative relationship of the library may be, the resources of the library are involved; and close co-operation between the extension divisions and the library are essential if the service of the university to its constituency is to be maintained at a high level. Furthermore, such service necessitates contacts not only within the university but with other libraries and state agencies, as well as with the individuals and groups served. In Wisconsin, for example, there are six library agencies supported by the state which supply some form of library service. Since each agency specializes in certain kinds of materials, the group as a whole has worked out an arrangement by which a request for assistance received by one agency may be forwarded to another if the latter can give more satisfactory service.

Home study.-Similar administrative relationships exist between the library and the university unit engaged in offering home-study or correspondence courses. It is important that library officials be apprised of the book needs for home-study courses so that appropriate steps may be taken to provide materials for students.

Library school.-Formal education for librarianship was begun in the United States in 1887. Prior to 1923 several of the most notable schools, such as the New York State Library School and the Library School of the New York Public Library, now combined in the School of Library Service of Columbia University, were not connected with degree-conferring institutions. Since that date all library schools not formerly associated with institutes, colleges, and universities have been transferred to such institutions or have been discontinued, and all new schools have been established on college and university campuses.

The relations of the library to the library school are, in many ways, similar to those which the library maintains with other departments and schools. But they differ in two important particulars. The library may provide physical quarters in the main library building for the housing of the school, and the librarian may serve as its directing head.

In the first instance the administration of the library and school may be separate. But the library may serve as the laboratory of the school, propose problems for research, assist in carrying out investigations, provide part-time or full-time employment for libraryschool students, build up professional materials and bibliographical apparatus of interest to both library and school, and, by maintaining an excellent esprit de corps, assist in developing within students a fine professional attitude. The library may likewise profit from the stimulation of association with library-school staff members engaged in the systematic consideration of library problems of libraries of all kinds and from participation in the work of libraryschool students who are interested in the theory, as well as the practice, of librarianship.

In the second instance these relations are extended by the addition of others. The librarian serves as director of the library and dean of the school, prepares and administers two budgets, supervises two staffs, and is able to effect such co-ordination between the library and the school as he may desire. At present the number of schools administered separately and jointly is about equally divided. In practice, when the library and the library school are administered jointly, the librarian-dean gives his major attention to one and a capable assistant directs the other. On account of his increased responsibilities the librarian-dean may receive a higher salary than the librarian, his status as a member of the teaching staff is definitely determined, and he is automatically placed in direct contact with the teaching staff by virtue of his membership in it.

The problems to which the two types of organization give rise involve not only administrative but also educational relations. A discussion of the educational implications of the relations cannot be given here. ${ }^{6}$ Whether one arrangement or the other is to be followed should be determined in the light of the specific circumstances and

[^12]needs of the institution concerned and of the principles which generally apply in the organization of instruction and research in other professional fields. It can be pointed out, however, that the nature of the curriculum, the program of research, the number and quality of beginning and advanced students, and the qualifications of the members of the faculty are matters to which serious consideration should be given. It should also be kept in mind that the administration of a major university library is exacting in its demands; and it may leave little time for carefully considering educational theories and practices, for keeping up with the extensive literature relating to the various subject fields of librarianship, and particularly for suitably directing students engaged in advanced study and research. A study of the development of professional education in other fields, such as medicine, law, and education, may reveal practices and trends of significance for education for librarianship.

Other libraries in the community.-One of the most interesting developments noted in librarianship during the past decade has been the effort made by librarians to increase library resources intended for research through co-operation and specialization. This effort has expressed itself in a number of ways. The co-operation of the libraries in Nashville has already been mentioned. In that instance the libraries of three institutions on adjoining campuses have been brought under the direction of what might be termed a "library holding company"; and the resources for research, as well as stack cubicles and studies, have been provided for scholars. The.co-operative arrangement, however, is not limited to the three institutions. It has been extended, through the development of a union catalog, to include the city public library, the state library, and other collections in near-by institutions. As a result, the total book resources of the community-some 800,000 volumes-are available to the three institutions, whose total holdings numbered only 400,000 volumes. Similar arrangements have been perfected in other cities, as, for example, in New Orleans and Atlanta, where the libraries of Tulane and Emory universities have co-operated with the libraries of other institutions in developing local and regional library facilities for the support of instruction and research. The publication of The Resources of New York City Libraries,' edited by R. B. Downs, makes information available concerning collections in New York City containing 16,500,000 volumes.

[^13]Union catalogs and bibliographical centers.-One of the principal means employed in these co-operative enterprises has been the newly developed union catalogs. University librarians have participated in their development; and at the beginning of 1944, union catalogs at Atlanta, Cleveland, Nashville, Philadelphia, and Seattle, to mention some of theomost notable examples, were housed in university library buildings.

This movement has been accompanied by another-the development of bibliographical centers. For many years a number of the major university libraries not only have maintained catalogs of their own collections but have assembled cards published by the Library of Congress and other scholarly libraries. These cards, brought together in a special catalog, have been used principally for the purposes of locating books not owned by the library and of supplying bibliographical and other information of use to the patrons of the library. Such card collections, when combined with extensive bibliographical apparatus and regional union catalogs, have proved very valuable not only in locating materials but in supplying many kinds of information helpful to the development of library cooperation and specialization. Such undertakings, notably those of Philadelphia and Denver, have been fully described in recent publications. ${ }^{8}$ The function of the Philadelphia center, as conceived by the group of university professors and administrators, librarians, and members of interested organizations, is stated as follows (op. cit., pp. 56-57):
.... it should be equipped to answer all kinds of library questions which the reference librarians of individual libraries are not equipped to answer. As the focal point of the libraries in the area, it should be fully informed about them, it should have a card index of their subject holdings and copies of all their important publications. It should also have an adequate index of all research organizations, laboratories, learned societies, trade and professional organizations, special-interest groups, educational institutes, etc. within the area, as far as they have not been already enumerated in printed guides. It should have a file of experts, specialists, and consultants in the advanced fields of learning together with the terms under which any one of them can be consulted. It should compile and maintain a classified subject index of reference tools in all fields of learning so far as they are not already covered by Petzholdt, Vallée, Besterman, Bohatta, Wilson, and other standard reference guides. And it should in time undertake to check the most important subject bibliographies for location. It should have at easy command lists of published indexes and abstracts, lists of doctoral dissertations published and in

[^14]progress and, so far as they are available, lists of research projects in all fields of learning. It should maintain a card file of commercial information services, of translating and typing services, of booksellers, of photostatic and other reproducing services, and of film-reading machines available within the area. It should be ready to furnish detailed information about union catalogues and important libraries throughout the United States; it should keep posted and be ready to give information about all new library equipment and library techniques. It should maintain a basic collection of library literature and current library periodicals.

Participation in such activities has given the university librarian his greatest opportunity (sometimes not recognized or fully appreciated) not only for demonstrating his understanding of the instructional and research functions of the university but also for showing a like understanding of the essential unity of knowledge and the necessity of co-operation. The utilization of methods of reproducing materials through photography, sound recordings, and microprint has likewise extended his range of activities and increased his possibilities for distinguished service.

Students.-The relation of the librarian to students seems, in most instances, indirect and remote. His contact with'them is largely through others, particularly through those members of his staff responsible for the operation of the general information and circulation desks, special reading and reference rooms, and the special libraries of departments, divisions, schools, and institutes. There are, however, many ways in which his relation to students is expressed. One or two of these are administrative in nature. The librarian is responsible for the quiet, effective operation of all library services in order that student use of the library may be educationally profitable. He is also charged with the responsibility of seeing that certain students do not limit the use of the library for other students by the infringement of library rules.

The role of the librarian in the educational activities of the student may, however, be important, particularly if the librarian is thought of as serving the student directly and through his staff. The librarian or an appropriate staff member may acquaint the student with the library in orientation week. He may assist student advisers in extending the student's knowledge of the library concerning certain library services or types of publications. The reference librarian may serve a similar purpose. Formal courses in the use of books and libraries or assistance to students reading for honors or preparing term papers afford other opportunities. The organization and display of attractive exhibits may likewise stimu-
late student interest in different aspects of the work of the library.

In special courses in bibliography and in introductory courses in graduate study offered generally by universities throughout the country, the librarian can contribute by acquainting the student with general catalogs, indexes, and handbooks which students in all departments will have occasion to use. The literature relating to special fields can be left to the specialists in the department. Participation in seminars at which source materials are discussed also gives opportunity for the establishment of important relationships.

The librarian can likewise be brought into effective relation with the undergraduate student by promoting student use of leisure time in reading. The browsing room, the house library, the bookstore in the library, and the informal readings by authors, members of the instructional and library staffs, and students extend the range of the librarian's contacts and enable him to make the library a more effective educational and cultural instrument for the entire university.

One of the most important relations of the library to the student is that which grows out of the employment of the student in carrying on the work of the library. Through his activities in the library the student assistant sometimes discovers his interest in librarianship as a profession, and his training can be directed by the librarian to that end. Many librarians have begun their professional careers in this way.

Business officers.-Another major line of relationships which the librarian maintains with other members of the university community is that with the officers who are responsible for (1) the direction of the financial and business affairs of the university or (2) the administration of some special business activity. In many institutions some of the officers concerned with general financial administration are, like the librarian, responsible directly to the president. This is the unit type of organization. In others the comptroller and possibly other officers are directly responsible to the governing body but work in close co-operation with the president. This is the multiple type. ${ }^{9}$ Regardless of the type of organization and of the titles of the officers, the administration of the library is

[^15]related to these officers in a variety of ways. In state universities these activities may also involve state officers, particularly the director of the budget or the budget commission; but, if they do, it is usually indirectly through an officer of the university.

The three principal administrative relations which the librarian maintains with the business officers are: ( 1 ) the preparation and administration of the budget, (2) the acquisition of materials, and (3) the employment of personnel. These relations will now be considered briefly. An extended consideration of the financial administration of the library, however, will be found in chapter iii.

It is assumed that all university libraries operate on a budget which covers the estimated receipts and expenditures for library purposes. It was noted in the discussion of the librarian's relation to the president that the latter was, in most institutions, the chief budget officer. In some instances some other officer may perform this function. However, in the preparation of the library budget the librarian, after consultation with staff members, heads of departments, schools, and institutes, and the library committee of the faculty, submits the estimate of budget needs to the president for review. Information is supplied on all matters requiring special consideration, and the president includes the items for the library in the general budget submitted to the governing board. This consolidated budget may be presented by the president first to the finance committee of the governing body and then to the body as a whole. In institutions in which the comptroller is directly responsible to the governing body he may also be involved in the preparation of the budget. He or the finance committee of the governing body may be responsible for estimating income from endowment and other sources and seeing that the proposed expenditures do not exceed the estimated income.

In state and municipal universities the budgetary procedures may be handled somewhat differently, in that the estimates are usually prepared for a biennium. It should be noted, however, that although biennial estimates may be preferred by legislatures, the working budget will be annual. The data concerning the library are prepared as indicated above, but the consolidated budget prepared by the president and other responsible officers and approved by the governing body is reviewed and modified by the municipal or state budget officer. It may likewise be further modified by the appropriating body. Even after it is adopted, it may be subject to periodic review
and further modified in accord with legislation governing it. The preparation and administration of the budget of the library consequently call for close co-operation between the librarian, on the one hand, and the president or other responsible officer or officers, on the other.

Libraries in both private and public universities are frequently the beneficiaries of gifts and endowment to be employed in specific ways. The financial administration of such funds is usually left to the finance committee of the governing body or to the financial officer of the institution. It is also necessary in such instances for the purchasing agent and the librarian to have full information about such funds in order that they may be expended for the purposes intended and that the accounts may be kept properly. The-importance of this relationship may be indicated when it is understood that all the book funds for the Harvard College Library (as differentiated from the University) come under this classification rather than under that of appropriations from the University.

When the budget is officially approved, the librarian can more or less pursue his own course of expenditure, subject only to the budgetary limitations and business procedures imposed. It is one of the duties of the business officer to see that these limitations are observed. He may have the added power of limiting expenditures during any given period. In many institutions, moreover, all proposed expenditures require at least the nominal approval of this officer, although this authority is often delegated to the librarian as far as book purchases are concerned. In some states the purchasing agent or auditor may refuse to authorize payments for materials unless there has been strict compliance with detailed instructions.

The usual routine in most universities in the purchase of supplies and equipment is fairly simple. The librarian forwards such requisitions as are required to the business office or purchasing agent. The centralization of all purchasing occurs at this point. It is common, too, that estimates on contemplated purchase of major items be procured through the centralized office. Disbursements and payment of bills are also centralized.

The procedures which the librarian of a state university must follow in ordering books, materials, and supplies may differ considerably from those followed in a private institution. As a rule, they are more involved because expenditures are subject to the
control of state budget officers, as well as to that of the institution of which the library is a unit. The procedures also vary from state to state. In an extensive study by Kelly and McNeely ${ }^{10}$ in 1933 of state purchasing agency practice, three common patterns of control were found. Either purchasing was centralized under (1) a single person's direction or (2) a board, or (3) there might be no agency at all. They likewise found that, even where a central agency existed, the state university and a few other institutions were sometimes exempted by statute from its control.

These relationships call for close co-operation between the librarian and the business office and should be characterized by sympathetic understanding. Particular care should be exercised by both officers to insure speed in ordering and delivering materials and in approving invoices for payment. Failure in these particulars leads to complaints by the faculty and students for whom materials are desired, and detracts greatly from efficient service. If the invoices are not paid promptly, the institution forfeits the small discount usually allowed for quick settlement.

The employment of library personnel may involve the president's office and that of the business manager. Appointments to both the professional and nonprofessional staffs are made upon the recommendation of the librarian. They may be considered by the president only or by the president and business manager. When appointments are made to the professional staff and recommendations concerning faculty status are involved, they are usually submitted to the president and, if approved, transmitted by him to the governing body. When appointment is to the clerical staff, the recommendation may be submitted to the business manager.

The status of staff members, both professional and nonprofessional, involves questions with which both president and business manager must deal and for which the university must develop specific regulations. The librarian should be fully informed concerning all of these requirements and should co-operate with other officers in seeing that the library staff complies with them properly. At the same time, the librarian should insist that the status and - remuneration of the staff, like that of the instructional staff, should be determined by means of a carefully devised personnel classifica-

[^16]tion scheme based upon the training, competence, and experience of its members. ${ }^{\text {rx }}$ Unfortunately, university administrations have not given the attention to this aspect of university personnel classification that it deserves; and, unlike public libraries or libraries under the direction of the federal government, they frequently do not set up classifications for professional and scientific workers but class them indiscriminately with the nonprofessional and clerical staff.

One other relation between the librarian and the business office may be noted. The business office is usually the introducer of new mechanical inventions for increasing the efficiency of clerical work. Many of the inventions are adaptable to library purposes. Librarians can learn of these if they keep in close touch with the business office. Sometimes they may share the use of machines such as the Hollerith machine. Often the business office can help to explain and work out adaptations of mechanical devices for library purposes.

The library is also concerned with the maintenance of relations with another group of business officers or units of the general business office. These usually include (1) the office of buildings and grounds, (2) the university press, (3) the bookstore, and (4) the rental library. Occasionally the library is also involved in a business relationship with a branch library of the public library.

Buildings and grounds.-The library, like other units of the university, is dependent upon the office of buildings and grounds for a number of services. The buildings and grounds department may be under the business office or may be independently responsible to the president. In most universities this office is responsible for (I) the operation of the university plant, (2) janitorial service, and (3) the maintenance of university property. When extensive repairs or installations of equipment are required which call for special expenditures, they are likely to come under the jurisdiction of the president or business manager, even if they are carried out by this department. The librarian will also find it desirable to participate in the planning and in the supervision of the work.
Janitorial service is usually centralized under the buildings and grounds department. Work schedules of the janitors in the library should be worked out jointly by the librarian and the department.

[^17]Provision should be made for extra services, such as book cleaning, floor waxing, packing and unpacking outgoing and incoming shipments, moving books, and maintaining interlibrary deliveries of materials on the campus, etc. This service, if properly rendered, contributes greatly to the efficiency of the administration of the library and should be given the consideration it deserves.

The university press.-The university press is an organization which has assumed increasing importance in American universities since 1900 . Usually, it is organized as a part of the university under the direction of a board of governors, as at Chicago; or it may be separately incorporated (but closely connected with the university and supported in part by university funds), as at North Carolina. The presses may own their plants, as at Harvard and Princeton; or they may publish through commercial printers, as at North Carolina and Yale.

Whatever the organization under which they carry on this work, they are usually responsible for the publication of (1) books, (2) periodicals, (3) university studies, and (4) official catalogs and announcements of the university. If they own their own plants, they may also engage in printing stationery and other materials used by the university.

Obviously, these activities are of interest to the library. First of all, it is essential that the library receive copies of all the publications of the university. Next, the library is usually charged with the maintenance of exchanges with other institutions. To carry on this activity successfully, it is important for it to have placed at its disposal sufficient copies of press publications to meet its needs. For these purposes the library should have a working arrangement with the press that would be fair to both, since both are engaged in the service of the university. It should be clear that in the main both of these university agencies are supported by the same source of funds and that discount and free availability arrangements with respect to press publications in relation to the library should be developed with that basic fact of common support in mind. Otherwise, business-like bargaining, actuated by the profit motive, will enter into the making of these arrangements. It can be argued that, because of common support, there is little reason for any charge being made against the library by the press for the publications of the latter which are to be used through the library for exchange purposes and that to allocate funds to the library for the purchase
of press publications for exchange is a rather unnecessary operation, since the money for the support of both the press and the library comes from a common fund. On the other hand, it can be argued that, for purposes of financial control, such bookkeeping transactions are desirable. A different consideration lies in the fact that, in case of many scholarly books, exchange distribution will account for a very high proportion of the book's market. If the library's exchange policy with respect to press publications is sound and carefully worked out-in other words, not an uncontrolled give-away policy-it does not matter whether the funds are placed in the library budget or the press budget. Perhaps such a policy is best worked out by a joint committee of library and press officials. On the other hand, if the library is going to be indiscriminate in distribution, then financial and bookkeeping curbs are necessary. A special arrangement is also necessary when the press is separately incorporated, as is sometimes the case.

If the library school is under the direction of the librarian and the official printing of the university is handled by the press, the publication of the school catalog and of any publications the school may issue will be handled by the press. The printing department of the press may also undertake certain services for the library, such as the printing of stationery, catalog cards, and forms used in library routines. The library may also co-operate with the press in the maintenance of a special collection on printing and the graphic arts; and the librarian, because of his knowledge of printing and publication, may serve as a member of the board of governors.

The bookstore.-It has long been assumed that cultural and educational benefits are derived by students from their association with books and their actual possession of them. Yet it was estimated by Pearce in 1930 that only 125,000 of 900,000 college students had access to bookstores "worthy of the name." ${ }^{12}$ Undoubtedly, a higher proportion of students visit good bookstores today. The librarian may well justify his interest in seeing that association and ownership are made possible through the medium of an attractive bookstore. He may co-operate with the bookstore by (1) participating in book talks and readings, (2) advising in the arrangement of exhibits of books and related library materials, and (3) sponsoring competition for the best student libraries.
Commercial relationships between the bookstore and the library

[^18]may likewise be profitable to both. Publishers usually give greater discounts to bookstores than to libraries. Use of the bookstore for purchase, however, usually occasions some delay in securing materials unless special arrangements are made by which orders originating in the library are quickly cleared through the bookstore. Many of the supplies and much of the equipment which the library requires may be obtained through the bookstore, provided the regulations of the purchasing agent permit it.

The rental library.-Rental libraries serve students by enabling them to secure books which are not subject to the strict limitations of books placed on reserve or even of books loaned from the stacks for two weeks. The charges for their use are also relatively low. The rental library is operated in various ways by different universities. At California it is administered by the university library and in fairly close connection with the reserve collection. A limited number of copies of books reserved for required reading are also provided by the library, so that a student may obtain the necessary titles if he does not wish to rent them. The rental collection is available for prolonged loans; and the income from it pays, in large measure, for the reserve collection. At Chicago the rental library is operated by the bookstore, and many of the titles in the rental collection are so listed in the main catalog of the library. At Columbia the university library maintains a rental library of the most recent nonfiction and fiction titles for faculty and students. Surplus funds accumulated from the rentals are used for the purchase of new titles. Used copies of books are later sold to faculty and students, thus aiding in the building of personal libraries. At North Carolina the rental library is operated by the Bull's Head Shop, a special bookstore maintained in the library building that features general, rather than curricular, reading.

In some instances, libraries have not established rental collections because they have feared that it might be charged that they were operated for profit when it was the duty of the university to provide the desired materials in return for tuition and fees. Libraries are also not usually equipped to administer commercial operations.

Branch library of the public library.-Infrequently the university library may house a branch of the public library. This is true in the case of the library of Columbia University. The University of Chattanooga shares a library building with the city public library. There are apparent advantages in such arrangements. On the credit
side, the university library gains for its clientele an additional book collection of considerable value, and it is saved from duplicating materials which otherwise it would have to obtain. On the other hand, the presence of the public library, unless it is immediately accessible from the street, as it is at Columbia, may interfere with the administration of the library. Special regulations regarding registration and use of the university library are usually necessary to avoid such interference. The service of the university library in granting such space may be regarded as extension work, although the university generally does not provide the personnel for the library.

Other groups.-The relationships which the library maintains with administrative officers, the faculty, and financial and business officers have been considered in the preceding discussion. Attention may now be given to the relations which the library maintains with a more heterogeneous group which is found in the university community. This usually includes: ( 1 ) the general public, (2) the families of faculty members and administrative officers, (3) employees of the university, (4) alumni, (5) members of the "friends-of-the-library" group, and (6) visiting librarians and scholars.

The library may serve the general public through its extension service or through a public library operated in the university library building. The library of Rutgers University allows borrowing privileges to all residents of New Jersey. Other libraries which require students to pay library fees are usually open to members of the community upon the payment of similar fees. Free use of materials for reference purposes is generally granted all persons who request such privileges. One of the conditions governing the distribution of public documents of the federal government to depository libraries is that they shall be available for reference purposes without cost. The extent to which a university library, particularly if it is a private institution, is justified in serving the public is contingent primarily upon its budget and general policy of community service. If service to the public results in poorer service to faculty and students, it is obviously inadvisable to provide it.

Members of the families of faculty members and administrative officers and employees of the university are usually accorded the use of the library; and, in some institutions, the library extends special service to alumni, both in the university community and at a distance. In its service to the alumni the library may have the
co-operation of the alumni office, as such service may constitute a part of a general program of the university in maintaining close relations with the alumni.

The "friends-of-the-library" movement has developed rather rapidly since 1910 , and a number of such organizations are to be found connected with university libraries. They are interested primarily in building up the collections of the library, rather than in library use. They can be very helpful in providing unrestricted funds for library use, in acquiring special materials, and in making known the needs of the library to the public.

The privileges of the library are usually accorded visiting librarians and scholars. The responsibility for making arrangements for extending such privileges is generally placed upon the librarian, though in some universities, where there are many requests for the. use of laboratories and other facilities, the arrangements may be made by the departments immediately concerned. At Columbia, a Director's Committee on Library Privileges, consisting of members of the faculty and the library staff, decides on requests of nonuniversity individuals for library services.

## SUMMARY

Three major problems of the university library have been discussed in this chapter. They are: (I) the legal bases upon which the government of the university (and through it the library) rest; (2) the provisions which a sound governmental policy for the library should contain; and (3) the relations which the librarian must maintain with other officers and members of the university and university community in the successful administration of the library.

The successful administration of the library depends, in large measure, upon the clarity of the understanding which the university and the library have of these matters. The president of the university and the librarian alike must know what the essentials of a sound, well-conceived governmental policy for the library are. The president must place the librarian in such a position that it will be possible for the latter to adjust the services of the library effectively to the various interests of the university. University library administration frequently breaks down at this point. Finally, it is imperative that the librarian match the opportunities which the situation presents him with the understanding, imagination, and
resourcefulness which the administration of a university library devoted to the furtherance of instruction and research requires. The library is an integral part-an indispensable part-of the university. It serves all of the university interests. Consequently, whatever contributes to its efficient organization and administration, contributes directly and greatly to the university's total achievement.

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## CHAPTERIII

## FINANCIAL ADMINISTRATION

THE effective administration of the finances of a university library requires considerable skill on the part of the librarian, since the budgets of several university libraries range from $\$ 250,000$ to $\$ 500,000$ or more annually and involve the employment of staffs of more than one hundred members, not including student assistants. The largest staff in 1940 numbered 283, with a pay roll of $\$ 441,829 .^{\text {. }}$ Although the library, unlike a business enterprise, is relieved of the necessity of making a profit, the librarian is expected to use efficiently the funds put at his disposal. To do this he should be faniliar with the methods which are employed in the administration of institutions of higher education.

Following the administrative principle of grouping homogeneous functions under a single authority, most universities have centralized business activities in one office under a business manager. Functions ordinarily assigned to this office include financial accounting (involving budget control), collection of revenues, purchasing, payment of bills, selling, supervision of stores, financial reporting, assistance in budget formulation, plant supervision, supervision of supplementary business activities, financial relations with students, and endowment management. In varying degrees the university library is involved in each of these. This chapter will describe four major aspects of financial administration of the university library; these are: (1) business functions and relationships, (2) sources of income, (3) budgetary procedure, and (4) accounting and financial reporting.

## BUSINESS FUNCTIONS AND RELATIONSHIPS

The library system of a university is seldom large enough to warrant the establishment of a separate office to handle all its business matters. In a few instances (Columbia University furnishes an example) all business activities are concentrated in the hands of

[^19]an assistant director of libraries. At Columbia the business office is responsible for pay roll and accounting, supplies, building and equipment, telephone service, personnel, correspondence, and files. Thus, personnel administration is combined with a series of business activities. In the majority of libraries, however, business functions are not centralized. Instead, the activities are generally handled by the librarian, with the help of an office assistant, an executive secretary, and the order librarian.

The business functions of every library involve relationships with the business office of the university. In state institutions the relationships may differ considerably from those in institutions which are privately supported. The differences appear principally in purchasing and accounting activities. ${ }^{2}$ Certain business functions, however, are performed in libraries of both private and public institutions. These are: (a) bookkeeping, (b) recording income, (c) purchasing, (d) paying bills, (e) obtaining discounts, ( $f$ ) collecting fines, and $(g)$ receiving deposits. Each of these matters may now be considered.

## BOORKEEPING

Two sets of books are usually kept for university library expendi-tures-one in the business office and the other in the librarian's office. Although the totals of the two records should agree, different classifications of data are included in each. Records kept by the library are broken down in considerable detail. It is important that they show expenditures by the general library and its subdivisions, by the various departments and other university organizations, and by all classifications or divisions set up in the budget. They should show, for example, the balance of the history department's book budget or how much the catalog department has spent on hourly service. In regard to book purchases, the kind of bookkeeping a library must undertake requires that each account be debited by the estimated cost of each order when the order is placed and that this charge must be revised when the invoices are received. Bookkeeping records have been successfully kept by the use of accounting machines at North Carolina, Texas, and Georgia. It may be observed that accounting machines are usually designed for large-scale operations. Furthermore, in any plan to use accounting machines arrangements should be made to provide the library office with frequent statements.

[^20]It should be noted that the results of bookkeeping have a direct relationship to budget-making and supply the record of expenditure to use in making appropriations for the coming year. Whereas a budget is, in a sense, a norm by which to guide performance, bookkeeping is a means by which expenditure is controlled in accordance with the budgetary norms. The bookkeeping records of the business office are more concerned with the totals which may be charged under a comparatively few budgetary classifications and with the prompt payment of bills.

## RECORDING INCOME

The responsibility for collecting revenues for the whole institution is usually lodged in the business office of the university. Student fees which are earmarked for the library and income from library endowments and special funds are collected by the business office. Monetary gifts as grants-in-aid for the library are also received and disbursed through the business office. The library, however, usually collects fines and rental fees; and it may be charged with the responsibility of sanctioning other fees and payments for duplicates and library publications sold to other institutions. When the statutes of the institution permit, the library office may also be responsible for handling student and nonstudent deposits which are held to cover fines or possible loss of books. Sums collected in various parts of the library are accumulated in the library office.

## PURCHASING

The usual routine for the purchase of books and supplies is fairly simple. The librarian prepares orders for materials in accord with routines established by the business office and sends them to the business office or purchasing agent. The orders are then checked and forwarded by the purchasing agent. Standardized materials, such as typewriter and carbon papers, are ordered by the business office on the basis of the annual estimates from the various units of the institution.

The system of purchasing for the state university library may be more complex than that for the library of an endowed institution. Depending upon state laws, the librarian may be required to follow one of four procedures. He may be required: (1) to purchase all supplies, including books and periodicals, through the state purchasing agent; (2) to order all materials and books through a central library order department, as in Oregon; (3) to secure library books
and supplies through the university purchasing agent; or (4) to buy all supplies independently. The third practice appears to be the prevalent policy. Even where this exists, however, some items may be purchased directly by the librarian. Purchasing through a central library department of a state is a rare procedure. Although not recommended as an ideal procedure by purchasing experts, ${ }^{3}$ acquiring materials through a state purchasing agent is relatively frequent. Few librarians are permitted to buy all supplies independently of the business office.

Variations, of course, exist in all of the above procedures except that of the central library order department of the state. The variations may concern the time and form of the requisitions, the number of copies of the requisition, the proper authorization, the routine for the itemization of supplies and materials, and the specifications of the dealer. Since the purchase of books and certain library materials require specialized knowledge, the purchasing office generally welcomes the suggestion of names of qualified dealers. State statutes, however, may specify that the purchasing agent of the state or of the university must submit the list of materials to several dealers for bids. They may also require bids for materials costing more than a given amount (e.g., $\$ 100$ or more) and forbid the purchase of materials from members of the governing body or officers of the library. In most institutions in which purchasing is based upon quarterly, rather than annual, allotments of funds, exceptions may be made in the case of the library for the purchase of books and periodicals. The library may also be granted a contingent fund, held by the university purchasing agent for the purchase of books as needed. In other cases the university may have separate or special funds which may be exempt from such regulation. It is evident that the librarian of a state institution which has to comply with the regulations of a central purchasing agency which operates on a quarterly basis is more restricted in placing orders than is the librarian of a private institution in which there are no such requirements.

In some state and private institutions the library is given complete authority in purchasing books, periodicals, and continuations. Under this arrangement the order department of the library receives bids for periodicals, seeks discounts on books, makes out purchase

[^21]orders, and places orders directly with dealers. The business office is supplied with copies of orders for accounting purposes. Supplies and equipment are more frequently obtained through the university purchasing agent.

## PAYMENT OF BILLS

University business offices usually specify that invoices be supplied in duplicate, triplicate, or quadruplicate, depending upon the number of officers needing a copy of each invoice. The library order department checks materials received against the requisition and invoice. A copy of the invoice is retained in the library for bookkeeping purposes, and the other copies go to the business office for distribution. Library vouchers approving payment, signed by the librarian or the assistant in charge of orders, accompany the invoices. Payment of bills is made by the business office.

For the payment of minor freight charges and small purchases needed in emergency, it is not unusual for the library to use funds from petty cash. Transportation and freight charges which involve relatively large sums are paid by the business office and charged against the appropriation of the library.

## DISCOUNTS

Discounts on library purchases, always a matter of interest to librarians, are of two kinds: (I) discounts of a small percentage on the total amount of the invoice usually granted when invoices are paid promptly ${ }^{4}$ and (2) discounts of a larger percentage on the prices of individual books included in the invoices. Since the small discount is not allowed unless payment is made within a given period, the librarian is obligated to check invoices promptly and turn them over to the business office for payment.

The second type of discount is that received from book dealers on books. University libraries generally do not receive as large discounts as those obtained by large public libraries. Frequently, public libraries advertise for bids from jobbers who supply current American books for a given period of time. The board of directors of the Chicago Public Library, for example, lets its book contract to the lowest bidder for each calendar year. This bid is based on

[^22]discounts later applicable to different book-trade categories, such as trade books, educational books, etc. After the contract is let, the library places all of its orders for books with the successful bidder. In addition to the discounts received by the library on the basis of its contract (see Table I), it also secures an additional discount of from 2 to 3.5 per cent, depending upon the type of book, when fifty or more copies are purchased.

The university library does not obtain as much discount as the public library except in the case of texts and certain types of scientific and technical books. It is necessary to point out, however, that

TABLE 1
Comparative Discount rates Offered Libraries on Current american Books, 1940
(Including Carriage)

| Type of Book | Chicago Public Library* (Per Cent) | Book Co-operative for Libraries $\dagger$ (Per Cent) | University <br> Libraries <br> (Per Cent) |
| :---: | :---: | :---: | :---: |
| Trade.. | 39.5 | 27 | 251 |
| Texts...... | 15.0 | 12.5-25.0 | 10-12-15 |
| Scientific and technical | 15.0 |  | 15 |
| Continuations. |  |  | 10 |
| Popular copyrights. | 40.0 |  | 25 |
| Reprints...... | 40.0 |  | 25 |

[^23]the book budget of the Chicago Public Library is very large when compared with that of the average university library. For example, in 1941 the amount budgeted for books, periodicals, and bindings was $\$ 325,000 .{ }^{5}$ The range of appropriations for books and periodicals reported by certain college and university libraries during the same year was from $\$ 5,12$ I to $\$ 144,818$; the median, $\$ 25,446$. $^{6}$ Consequently, the university library may not be in a position to demand the discounts that a large public library can obtain. The fact that the university library buys single copies of most. items, as well as many foreign and out-of-print titles, may add to the difficulty of handling all of its orders through one agent.

[^24]The question of library discounts frequently discussed in booktrade and library journals received unusual consideration about 1940, for two reasons. At that time several booksellers announced that they would grant no discount to libraries of more than 25 per cent. At approximately the same time, three co-operative book-purchasing agencies were organized, the principal object of which was greater discounts and more economical buying. A number of the college libraries to which the Carnegie Corporation made grants for the improvement of their book collections placed their orders through a centralized agency at the University of Michigan. The Bibliographical Center at Denver became a purchasing agency for libraries in Colorado, Wyoming, Utah, and New Mexico; and the Consumers' Book Cooperative, established under the New York State cooperative law, served 76 libraries of all types in twenty-eight different states. The colleges buying through the University of Michigan agency estimated that they secured a discount of from to to 15 per cent larger than they would if they had purchased separately, and in the other two instances the discounts obtained were greater than they had previously been. ${ }^{7}$

## COllecting fines

The assessment of fines in university libraries is a punitive procedure rather than a means of obtaining income. If the funds are collected by the library, they are regularly turned over to the business office. In a few institutions the fines are paid by students at the business office. ${ }^{8}$ Another variation is the collection by the business office of a deposit specifically for library fines. This deposit, which varies from $\$ 1.00$ to $\$ 10.00$, is drawn against for fines incurred. It is obvious that the deposit system requires considerable clerical work in checking the fines incurred and in making refunds.

Whether or not the library is credited with or reimbursed for the fines collected varies among universities. In some institutions they are credited to the library account and are available for expenditure immediately. In others they are deposited in a general university

[^25]fund and are administered in accord with the special regulations governing the use of such funds.

Meager data are available regarding the proportion of its fines which a library collects or fails to collect. A thorough analysis of what the library pays in salaries, stationery, and postage to collect fines may also be useful, to point out the wisdom or lack of wisdom in elaborate fine systems.

Variation also exists in the methods of assessing charges for lost books. In some libraries the borrower pays only the price of the book plus the fines which have accumulated. In others he is required to pay not only the cost of the book and the accumulated fines but also a charge to cover the expense of ordering and cataloging a new copy.

## RECEIVING DEPOSITS

In many libraries fixed fees or deposits are required of users of the library who are not regular members of the university. These deposits are drawn against for the privilege of borrowing books and for fines and lost books. In urban universities, which frequently provide library service to residents of the community, deposits may represent a considerable sum and may require special handling by either the libraries or the business offices. Generally, deposits are returned to the patrons when they relinquish their library privileges, but in some institutions they are considered fees and are retained by the business office.

## SOURCES OF INCOME

In his report for the year 1938-39 the director of the Columbia University Libraries wrote:
The Library budget for the year 1938-39 was close to half a million dollars ( $\$ 494,886.00$ ). Only the Department of Buildings and Grounds was allotted a larger share of the income of the University. Yet in practically every one of its thirty or more administrative units, funds for the purchase of books and equipment are inadequate. The staff at each point is barely adequate to cover schedules and carry on the most necessary activities, giving no opportunity to plan and build for the future. The salaries in nearly every grade of this minimum staff are inadequate. Responsible, full time library workers, having college degrees (some of them also having higher degrees), professional training, and much successful experience receive in many cases a lower compensation than unskilled manual laborers. It would probably be correct to say that the average compensation of members of the professional library staff, as distinguished from the clerical staffwhich is paid still less, of course-is considerably below that of those employed by the University in various mechanical trades. At the same time in virtually every department of the Library the staff is carrying as heavy a work load as seems pos-
sible without a disastrous breakdown in the service. This is an important consideration which must not be overlooked if the Library is to be expected to extend freely to the general public the same valuable and costly services that it is under obligation to provide to members of the University. 9

This quotation is significant because it emphasizes important aspects of the financial administration of university libraries. First, the total amount of operating funds is sufficiently large to require skilful management if it is to be spent wisely. Second, despite the amount of the income, it is insufficient to meet the requirements of the library for books, staff salaries, and other administrative expenses. Third, the insufficiency of the budget limits the ability of the library to extend its services in any other direction. And, fourth, since the finances of the library are limited, it is necessary to rank services according to relative importance.

It is obvious that any discussion of the adequacy of a university library's income must take into consideration the financial condition of the entire institution. ${ }^{10}$ For data on the income of the university as a whole, the reports of the president, comptroller, or other business officer can be consulted. These reports, however, infrequently subdivide these data so as to indicate the sources of income for the library. Statistics which classify library income by source are reported annually in College and Research Libraries.ri These statistics, however, have had two failings: the same institutions have not been reported consistently over a period of years, and only a small proportion of the nation's colleges and universities have been included.

University libraries, in varying degrees, receive their income from five principal sources: (1) funds allocated from the university budget; (2) endowment income; (3) gifts; (4) fees; and (5) miscel-

[^26]laneous sources, including fines, the sale of publications, the sale of duplicates, the sale of catalog cards, charges for lending or rental services, and, for a number of years in the past, government funds.

## LIBRARIES IN ENDOWED UNIVERSITIES

The sources of income for 10 university libraries in endowed institutions are presented in Table 2. These data, though incomplete, serve to show that the various sources of income remain fairly constant in proportion from year to year. Except at Yale University the amount allocated from the university budget has been the largest single income item in each institution. At Yale the endowment income exceeds allocation for four years and nearly equals it in the other years. The libraries of Harvard and Princeton likewise are able to draw on endowment funds which far exceed the funds granted most other institutions through university allocation. It should be pointed out in this connection that libraries are often restricted in their use of endowment funds. Frequently the funds are set up with certain stipulations regarding the type of materials to be purchased or the subjects for which the funds are to be spent. Restrictions of this character limit the effectiveness of the library in developing its resources and services systematically.

Percentages of total income secured from each of the four sources -allocation, endowment, gift, and other-were worked out in Tables 3 and 4 for the 1938-39 and 1939-40 data of Table 2. For each of these sources for each year there is a wide range between the low percentage and the high percentage. Income allocated from the university's budget ranges from 39.7 to 98.7 per cent; endowment income ranges from 0.6 to 41.5 per cent; income from gifts ranges from 0.3 to 14.6 per cent; and "other" income ranges from 0.8 to 33.2 per cent. The "gift" income, since it represents only cash gifts, gives no idea of the total gifts received by each library. A substantial proportion of the additions to the book collections every year comes as gifts from individuals, firms, and government agencies.

When the median figures for the two years in Tables 2 and 3 are considered, it is found that the median library in these private universities receives its income from the following sources in about these percentages: allocation, 75; endowments, 12; gifts, 4; other sources, 7 .

TABLE 2*
Library Income by Source in io Endowed Universtites, 193i-40

| University | Fischl Year Endino Jone so |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935 | 1932 | 1933 | 1934 | 1939 ${ }^{\text {P }}$ | 1936 | 1937 | 1938 | $1930$ | 1940 |
| Chicago: <br> Allocation. Endowment $\qquad$ Gift. $\qquad$ Other $\qquad$ <br> Total $\qquad$ |  |  |  |  |  |  |  |  |  |  |
|  | \$381,868 |  | \$256,702 | \$272,557 |  |  | \$299,6x0 | \$314,521 | \$329,355 | \$328,484 |
|  | 7,577 | 6,086 | 19,977 |  |  |  | - 4,159 | 4,410 | 4,390 | 4,479 |
|  | 63,137 | , ....... | 100,400 |  |  |  | 23,000 |  |  |  |
|  |  | 110,569 |  |  |  |  |  |  |  |  |
|  | \$452,582 | \$450,776 | \$377,079 | \$272,557 |  |  | \$326,769 | \$318,93r | \$333,745 | \$32,963 |
| Columbia: |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | \$396,730 |  | \$449,542 |  |  | \$495,170 | 8482,725 |
| Endowment. |  |  |  |  |  |  |  |  | 13,063 | 12,284 |
| Gift.. |  |  |  |  |  | 3,464 |  |  | 8,785 | 20,224 |
| Other. |  |  |  |  |  |  |  |  | 3,287 | 11,053 |
| Total. | .-7...... | . $\cdot$........ | . . . . . . . . | \$396,730 |  | \$453,006 |  |  | \$520,305 | \$526,286 |
| Denver: |  |  |  |  |  |  |  |  |  |  |
| Allocation. . |  |  |  |  |  | $8,634$ |  |  | \$ 18,249 | .......... |
| Endowment |  |  |  |  |  | 10,749 | 17,663 | $18,450$ | 18,777 | ......... |
| Gift... |  |  |  |  |  | 2,951 | 378 | $6,209$ | 854 | . |
| Other. |  |  |  |  |  | $4,017$ |  | $5,103$ | 8,112 |  |
| Total. |  |  | , , : $0.0 .:$ | =: | : : : : : : : \% | \% 26,34] | 530,942 | 8 38,229 | \$4 45:902 | :...... |
| Duke: |  |  |  |  |  |  |  |  |  |  |
| Allocation. |  | . . . . . . . | \$134,447 | \$186,954 |  | \$198,732 |  |  | \$200,367 | \$204,235 |
| Endowment |  |  | [1, 205 | 899 |  | ${ }^{363}$ |  |  | 5,747 | 555 |
| Gift... |  |  |  | 24,859 |  | 28,333 |  |  | 20,511 | 15,847 |
| Other. |  |  | 23, 289 | 34,740 |  | 23,923 |  |  | 24,727 | 25, 833 |
| Total. |  | . . . . . . . . | \$168,999 | \$236,652 |  | \$251,350 |  |  | \$247,352 | \$246,273 |

[^27]TABLE 2-Continued


TABLE 2-Conlimued


TABLE ${ }^{*}$
SOURCE of Library Income during 1938-39 in
9 Private Universities


- Data adapted from "College and University Library General and Salary Statistics," Bulleti! of the American Library Association, XXXIV (1940), 126.

TABLE 4*
Source of Library Income during i939-40 IN 9 Private Universities

| Institution | Pracentage of Total Inconk |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Allocation | Endowment | Gift | Other |
| Chicago. | 98.7 | 1.3 |  |  |
| Columbia. | 91.7 | 2.3 | 3.8 | 2.1 |
| Denver. |  |  |  |  |
| Duke.... | 82.9 | 0.14 | 6.4 | 10.5 |
| Harvard. . . . . . . . . . | 50.2 | 35.4 | 12.9 | 1.5 |
| Joint University Libra | 53.7 | 2.4 | 12.0 | 31.8 |
| Princeton. | 71.0 | 17.9 20.4 | 4.5 | 6.6 |
| Rochester. | 77.0 51.0 | 20.4 | 0.3 0.3 | 2.3 12.4 |
| High. | 98.7 | 36.3 |  | 31.8 |
| Median | 74.0 | 10.1 | 4.5 | 6.6 |
| Low. | 50.2 | 0.14 | 0.3 | 1.5 |

[^28]
## STATE UNIVERSITY LIBRARIES

Table 5 gives the amount of income from four sources for 17 state university libraries. These figures show a decidedly different pattern from that of the private universities in Table 2. The former shows great variations in each source of income for each library-particularly in endowment, gift, and other income. The appropriation income is the only source for most of the libraries which appears to be fairly consistent and constant. State universities apparently have not developed procedures for securing gifts for their libraries to the extent that private universities have, if the amounts received by the libraries of the two groups are any indication. In state university libraries gifts constitute only an occasional source of income. In private university libraries they constitute a fairly constant source, and the amount is relatively large. In the latter the activities of the friends-of-the-library organizations have probably been responsible for the constancy and amount of income from gifts, since many of them have groups of this character. The libraries also benefit from the general fund-raising organization usually maintained by private institutions. Public supported universities, however, have not cultivated such groups to the extent that the endowed universities have.

Tables 6 and 7 present the 1938-39 and 1939-40 data of Table 5 in percentage form. These percentages have a small range, as compared with the percentages for private universities in Tables 3 and 4. If the University of Oklahoma were omitted from Tables 6 and 7, there would be very close agreement in the percentages of the rest of the institutions. It is evident from these figures that the typical state university library receives the bulk of its income from state appropriations and that other sources of income are negligible or nonexistent. The median state university library receives its income approximately as follows: appropriation, 98 per cent; gift, endowment, and other, 2 per cent.

## LIbRARY fees

Little information concerning the number of universities which charge library fees and the importance of this source of library support is available. However, some data have been derived from the fee schedules of the universities which are members of the American Association of Universities and of those accredited by that organiza-

TABLE 5*
Income by Source for 17 State University Libraries, r93o-40

| University | $1930-31$ | 2931-32 | 193-33 | 1935-34 | 1934-35t | 1935-36 | 1936-37 | 1937-38 | 1938-39 | 1930-40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arizona: |  |  |  |  |  |  |  |  |  |  |
| Appropriation. |  |  |  | \$ 32,438 |  |  | \$ 35,584 | \$ 44,800 | \$ 39,555 | \$ 40,160 |
| Endowment. |  |  |  |  |  |  |  |  |  | .......... |
| Gift.... |  |  |  |  |  |  |  |  |  | ......... |
| Other..... |  |  |  |  |  |  |  |  |  | . . . . . . . |
| Total. |  |  |  | \$ 32,438 | ........... |  | \$ 35,584 | \$44,800 | \$ 39,555 | \$40,160 |
| California: |  |  |  |  |  |  |  |  |  |  |
| Appropriation. |  |  |  | \$217,665 | ........... | \$253,254 | \$230,350 |  | \$273,863 | \$299,999 |
| Endowment. |  |  | . .......... | 12,356 | . . . . . . . . | 8,520 | 8,520 | . . . . . . . | 9,807 | 8,006 |
| Gift..................... |  |  | . . . . . . . . | 1,204 | . . . . . . . . | 2,639 | 2,675 | .......... | 1,144 | 1,878 |
| Other. |  |  |  | 7,198 |  | 7,529 | 31,899 |  | 65,799 | 41,713 |
| Total. |  |  | ........... | \$238,423 | .......... | \$275,942 | \$273,444 | ........... | \$350,613 | \$351,596 |
| California (Los Angeles): |  |  |  |  |  |  |  |  |  |  |
| Appropriation. <br> Endowment. |  |  |  | \$114,407 |  |  |  |  | \$159,600 | . |
| Gift.... |  |  |  | 489 |  |  |  |  | 1,000 |  |
| Other. |  |  |  |  |  |  |  |  |  |  |
| Total. | ........... |  | . . . . . . . . | \$114,896 |  |  |  |  | \$160,600 |  |
| Illinois: |  |  |  |  |  |  |  |  |  |  |
| Appropriation | \$299,009 | 5307,756 | \$284, 275 | 5275,360 |  | \% $\mathbf{2} 94,978$ | \$302,283 | \$370,328 | \$396́997 | \$396,730 |
| Endowment............ |  |  |  |  |  |  |  |  |  |  |
| Other... |  |  |  |  |  |  |  |  |  |  |
| Total. | \$299,009 | \$307,756 | \$284,275 | \$275,360 | .... . ${ }^{\text {a }}$. | \$294,978 | \$302,283 | \$370,328 | \$396,997 | \$398,730 |

${ }^{\bullet}$ Source: "College and University Library General and Salary Statiatice, published annually in the Bulltin of the American Library Assoriation, Vols. XXVI-XXXV (r932-41). Titio varices.
† Data not given for this year.

TABLE 5-Continued

| University | 1930-31 | 1935-32 | x932-3s | ${ }^{1035-34}$ | 1034-35 $\dagger$ | 1935-36 | 2036-37 | 1037-38 | 1938-39 | 1939-40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Iowa: |  |  |  |  |  |  |  |  |  |  |
| Appropriation | \$210,320 | \$158,633 | \$141,703 | 8131,496 |  | \$150,238 | \$147,994 | \$163,613 | \$157,524 | \$166,463 |
| Gift. | 8,594 |  |  |  |  |  |  | too |  |  |
| Other. | 959 | 1,966 | 108,451 | 14,077 |  |  | 1,019 | 247 | 329 | 519 |
| Total. | \$219,873 | \$160, 599 | \$250,154 | \$46,573 |  | \$150,238 | \$149,013 | \$163,960 | \$157,853 | \$166,982 |
| Kansas: Appropriation | \$85,898 | \$ 75,780 | \$72,570 | \$82,117 |  | 882,73x | 880,963 | \$83,290 | \$83,565 | \$ 83,185 |
| Endowment. |  | 75,880 | - 2,570 | - ${ }^{1}$,117 |  | -82,731 | 80,903 | -83,290 | ${ }^{-8,565}$ | -83, 88 |
| Gift. . | 2,508 |  |  |  |  | 262 |  |  |  |  |
| Other | 2,651 |  |  | 26 x |  |  | 2,000 | 1,500 | 3,225 | 3,851 |
| Total, | \$ 91,057 | \$ 75,780 | \$72,570 | \$82,378 |  | \$82,993 | \$ 82,963 | \$84,790 | \$ 86,690 | \$ 87,036 |
| Louisiana State: Appropriation |  | \$ 48,560 | \$ 79,551 |  |  |  | \$125,818 |  | \$135,383 | \$140,820 |
| Endowment. |  |  | 117 |  |  |  | 404 |  | 3337 10,00 | 244 0818 |
| Other. |  | 2,645 | 5,856 |  |  |  | 475 |  | 12,396 | 804 |
| Total. |  | \$ 51, 205 | \$85,524 |  |  |  | \$126,697 |  | \$167,116 | \$142,786 |
| Michigan: |  |  |  |  |  |  |  |  |  |  |
| Appropriation | \$467,821 8,340 | $\begin{array}{r} \$ 494,529 \\ 8,340 \end{array}$ | $\begin{array}{r} \$ 448,413 \\ 10,380 \end{array}$ | $\begin{array}{r} \$ 353,740 \\ 10,202 \end{array}$ |  | $\$ 370,752$ 9,294 | $\begin{array}{r} \$ 389,588 \\ 10,482 \end{array}$ | \$414,033 9,463 | $\begin{array}{r} 8421,9 \mathrm{gI} \\ 0,852 \end{array}$ | \$422,132 $8,38 \mathrm{I}$ |
| Other |  |  |  |  |  |  |  | 9,000 |  |  |
|  |  |  | 4,030 |  |  |  |  |  |  |  |
| Total. | \$476, 161 | \$502,869 | \$462,823 | \$363,942 |  | \$380,046 | \$400,070 | \$432,496 | \$431, 843 | \$430,5:3 |

TABLE 5-Continued


TABLE 5-Continued

| University | 2930-3x | 1031-32 | 193-33 | 1033-34 | 1034-35 $\dagger$ | 1935-36 | 1936-37 | 1937-38 | 19388-39 | 1939*40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oklahoma: |  |  |  |  | . |  |  |  |  |  |
| Appropriation. |  |  |  | \$ 24,688 |  | \$ 26,219 | \$ 20,724 | \$ 50,698 | \$ 52,894 | \$ 39,968 |
| Endowment. |  |  |  | . ${ }^{\text {c....... }}$ |  |  |  |  |  | ......... |
| Gift. |  |  |  | 15,244 |  |  |  |  |  | - |
| Other. |  |  |  | 16,955 |  | 26,225 | 24,157 | 18,562 | 20,300 | 20,991 |
| Total. |  |  |  | \$ 56,887 |  | \$ 52,444 | \$ 44,88r | \$ 69,260 | \$73,194 | \$60,959 |
| Oregon: |  |  |  |  |  |  |  |  |  |  |
| Appropriation <br> Endowment. | \$ 88,244 3,779 | $\begin{array}{r} 68,574 \\ 2,29 \mathrm{I} \end{array}$ | $\begin{array}{r} 60,323 \\ 2,232 \end{array}$ | $\begin{array}{r} 63,489 \\ 2,684 \end{array}$ |  | $\begin{array}{r} 65,740 \\ 1,474 \end{array}$ | $\begin{array}{r} \$ 63,7 \text { or } \\ 1,836 \end{array}$ | $\begin{array}{r} \$ 8,815 \\ 7,625 \end{array}$ | $\begin{array}{r} \$ 76,197 \\ 1,994 \end{array}$ | $\begin{array}{r} \$ 86,423 \\ 1,685 \end{array}$ |
| Gift......... | 4,329 |  |  |  |  |  |  | 1,62 |  |  |
| Other. | 15,154 | 9,363 | 5,117 | . $\cdot$. ${ }^{\text {a }}$ |  |  | 114, |  |  |  |
| Total. | 8111,506 | \$80,228 | \$67,672 | \$66,173 |  | \$67,314 | \$ 65,651 | \$80,462 | \$ 78,271 | \$88,454 |
| Texas: <br> Appropriation |  |  |  |  |  |  |  |  |  |  |
| Appropriation Endowment. . |  |  |  | $\begin{array}{r} \$ 15,292 \\ 2,605 \end{array}$ |  | \$140,437 3,700 | $\begin{array}{r} \$ 246,326 \\ 2,641 \end{array}$ | $\begin{array}{r} \$ 169,289 \\ 2,212 \end{array}$ | $\begin{array}{r} \$ 196,434 \\ 1,280 \end{array}$ | $\begin{array}{r} \$ 195,792 \\ 1,328 \end{array}$ |
| Gift. |  |  |  | 515 |  | 7,783 | 19,106 | 22,907 | 13,690 | 4,990 |
| Other. |  |  |  | 2,320 |  | 2,497 | 3,140 | 3,844 |  |  |
| Total. |  |  |  | \$120,732 |  | \$154,417 | \$171,213 | \$198,252 | \$211,404 | \$202,110 |
| Washington: Appropriation. | \$139,104 | \$125,981 | \$ 98,153 | \$131,949 |  | \$113,802 | \$110,374 | \$136,827 | \$136,837 | \$139,231 |
| Endowment. |  | 48 | -98,153 | -31,949 |  | -13,802 | \$110,374 | \$136,827 | \$136,83 | \$23,23 |
| Gift.. |  | 7 |  |  |  |  |  |  |  |  |
| Other. | 2,828 | 3,707 |  |  |  | 428 | 468 | 982 | 1,312 | 354 |
| Total. | 8141,933 | \$129,743 | \$08;153 | \$131; 040 | :1...... | \$114, 230 | S110, 84.3 | \$137;809 | \$138,149 | \$139,585 |
| Wyoming: Appropriation | \$ 24,340 | \$ 25,265 | \$ 22,305 | \$ 19,486 |  |  |  |  | \$ 19,660 | \$ 27,898 |
| Endowment. |  |  |  |  |  |  |  |  |  |  |
| Gift.. |  | 400 |  |  |  |  |  |  |  |  |
| Other. | . |  |  |  |  |  |  |  |  | 666 |
| Total. | \$ 24,340 | \$25,665 | \$ 22,305 | \$ 19,486 |  |  |  |  | \$19,660 | \$28,564. |

tion. They are taken from American Universities and Colleges ${ }^{\text {² }}$ and are for the academic year 1939-40.

Of the 92 universities noted, 27 per cent charge a library fee. The Survey of Land-Grant Colleges and Universities in 1930 reported that 34 per cent of that group of institutions collected library fees. ${ }^{13}$ The slightly lower percentage among the present

TABLE 6*
Income by Source for 17 State University Libraries, 1938-39

| University | Precratace of the Totar Income |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Appropria- } \\ \text { tion } \end{gathered}$ | Endowment | Gift | Other |
| Arizona. | 100.00 |  |  |  |
| Californis .... | 78.40 | 2.80 | 0.40 | 18.40 |
| California (L.A.) | 99.40 |  | 0.60 |  |
| Illinois.. | 100.0 |  |  |  |
| Iowa. . | 99.80 |  |  | 0.20 |
| Kansas. . | 99.60 |  |  | 0.40 |
| Louisiana. | 81.10 | 0.20 | 5.90 | 12.80 |
| Michigan. | 97.90 | 2.10 |  |  |
| Missouri.. | 100.00 |  |  |  |
| Nebraska. | 98.10 | ...... |  | 1.90 |
| North Carolina | 98.90 |  | 0.90 | 0.20 |
| North Dakot | 96.40 |  |  | 3.60 |
| Oklahoma. | 73.00 |  |  | 27.00 |
| Oregon. | 97.44 | 2.55 | 0.or | .......... |
| Texas.. | 92.90 | 0.60 | 6.50 | ......... |
| Washington | 99.05 |  |  | 0.95 |
| Wyoming. | 100.00 |  |  |  |
| High. | 100.00 | 2.80 | 6.50 | 27.00 |
| Median | 98.90 |  |  | 0.20 |
| Low. | 73.00 |  |  |  |

${ }^{*}$ Data adapted from "College and Univeraity Library General and Salary Statiotica," Bulletie of the Americes Library Association, XXXIV (1940), 126.
group of university libraries may reflect a trend away from special fees or merely a difference in practice among the two types of institutions. State institutions are more likely to assess library fees than are private universities.

The data for the university libraries have been analyzed in Table 8. A slightly higher percentage of public than of private universities charge library fees. This apparent difference may be due to differences in methods of setting up fee schedules. Public

[^29]universities tend to itemize each individual fee, so that students and their parents can see just what their expenses are likely to be. Endowed universities, on the other hand, usually charge a lump sum for tuition without itemization. In gathering the data it was observed that, in nearly every case where a library fee was charged, the schedule of fees was very long and complicated. Russell has

TABLE 7*
Income by Source for 15 State University Libraries, 1939 -40

| University | Percentage of the Total Incoue |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| - | Appropriation | Endowment | Gift | 'Other |
| Arizona. | 100.00 |  |  |  |
| California. | 85.00 | 2.30 | 0.50 | -11.90 |
| Iowa. | 99.70 |  |  | 0.30 |
| Kansas. | 95.60 |  |  | 4.40 |
| Louisiana | 98.60 | 0.20 | 0.60 | -. 56 |
| Michigan. | 98.00 | 2.00 |  | ...... |
| Missouri. | 99.90 | . ......... |  | 0.10 |
| Nebraska. | 98.30 |  |  | 1.70 |
| North Carolina. | 92.30 | ......... | 5.60 | 2.10 |
| North Dakota. | 95.30 |  |  | 4.70 |
| Oklahoma. | 66.00 |  |  | 34.00 |
| Oregon. | 97.70 | 1.90 | 0.40 |  |
| Texas. | 96.80 | 0.70 | 2.50 | . . . . . . |
| Washington | 99.70 |  |  | 0.30 |
| Wyoming. | 97.70 |  |  | 0.30 |
| High. | 100.00 | 2.30 | 5.60 | 34.00 |
| Median. | 97.70 |  |  | 0.30 |
| Low. . | 66.00 |  |  |  |

[^30]observed that "in some institutions the fees seem to run in a cyclefirst a single fee, then the gradual addition of new separate fees, finally a reconsolidation into a single fee at a new level." ${ }^{14}$ Because of this tendency, it may be that special library fees tend to disappear at the point of the cycle when schedules are consolidated into one fee and to reappear when increased pressures on the library for materials cannot be met by existing sources of income.

Universities with enrolments under 7,500 appear to be more likely to charge special library fees than those with enrolments higher than this. Likewise, institutions which have library collections under

[^31] (Syllabus, Educ. 339 [Chicago: University of Chicago, 19341), p. 73 (mimeographed).

250,000 are more likely to charge a library fee than are those' institutions which have larger collections. These two conclusions are consistent with those of the Survey of Land-Grant Colleges and Universities. ${ }^{\text {. }}$
There is little uniformity or consistency in the amount of the fees to be paid or in the categories of those who are required to pay

TABLE 8*
Library Fees in Universities

| Institumons | No. of Institutions |  |  | Percentage |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Charge Fee | No Fee | Total | Cbarge Fee | No Fee |
| Kind of institution: |  |  |  |  |  |
| Public. | 15 | 33 | 48 | 31 | 69 |
| Endowed. | II | 33 | 44 | 23 | 77 |
| Size of enrolment: |  |  |  |  |  |
| Over 10,000. | 2 | 12 | 14 | 15 | 85 |
| 7,500-10,000............. | 1 | 2 | 3 | 33 | 67 |
| 5,000-7,500.............. | 7 | 9 | 16 | 44 | 56 |
| 2,500- 5,000............. | 8 | 25 | 33 | 24 | 76 |
| Under 2,500...... . . . . . . . | 8 | 18 | 26 | 3 I | 69 |
| Number of volumes in library: Over 1 million. |  | 9 | 9 |  | 100 |
| 750,000-1,000,000....... . | 1 | 1 | 2 | 50 | 50 |
| 500,000- 750,000........ | 3 | 6 | 9 | 33 | 67 |
| 250,000-500,000....... | 4 | 19 | 23 | 17 | 83 |
| Under 250,000............ | 18 | 31 | 49 | 37 | 63 |

- Compiled from the inatitutional exhibita in C. S. Marah (ed), American Universities and Colleges (4th ed.; Washington: American Council on Education; 1940).
them. Fees range from $\$ 1.50$ to $\$ 25.00$ per year. In several instances, one "incidental" or "university" fee is specified which includes library, health, and other items. Five institutions assess a special law-library fee which ranges from $\$ 6.00$ to $\$ 15.00$ per year. At one institution a fee is charged "for the purchase of duplicate text and reference books which are placed on reserve in the library for the use of students in those courses and operate to reduce or eliminate the cost of text books for individual students." Furnishing free textbooks to students in this way seems less desirable than furnishing them through rental sets at the university bookstore. ${ }^{16}$

[^32]The question of library fees is a part of the larger problem of fees in general. Reeves and his associates strongly recommend that every college and university have "a single fee covering all the basic charges, with no extra fees for any academic purpose." ${ }^{17}$ Since the library performs definite functions which are essential to the maintenance of the university, it should not depend upon special fees for support but should be supported, like other parts of the university, by appropriations from the institution's total income. ${ }^{8}$

## OTHER SOURCES OF INCOME

In addition to the income which the library may receive from allocations, endowments, gifts, and fees, it may also receive a portion of its funds from several other sources. A relatively small amount of income may, as has been pointed out, be derived from fines. The sale of publications may constitute another source. ${ }^{19}$ Relatively speaking, the larger libraries secure more revenue from the sale of duplicates and of catalog cards than they do from the sale of publications. During the ten-year period, 1930-31 to 1940-41, the University of Chicago Libraries collected approximately $\$ 900$ annually from the sale of cards to 12 libraries. The range was from $\$ 652$ to $\$ 1,373$ annually. In a few institutions a small amount is collected by the library for binding for students and faculty and for photostat and microfilm work. The net income from these sources usually is small, since the charges are intended merely to cover costs. The total amounts handled, however, may be considerable. The charges of the department of photographic reproduction of the University of Chicago Libraries for various services amounted to $\$ 13,960.72$
plan by A. J. Brumbaugh (Chicago: University of Chicago Press, 1940), p. 198; or A. F. Kuhlman, "Some Implications in the New Plan of the University of Chicago for College Libraries," Library 2uarterly, III (1933), 21-36.
${ }^{17}$ F. W. Reeves et al., The Liberal Arts College (Chicago: University of Chicago Press, 1932), p. 620.

[^33]during the year $1940-41 .^{20}$ In libraries maintaining rental or lending services, income received from charges to patrons may represent fairly large sums. The lending service of the Columbia University Libraries, for example, collected $\$ 6,789.75$ in 1943-44. The expenses for this service totaled $\$ 6,805.00$. ${ }^{\text {20 }}$ Although funds supplied by the federal government through the Works Progress Administration and the National Youth Administration have been eliminated, this source of income in the past helped considerably in the expansion and maintenance of library service in academic libraries.

## BUDGETARY PROCEDURE

THE UNIVERSITY BUDGET
A budget is a financial statement of the estimated revenues and expenditures of an institution for a definite period of time. It represents a logical, comprehensive, and forward-looking financial program for the co-ordination of the activities of the various functional divisions of the university. As a definite financial plan, as a forecast of the means for carrying the plan into effect, as a current guide, as a cost summary of operations, and as a historical record and basis for the formulation of future policy, it is an indispensable instrument in the hands of the university administrator. ${ }^{2 x}$

Certain facts concerning the university's budget procedure should be known to the librarian if he is to perform his responsibilities in this area satisfactorily. He should be aware of the time when the budget is closed for the fiscal year, when the preparation of the next year's budget must be begun, and when estimates for the coming fiscal year must be submitted. Since most universities operate on a fiscal year which dates from July i to June 30, work on the following year's budget generally is started in November or December. The tentative budget should be ready by January, and the final budget is usually approved by the governing board or legislature in March or April. In state-supported institutions the budget is usually for a two-year period.

[^34]Ordinarily, the budget can be considered from several points of view. Two of these may be emphasized here. They are: (1) the total amount of revenue to be expended and (2) the distribution of funds within the total budget. Although the president of the university is in direct control of the preparation of the budget, the officers and departmental heads are responsible for preliminary estimates for their units. The financial officer usually furnishes the departmental heads with forms upon which to submit these estimates. ${ }^{22}$ The librarian's part in this procedure involves interrelating the library's functions with the rest of the educational program and co-ordinating library financial policies with those established by the president. After the budget is adopted, it may be necessary to revise it during the year if the university income is lower than that anticipated. The control of the budget is exercised through a system of records and reports in the business office and in the library.

## LIBRARY BUDGET

There are three ways in which the librarian can prepare budgetary estimates: (1) by comparison with past expenditures, (2) by budgeting in accordance with the work program, and (3) by using arbitrary standards and norms.

Comparison.-In preparing the budget the librarian is rarely faced with a situation for which there is absolutely no precedent. Unless it is a new institution, the university has had a library budget previously. Moreover, the librarian is generally aware of the relative value that has been placed on library service by the university, because past experience indicates that. Consequently, it is the function of the librarian to propose a budget which takes into consideration last year's expenditures, the appropriation for the current year, and the estimated expenditures for the next year. The proposed budget is based on the librarian's judgment of the adequacy of budgets of the previous and the current years. In order to emphasize inadequacies, such as were noted above in the report of 1938 - 39 of the director of libraries of Columbia University, comparisons of library support with the support of other departments in the university may be presented or comparisons may be made with other comparable university libraries.

The work program.-When the budget is formulated on the basis of the library's needs in terms of service to be offered and work to

[^35]be accomplished, consideration is taken of the objectives of the individual university. The librarian, in order to suggest an adequate program of library support, should be cognizant of any change in the university educational program. Many modifications of the university programs involve library facilities and service and consequently affect the library budget.

Budgetary estimates based on the work program should cover fixed charges, modified fixed charges or service-station charges, and unit-cost estimates. Fixed charges include: maintenance of the librarian's office, maintenance of depository catalogs, cost of printing cards, maintenance of rare book rooms or other special reading rooms, binding and rebinding, supplies, telephone, postage, freight and express, memberships, pensions, building maintenance, and insurance.

Modified fixed charges or service-station charges include the cost of maintaining essential desks. These charges may be modified if necessary, because some desks may be eliminated by careful reorganization; hours of maintenance may be shortened or lengthened; or the number of persons stationed at desks may vary according to pressure of work.

Unit-cost estimates are concerned with the probable number of students and faculty members to be served, the extent of the research program, the size of the reserve and general circulation, the demands for bibliographical services, and the number of books, periodicals, and other printed materials which will probably be acquired during the year. When these conditions are set forth quantitatively, it is then necessary to compute the cost in terms of personnel, equipment, and materials. Computation may be relatively easy if careful cost-accounting records are kept. If specific cost analyses are not available, approximations may be worked out for the individual library. Schemes of classification and pay plans, such as those developed by the American Library Association, ${ }^{23}$ and costs for certain types of activity, such as those determined by Rider ${ }^{24}$ and Miller, ${ }^{25}$ might be used.

[^36]Arbitrary standards.-The progress of a profession is usually marked by the accumulation of an increasing number of generally accepted practices. As these practices are commonly approved, they are recognized as norms or standards and are regularly followed until more satisfactory methods are discovered. A measure of standardization thus characterizes normal development.

Many attempts have been made by library and educational associations and students of financial administration to set up standards for different aspects of university library work. Usually these atattempts have been based upon the ratio of library expenditures to total institutional expenditures, expenditures for library purposes per student, expenditures per faculty member, or expenditures per library staff member. ${ }^{26}$ When summarized, these studies show considerable variation in the recommendations. The range of the percentage of the library budget to the entire college budget, for example, was from 4 to 12 per cent. The surveyors of the Indiana University Library found that the median ratio of library expendi-- ture to total university expenditure in in state universities for 1938-39 was 4.86. ${ }^{27}$ In universities which have not yet built up adequate collections, this percentage may have to be higher until certain basic materials have been acquired. Thus the University of Texas, for example, was spending 7.80 per cent of its total educational budget on the library in $1938-39 .{ }^{28}$ The range of per student expenditure was from $\$ 12.96$ to $\$ 25$.10; per faculty member, from $\$ 270$ to $\$ 300$. The recommended distributions of the budget itself likewise show variations. The expenditures for books range from 38 to 50 per cent; for salaries, from 50 to 60 per cent; and for other needs, from 6 to io per cent.

The average (mean) percentage distribution of the budgets of 16 state university libraries in $1939-40^{29}$ approximates closely those recommended by various librarians. Salaries comprise 57.2 per cent of the budget; books, periodicals, and binding, 37.1 per cent; and materials and supplies, 5.8 per cent.

[^37]Reeves and Russell, in studying total university expenditures per student, found that there is a variation in cost per student owing to size of enrolment. ${ }^{30}$ Smaller institutions are more expensive to operate than institutions of larger enrolment. Later these same authors concluded that "after a certain enrolment is reached, there is no further effect of size of enrolment upon cost or income per student." ${ }^{31}$ They developed a technique for weighting expenditures per student by size of enrolment and scope of program. They found that institutions of different size require different amounts of support per student for a program of a given quality. The expenditure per student decreased as the institution increased in size. This rule, however, would not apply to universities except in relation to undergraduate students, since the support of graduate and professional study and research is much greater than that for undergraduate instruction.

In his study of college and university libraries, Waples found that the two measures of financial support which were most likely to be related to excellence of library service were: (1) the average expenditure for new books and periodicals over a five-year period, and (2) the annual expenditure for library salaries, weighted for enrolment. ${ }^{32}$ According to this author, enrolment affects only the quantity of duplicate copies. Generally, the cost of duplicate copies involves only a small part of the book budget.

It should be apparent that, because of the many variables which are involved and the variations in the needs of different institutions, no arbitrary standards will exactly fit a particular library. The nature of the curriculum, the status of the library's holdings, the amount and variety of research carried on, the number and efficiency of the library organization, the physical layout of the library building, the availability of funds, the nature of the library pro-gram-all have to be taken into consideration in determining what the budget of a given university library should be at a given time.

[^38]The term "book funds" is conventionally defined to include funds for periodicals, continuations, and binding, as well as for books. The funds for periodicals, continuations, and their binding, unlike those for books, are usually treated together as part of the general library budget instead of being allocated among the various academic departments of the university. University libraries have adopted this practice in order to decrease the number of broken sets. When the departments control their periodical and continuation subscriptions, cancellations due to changes in departmental personnel or to other causes frequently occur. When the university library controls these items, cancellation is practiced only in the case of publications which have seriously lessened in their importance to the educational program of the university. This latter practice ordinarily makes for a consistent policy and insures complete sets of journals. Similarly, the placement of all funds for binding purposes under the control of one person or one department of the library is likely to secure more uniform results than would be secured if the funds were scattered among the various units.

Funds for books are generally apportioned among the various academic departments of the university. The responsibility for the distribution is most often left in the hands of the librarian and the library committee. In order to provide for contingencies, a certain portion of the funds, which varies from library to library, is usually set aside, to be spent under the direct supervision of the librarian. In a recent study of practices in 53 large college and university libraries, Ellsworth found that 42 of the institutions carried their departmental book funds as subdivisions of the library budget. Six libraries which retain their book funds in both the departmental and library funds follow this practice because of the existence of special endowment funds. At the time of the survey, 4 libraries kept all book funds in the departmental budgets. ${ }^{33}$

Because of the confusion which is said to occur when book funds are merged with funds used for supplies and equipment, few libraries keep these funds together. ${ }^{34}$ The existence of special endowments may necessitate combination of funds.
A third point to consider in the matter of book funds is the extent

[^39]of flexibility permitted. Some degree of flexibility is permitted in most libraries. Rigid systems of allotments make it difficult for institutions to take advantage of special bargains which appear on the book market or to meet varying requirements of academic departments.

In addition to these practices of libraries in regard to the management of book funds, the important question of allocation of funds among the several academic departments should be considered. Librarians have long attempted to solve the problem of apportioning book funds in an objective and impartial manner. In recent years a number of formulas and schemes have been suggested. ${ }^{35}$ Ellsworth has summarized the factors involved as follows:
I. The student credit-hour load by department at three instructional levels
A. General college or lower level
B. Upper division
C. Graduate or special curriculums based on possession of the A.B. degree
II. Relative use of the library materials at each of the three levels by department (summation of use by all courses in the department expressed in the following categories, which are based on those proposed by Hekhuis in 1936)
A. Laboratory and textbook courses involving little or no use of the library by students
B. Laboratory and textbook courses involving occasional use of the library by students
C. Laboratory and textbook courses involving frequent use of the library by students
D. Courses in which no textbook is used and in which the library becomes the primary source of reading materials
III. Number of theses at the Master's level accepted by the department
IV. Number of theses at the Doctor's level accepted by the department
V. Amount of faculty publication and research by the department
VI. Special departmental needs and special book-market opportunities-such as new appointment in an area where the library is weak, a shift in publishing emphasis, or the appearance on the book market of a desirable but expensive secondhand item..$^{36}$

On the basis of a consensus of the people concerned, Ellsworth assigned numerical weights to the first four items in an effort to develop a system of apportionment at the University of Colorado. In a concluding statement Ellsworth indicated that the lack of data regarding "the cost of new titles appearing on the book market," which is considered one of the most important factors, interferes with a comprehensive system of departmental allocation of book

[^40]funds. He further points out that, as a result of a system of departmental pressures, the professional schools are more likely to secure higher proportions of the funds than are the arts colleges.

Coney has recently published the results of an experiment in developing an index for apportioning departmental book funds at the University of Texas. ${ }^{37}$ This index contains many of the elements used by Ellsworth. The six factors used to derive the index included: "(1) registrations, (2) courses offered", (3) faculty, (4) graduate majors, (5) several elements affecting book need not readily expressed precisely in quantitative terms (the 'nonquantitative' factor), and (6) cost of material." ${ }^{38}$ Like Ellsworth, Coney weighted the factors, although giving different weights to similar factors. Moreover, Coney included the cost of material as a factor. But the crux of these indices lies in the scheme of weights applied. A careful study of weighting in this connection would be a valuable corrective to both Coney's and Ellsworth's studies.

Prepared independently of each other and appearing in the same issue of the Library Quarterly, the studies of Ellsworth and Coney indicate the difficulty of arriving at a satisfactory distribution of the departmental book funds. As methods for procedure, however, the studies are suggestive. Further research in this aspect of university librarianship might possibly provide a reliable method of book-fund distribution which would be generally applicable. The indications are, however, that, regardless of the formula used, it is not possible to place book-fund distribution on a purely mechanical basis.

In addition to salaries and books, a portion of the funds are used for various other purposes. These include: supplies, such as catalog cards and stationery; communication, such as telephone and telegraph; printing; duplicating; travel; entertainment; organization memberships; express; freight; and insurance. Although library insurance is usually handled by the business office and is often included in a blanket insurance policy for the entire university, the librarian should have a clear understanding of the values of the materials to be insured and should see to it that the university makes adequate provision for their protection. The materials usually covered by insurance include the book stock, catalogs, and equipment. The librarian is particularly able to determine the values of

[^41]books added annually to the collections. Some librarians have adopted formulas for establishing the insurance value of their collections. One of these sets a value of $\$ 3.00$ for each reference book, $\$ 1.00$ for each volume in the stack, and an individual valuation for each rare book. The value of the catalogs is generally satisfactorily arrived at by using unit costs of cataloging. Allowances should also be made annually for the depreciation of binding, duplicating, photographic, and other equipment.

## ACCOUNTING AND FINANCIAL REPORTING

general considerations
As American university libraries have grown and the size of their units has developed, specialization has also increased. At the beginning of the twentieth century the librarian in most universities was obliged to handle all the functions associated with the library. But with library budgets running into hundreds of thousands of dollars, it has become necessary for the library to adopt modern methods of accounting and financial reporting. Moreover, it is sometimes necessary to maintain on the library staff a person who has been trained in accounting. Trent found that most libraries, using their present systems of reporting, cannot give satisfactory statistical records of their income and expenditures to the American Library Association, the North Central Association of Colleges and Universities, the U.S. Office of Education, and other accrediting agencies and bodies. ${ }^{39}$

Since the university librarian frequently finds it necessary to have library funds increased or reallocated and must present evidence in the form of statistics, it is important that he be able to make accessible to university officials more detailed accounting information concerning the library than is generally provided by the business office. It is also desirable for him to be expert in accounting procedures in order to meet fully his responsibility in administering university funds and in controlling expenditures for the various objectives of the library. ${ }^{40}$

Financial statistics included in annual reports should be concise. Too frequently, total expenditures are listed, and no attempt is

[^42]made to disclose significant expenditures. If faculty members are shown that certain portions of the budget are necessary for binding and periodicals, they can understand better why funds for books are limited.

Most librarians keep a permanent record of the cost of each book. This information is most often placed on the order card, although the accession record and the shelf list have sometimes been used for this record. The data are useful in making replacements, in adding copies, and in determining the value of materials for insurance purposes. Order cards are also used sometimes for a fund catalog if they are not filed as a permanent record. If a correlated order form is used, a separate slip may be designated for a fund file.

Librarians have also found it useful to separate different types of expenditures. Thus, separate records are kept for purchases of books and periodicals, for binding, and for continuations. Both the administration and the faculty are frequently interested in this division of funds. Unless equipment and supplies are purchased through the university business office, they should be accounted for in the same way as books. It is also necessary to keep accurate records of expenditures for personnel.

Many librarians do not retain duplicate bills in their files. They are often useful, however; and, when kept, comprise a dealers' file, since the bills are filed alphabetically by dealer and then chronologically. In some instances this form of record is kept on cards; arranged by dealer, the date, number of bill, amount, and date approved are provided on the card. This record may be made into a record of bills payable by adding the date approved when the bill is checked and sent to the business office.

It is often necessary for the librarian to get exact figures from the business office in the payment of foreign drafts. Rates of exchange vary, and the librarian is likely to have confused figures if these payments are not carefully checked. In normal times the foreign book market is an important source of materials for the university library.

Book orders are usually prepared on sheets, as they are easily checked when the materials arrive. Duplicates or triplicates are made, as the situation requires. Another record of outstanding orders is the original order file of cards either furnished by faculty members or made by members of the library staff.

Estimated totals of departmental commitments are usually kept,
in order to maintain close control over purchases. Because of such factors as discounts, differences in price of different editions, and cancellations, the amounts can be only approximate. But this record seems essential to prevent excess expenditures. Moreover, in university libraries where appropriations or. income from endowments or special funds revert to the state, to the general fund of the university, or to the donor, it is necessary to spend such funds within certain periods in order to forestall possible reversion. A careful check on these funds will insure the spending of all available balances, as well as prevent unwise spending in a short period at the end of the year.

## ACCOUNTING METHOD4Z

The librarian (or any library officer responsible for a portion of the budget) should be able to know at all times, easily and conveniently, the relations between income, expenditures, and obligations incurred for the entire library budget, divided into as many accounts as are needed for control. Various methods of accounting have been followed in libraries; but experience indicates that an effective system in a large library might, with respect to the book accounts, embody the following division of responsibility:
I. Detailed accounting for the library's book appropriations is made the responsibility of the library rather than of the university's accounting office, and the library has the responsibility for the accounting of encumbrances for outstanding orders.
2. The university accounting office limits its library book accounts to appropriations and invoices, leaving to the library the production of free balances (reflecting encumbrances), and supplies the library with monthly statements so that the library bookkeeper may keep his totals in line with the official totals.

If this division is followed, the library must assume the duty of keeping a sound set of books on the library's book accounts, since the free balance which reflects obligations for outstanding orders is the purchasing control figure. The university accounts would simply note the initial appropriation, changes made therein during the fiscal year, and invoices paid from this amount. These balances would be cash, rather than free, balances. The university accounting office would have no record in its own accounts of outstanding orders.

[^43]The argument in favor of this division of responsibility for the book accounts is found in the special problem of maintaining accounts which involve the ordering of a very large number of separate items, in relation to the amount of money expended, and the delivery of the orders over a long period of time-often on several invoices per order. If the job of accounting for outstanding orders in the library book accounts is separate from the university's general accounting procedure and is assigned to the library, this special situation is no longer at the mercy of an unsympathetic accounting method but can receive the specific attention of a staff member whose business is primarily to deal with this matter.

A standard posting machine, such as that manufactured by the National Cash Register Company and other concerns, should be carefully considered as a device for keeping all library accounts. While such machines are initially expensive, they are long-lived, economical of time, and have the important advantage of maintaining all ledgers on a current basis, showing a free balance at the end of each posting transaction.

## CENTRALIZATION

Several important values result, in large libraries, from centralizing bookkeeping and assigning the accounting responsibility to the library. In the first place, such an organization would enable the librarian to obtain full and detailed financial statements at any time with a minimum of inconvenience. This is an important administrative consideration. By centralizing the bookkeeping in one person's hands the library can afford to employ a competent professional bookkeeper and assure itself, and the university, of accuracy and professional competence in its financial records. Finally, it should be noted that, by separating bookkeeping from the activities which originate the expenditures recorded in the accounts, a check is set up and important protection obtained. Such separation is customary in business practice. To the reasonable objection that the book-account ledgers should be maintained in the acquisition department for its convenience, it can be observed that weekly statements can be made by the bookkeeper to the head of that department-if not throughout the year, at least toward the close of the fiscal year. Furthermore, if a posting machine is used, the acquisitions department (or any person, for that matter) can obtain currently accurate information as to a free balance by telephoning the bookkeeper.

## BOORKEEPING RECORDS

The essential elements of a satisfactory method of bookkeeping for the library book accounts, requiring three records, can be summarized as follows:
I. A ledger for each account showing for income the following items: (a) appropriation, (b) new income to the account-transfers from other accounts or additional appropriations, (c) transfers from the account, (d) credits (i.e., appropriation spent but returned for respending through a credit transaction); and for expenditure these items: (a) encumbrances, (b) clearance of encumbrances, (c) expenditures (or the posting of invoices); and, finally, the current free balance. It is obvious that not all of these items will be shown for a given posting, since when a given order is first posted, the amount will be entered as an encumbrance, whereas the clearance of the encumbrance and the posting of the expenditure cannot occur until an invoice has been received. If a posting machine is used, the current free balance will appear at the end of each transaction.
2. A duplicate order record consisting of a file of carbon copies of orders.
3. An invoice file.

Only order totals are encumbered on the ledger, the duplicate order sheet showing the itemization of the total. This duplicate order sheet must, consequently, be keyed to the entry on the ledger by date and dealer's name or by serial number or some other such means.

The clearing of an encumbrance and the posting of expenditures from the invoices are by totals; i.e., if an order for several items is delivered under several invoices, the items on each invoice should be cleared in terms of the total of the estimated cost of the invoiced items from the duplicate order, and the cost should be posted as the total of the invoice. The itemization of the invoice total is found in the invoice file.

It should be noted that by relying on copies of the invoices and orders the labor of transferring items from the order to the ledger is eliminated and, with it, the consequent hazard of error in copying.

## SUMMARY

The financial administration of the university library requires the close attention of the administrator if funds are to be spent wisely. The large library budgets in a number of institutions necessitate careful budgetary planning and the employment of precise bookkeeping and accounting procedures. Although various methods have been used for setting budgets for university libraries, the number of variables present in a local situation make it difficult to generalize. University presidents and other administrators who are interested in a library service which reinforces an effective instructional and
research program will need no urging to provide an adequate income for the library system.

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[^44]
## CHAPTERIV

## ADMINISTRATIVE ORGANIZATION

VARIOUS governmental and financial aspects of the administration of the university library have been discussed in the preceding chapters. It is now pertinent to consider those aspects of administrative organization which help the library perform effectively its function in carrying out the educational and research program of the modern university. Within the library, administrative and departmental organization, operational functions, book collections, personnel, buildings and equipment, records and reports, and methods of measurement present many administrative and educational problems.

In this chapter, in developing the thesis of the need of sound internal organization for the university library, the following topics will be treated: (1) the theory of administrative organization; (2) library administration; (3) officers of administration; (4) duties of the officers; (5) lines of responsibility and authority; (6) organizational systems; and (7) departmental library systems. Functional departmental organization will be discussed in chapters $v$ and $v i$, and the training and remuneration of administrative officers will be considered in chapters vii and viii. The application of certain principles of administration will be noted by reference to a selected number of university library organizations as represented on charts, since charts are useful devices to show relationships. It should be borne in mind, however, that they frequently fail to reveal fully certain elements or factors of internal organization which, in varying degrees, affect the efficiency of the library's operation.

## THE THEORY OF ADMINISTRATIVE ORGANIZATION

The study of administration as such has been one of the notable phenomena of the past quarter-century. Brought into prominence by Fayol in his Industrial and General Administration in 1916, the subject has received greater and greater attention in the last two decades, with the result that through the works of Fayol,' Gulick and

[^45]Urwick, ${ }^{2}$ and others ${ }^{3}$ a body of hypotheses or tentative theory has been built up, particularly in the fields of industry and public administration, which has been widely and successfully applied not only in the two fields mentioned but in other fields as well. Today, it may be said that there is an emergent science of administration growing out of careful investigation and controlled experimentation which the administrator, in whatever field, may study and apply with profit to the industry or office or institution which he directs.

This body of theory has been expressed in generalizations concerning the elements of the administrative function and the principles which are most commonly associated with it. It may constantly serve as a frame of reference for the administrator in the performance of his duties as a directing officer; and it should enable him to recognize clearly the distinction between administration, on the one hand, and operation, on the other, a distinction which, if not made-many administrators do not make it easily-leads to confusion and lack of efficiency.

These elements and principles have been so generally embodied in studies of scientific administration that it is unnecessary to give them extended consideration here. It is desirable, however, to restate them and to indicate their relation to the organization and administration of the university library.

## ELEMENTS OF ADMINISTRATION

The function of administration has frequently been broken down into the elements of planning, organizing, staffing, directing, coordinating, reporting, and budgeting, as follows:

Planning has been described as outlining broadly what needs to be done and indicating the methods necessary to achieve the determined purposes. Unless planning is made an essential part of the university administration program, it is difficult to understand how the librarian and his aides can either foresee or prepare for the future. Planning effectively requires a wide knowledge of the educational program of the university and a recognition of the philosophical and practical aspects of university librarianship. ${ }^{4}$

[^46]The element of organizing relates to the establishment of a structure of authority which is carefully defined and co-ordinated for the attainment of specific objectives. Applied to the university library; it involves the instituting of precise relationships which facilitate management and operation. This element is clarified in detail in chapters $v$ and vi, in which the technical and service departments of the university library are discussed, respectively.

Staffing is concerned with the whole personnel function, dealing with employment, training, and maintenance of favorable working conditions. A definite personnel policy for the university library is basic to a sound program of service. Unquestionably, personnel problems are among the most important of the library, and an able administrator devotes considerable attention to them.

Making decisions and incorporating them in specific and general orders are embodied in the element of directing. Library administrators, whether the chief librarian or his subordinates, are constantly called upon to issue orders which determine the current and future policies of service.

The element of co-ordinating is concerned with interrelating the various parts of an organization's work. In a library it may refer to the entire organization or to any one of its units. Unless the technical and service units of the library are fully co-ordinated, for example, processes may be introduced which are inconsistent with the objectives of the institution.

The administrator is obligated to keep his superiors informed of his organization's performance and needs. This is done by reporting. Through adequate records, research, and accumulation of data the librarian is able to reveal the condition of the library. This information also provides him with evidence for determining the efficiency of the enterprise for which he is held responsible.

In the preceding chapter considerable attention was given to the question of budgeting. This element of administration, as was pointed out, requires careful fiscal planning, accounting, and control. The administrator is obligated to study continuously the library needs of the university and to attempt to secure the funds necessary to support them.

## PRINCIPLES OF ADMINISTRATION

A "principle" may be defined as a settled rule for action. But a principle is something higher than a rule, since it forms the basis for the rule. If principles are ascertained by experience, as Fayol's were,
they are more than a mere summing-up; they are generalizations grounded on case studies.

Since Fayol defines the administrative function as being concerned only with the human portion of an undertaking, his administrative principles are also concerned with the human portion. None of the principles he sets forth is rigid; everything is a question of degree. The same principle is seldom used twice in the same way because of the many variables. There is no limit to the number of administrative principles, since any rule or device strengthening the human part of an organization takes its place among the principles only so long as it is worthy of this position. Any change in conditions may bring about a change in the rules. How to adapt the principles considered in the following paragraphs to the need is as important as the principles themselves and requires intelligence, experience, and judgment.

Division of labor.-Although an important administrative principle, division of labor is also the foundation of organization. Through it specialized skills are developed by which efficiency is increased. There are, however, certain limits beyond which division of labor should not go: (1) it should not set up a task requiring less than the full time of one person: (2) it should consider limitations of technology and custom at a given place and time; and (3) it must not pass beyond the physical into organic division.

If one person in a library ordered, cataloged, classified, prepared, shelved, and serviced the books, we would have a case illustrating no division of labor. In a very small library this might be necessary, but the confusion and inefficiency resulting from having all the assistants in a large university library perform all these functions is obvious.

Authority and responsibility.-Authority is of two kinds: statutory (that belonging to a given position) and personal (which is a result of possession of the qualities of leadership). Authority to give orders may be delegated by the head of a department to his first assistant. Possession of authority must also involve responsibility for actions. Once an executive has delegated authority for a certain activity, he no longer possesses that authority; but, if it is misused, he may recall it. In the case of responsibility, the executive continues to share it and is responsible to his chief for the work accomplished by his subordinate. In this manner the chief librarian is responsible for all that goes on within the library, no matter by whom the actual work is done.

Discipline.-Discipline should not be thought of as something im-
posed by a strict taskmaster. It is respect for agreements whose object is obedience, diligence, energy, and outward marks of respect. It applies to men in the highest positions as well as to those in the lowest. The most effective ways of establishing and maintaining discipline are providing good leadership throughout the staff, settling disputes clearly and fairly, and enforcing penalties judiciously. The professional staff of a university library probably presents less serious disciplinary problems than do clerical workers and student assistants.

Unity of command.-One person should be responsible to and receive orders from only one superior. If the head of a combined technical processes department in a university library should take it upon himself to give orders to an assistant in the serials division, which is under his general jurisdiction but under the direct supervision of the chief of the serials division, he would be violating this principle. Any orders he has to give should be transmitted to the workers through the divisional chiefs.

Unity of management.-Fayol expresses this as "one manager and one plan for all the operations which have the same objective in view." Unity of command is distinguished from unity of management in that the former depends on the staff working properly together, while the latter is provided for by properly arranging the organization. The catalog department should have one manager and a plan of operation to facilitate getting books cataloged correctly and quickly.

Subordination of individual interests to the common good.-This is an obvious principle as it stands. It may be visualized more concretely by considering the matter of time schedules in a university library. A reference assistant, for example, should not be permitted to enrol in a course which is scheduled for hours when he is most needed at the reference desk.

Remuneration.-Salaries should be fair, and increases should reward successful effort in order to provide an incentive to the individual for professional growth and increased efficiency. Some idea of the fairness of salaries of university librarians may be obtained by comparing them with those of members of the teaching staff having equivalent educational achievements.

Centralization.-Centralization in administration may be used in varying degrees, depending on the situation. In a university library it would not be desirable to have the function of ordering books so
decentralized that each department does its own searching, keeps its own records, and makes purchases independent of the other departments. In such an organization there would be expensive duplication of tools, records, and books purchased. On the other hand, book selection might be highly decentralized, since the department heads presumably know more about their respective fields than a central order librarian would. A limited degree of decentralization of managerial functions makes for better operation and takes advantage of the special knowledge of lesser staff members.

The hierarchy.-The hierarchy is also known as the "scalar principle," since it involves a series of steps, rising according to the degree of authority at each level. Each level is subordinate to the one above it. The scale or hierarchy extends in an unbroken line from the chief executive to the lowest employee. This line serves as a means of communication; orders go down the line; and information and appeals go up it. At each level there must be an official having authority over all others at that level; and at the top there is one person, the chief librarian in the case of a university library.

Span of control.-This term means the number of persons with whom an administrator must deal directly. An executive's span of control is limited because of limits of his own knowledge, time, and energy. It is impossible to state a "best" number to cover all situations. The number recommended by various authorities ranges from not less than three to not more than ten or twelve. Factors other than the executive himself affecting the span of control are the type of work (routine or complicated), homogeneity of work, and dispersion of work.

In the university library the chief of the catalog division can direct the work of a fairly large number of workers because of the essential similarity of their work and because they will ordinarily be all located in one place. The chief librarian, on the other hand, must deal with such diverse and scattered functions as technical processes, reference, circulation, and the departmental libraries. He would be lost in a maze of detail if he had to deal directly with the chiefs of cataloging, ordering, general circulation, reference, the various reading rooms, and the librarians of each of the departmental libraries.

Departmentation.-Departmentation is very closely related to division of labor, the span of control, and the hierarchy. It is the group-ing-together of activities on the basis of homogeneity under the control of one administrative officer. The bases for forming departments
are several; but the most important to the university library are function (cataloging, circulation, etc.), commodity (subject departmentation), geographical (departmental libraries), or persons served (undergraduate library).

Line and staff.-Line is synonymous with authority and command; staff, with advice and counsel. The line forms the links in the chain of the scalar organization; the staff has no authority. Both line and staff begin with the chief executive and may be found at every level downward. Staff officers are always directly responsible to line officers, and they have no voice to command except through the line officers. It is only in very large organizations that the staff exists as a separate body; frequently one person may serve as both line and staff. This is exemplified in the university library when the chief librarian calls in a department head, because of his special equipment, to make a study of some projected scheme of reorganization. This device may be used to take advantage of the special knowledge of any employee without raising his status in the hierarchy.

Order.-In the physical sense, "order" means the best arrangement for the most efficient operation. In a university library it would hardly be efficient to receive books at one end of the building, catalog them at the other end, and have to return them to the center of the building for preparation for the shelves. The arrangement should expedite activities and conserve the materials used.

In relation to the employees, order concerns the placement of the . right person in the job for which he is most suited. Ordinarily, a chief librarian would not put an expert cataloger at the reference desk. The cataloger might eventually become an excellent reference librarian, but a waste of time and ability would be involved in the process.
Equity.-Equity means uniform treatment of the staff. It is the result of combining friendliness on the part of an executive toward the staff with justice. In its application it may mean that the pay of a reference librarian should not exceed that of a cqtaloger with equal education, experience, and ability; nor should an executive give preferential treatment, not warranted by ability, to certain employees.

Stability of staff.-Rapid turnover of staff is both a cause and an indication of lack of success. It is conceivably better to have some positions in the library filled with mediocre persons who remain in them for a relatively long period than with excellent ones who move on rapidly. There is always some instability, and rightfully so, for
without it unfit employees are permitted to retain their jobs and the more capable workers do not move on to greater responsibilities.

Initiative.-Initiative of the employee should be aroused and encouraged within the limits of respect for authority and discipline. Permission to exercise initiative gives the employee satisfaction and supplements that of the manager.

Esprit de corps.-Harmony and unity are a great source of strength and should be fostered and encouraged by the management. Equity, unity of command, initiative, and availability of the managers do much to promote esprit de corps.

## LIBRARY ADMINISTRATION

The questions may now be asked: How extensively has this body of theory been recognized by librarians, and to what extent have these elements and principles of administration been consciously applied in the administration of libraries? To these questions there are several answers.

Many librarians have given considerable attention to the subject of library administration. They have frequently written concerning various aspects of the subject, and all library schools have required prospective librarians to take at least one course which dealt with it. However, the course may, in actuality, have dealt principally with the activities or operations in which the administrator is usually engaged and may have minimized theory, especially as it has been developed in related fields.

Practicing librarians have also studied special aspects of the subject. Public librarians, of necessity, have to administer the financial operations of the library in accord with the financial procedures of the city. They also have to maintain other relations with the city and state which make it necessary for them to be acquainted with the general field of municipal and public administration. Their approach to the consideration of the subject, however, has more frequently been from the point of view of political science than of administration as such. Specialization in the subject is possible only in the library schools which offer advanced programs of study and in departments of political science and business administration, in which comparatively few librarians enrol.

University librarians have likewise been concerned with fitting the administration of the university library into the pattern of administration of institutions of higher education. But their approach has
usually been practical rather than systematic and theoretical. They have emphasized purchasing and accounting procedures rather than conscious planning concerning the major objectives of the library and the university.

The influence of the general education and experience of librarians has also been reflected in the understanding of administrative organization and the use made of it by librarians. The great majority of librarians have, in their undergraduate study, concentrated their interests upon literature and history rather than upon the sciences and the social sciences. They have concerned themselves with form, style, and the causes and consequences of events rather than with exact analysis and controlled experimentation. Consequently, many librarians not only exhibit a lack of awareness of the problems and procedures in such fields, particularly in industry and public administration, but in some instances manifest a positive objection to the consideration of librarianship as a science rather than an art.

The experience of the librarian may likewise have contributed to this lack of awareness and use. Coney, writing in Current Issues in Library Administration, ${ }^{\text {s }}$ has touched upon this point in his discussion of the relationship of size to administration. Few libraries, even public libraries, have staffs of more than a thousand employees. The range for university libraries in Table I3 (chap. vii) is from 21 to 283 employees. The growth of the library has been relatively slow; the staff has been built up gradually; and the form of the resulting organization has not been consciously determined in accord with clearly defined specifications. Basic studies in library organization, job analysis, personnel, physical plant, use of mechanical devices, etc., which are essential in developing a well-co-ordinated administrative organization, have been largely lacking; and in many instances their importance has not been sufficiently recognized. In fact, university library organization and practice have been, for the most part, based upon theories which have been developed empirically by leaders of the profession through the expensive method of trial and error and have not been subjected to careful scrutiny by students of administration. Furthermore, librarians have sometimes been so reluctant to relinquish their hold over every individual and unit of work in the library that department heads, assistants, departmental librarians, and even subordinate members of the staff report directly

[^47]to them for both important and trivial matters. While it is understandable that a librarian might be anxious to keep in touch with all the work of the library, this practice may lead to ineffectiveness and failure to keep informed concerning educational movements and faculty and student needs-a knowledge of which is essential for the integration of the library in the academic program of the university.

It should also be noted that university libraries, despite many likenesses, also differ in many respects among themselves and, consequently, present different patterns of organization. The history of the library, the structure of the building, the governmental relationships, the existing personnel, the financial support given by the administration, the variety of subjects offered by the university for which the library must furnish materials, and the type and nature of the work performed-one or several of these factors may account for the diversity of organization. In some instances the librarian may have been chosen for his knowledge of a subject of research rather than for his skill in administration and, consequently, may have found it difficult to apply theoretical principles to practical problems when conditions called for such application.

Finally, since university libraries are not money-making units of the institution with which they are affiliated, the handy criterion of a net-profit statement cannot be applied to them. Consequently, they are less likely to be held accountable for administrative inefficiency than other units to which such a criterion is relevant.

## OFFICERS OF ADMINISTRATION

From the discussion in the preceding sections it is obvious that the success of the library in performing its appropriate function depends, in considerable measure, upon the nature of its administrative organization. As enrolments increase, new courses are offered, new schools are added, or other changes are made within the university which affect the library, corresponding changes must be made by the library to adjust itself to them.

It is equally obvious that the actual administrative effectiveness of the library also depends upon the character, knowledge, and administrative skill of the librarian and the principal assistants who aid him in the administration of the library. Consequently, these officers should be chosen on the basis of their known qualifications; the general sphere of their activities should be clearly defined; and they should be so placed in the general administrative organization
of the university that they will be able to direct the library successfully.

## TITLES OF ADMINISTRATIVE OFFICERS

The titles of the chief administrative officers in the university library have not been uniform. Although in the great majority of instances the head officer of the library is known as the "librarian," there is a noticeable tendency, particularly in those institutions in which departmental and professional school libraries are under one jurisdiction, to refer to him as "director of libraries." ${ }^{6}$. Table 9 shows the titles of administrative officers of university libraries listed in the catalogs of 31 institutions, together with the number of institutions listing each title. The variety of titles adds to the difficulty of comparing institutions on the basis of departmental organization and is offered as a guide in the interpretation of the various charts which are used in this chapter. In the remaining portion of the volume, titles which are used most prominently in university libraries will be employed.

## DUTIES OF ADMINISTRATIVE OFFICERS

Different forms of organizations in libraries result in different duties being assigned to administrative officers. The more important activities of the two chief officers-the librarian and the assistant librarian-have been isolated and may be outlined as follows:

TABLE 9
Types of Library Administrative Offices and Titles of Officers Listed in the Catalogs of 31 Universities

Office and Officers
Chief administrative officer:
Librarian
No. of Universities Listing
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20
Director of libraries 5
University librarian ,

Library director I
Director of university libraries. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Director of the library. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
First officer below the librarian:
Assistant librarian . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 14
Associate librarian 5
Assistant director.
3
Vice-librarian. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad$ I
Assistant librarian and head of order department. I

[^48]
## TABLE 9-Continued

Office and Officers No. of Univer-sities Listing
Executive assistants:*
Assistant to the librarian ..... 4
Assistant to the director of libraries ..... I
Chief executive assistant ..... I
Bookkeeper ..... I
Registrar ..... I
Divisional heads:
Assistant librarian in charge of technical processes ..... I
Assistant librarian in charge of services and heads of depart- mental libraries ..... I
Supervisor of departmental libraries ..... I
Departmental heads:
Acquisition department:
Order librarian ..... 6
Head, acquisitions department ..... 5
Head, order department ..... 3
Acquistions librarian ..... 2
Accessions librarian ..... I
Assistant librarian and head of order department ..... I
Head, gifts and exchanges department. ..... I
Catalog department:
Head (or chief) cataloger ..... 10
Catalog librarian ..... 7
Head (or chief), catalog department ..... 7
Head, cataloging department ..... 2
Supervisor of cataloging. ..... I
Superintendent of cataloging ..... I
Cataloger (others in department called "assistant") ..... I
Chief bibliographer ..... I
Chief classifier ..... I
Classification department:
Head, classification department ..... 2
Chief classifier ..... I ..... I
Reference department:
Reference librarian. ..... 16
Head (or chief), reference department. ..... 6
Assistant reference librarian ..... I
Periodicals department:
Periodicals librarian ..... 4
Head (or chief) of periodicals department ..... 3
Periodicals and serials librarian ..... I
Serials librarian. ..... I
Supervisor of periodicals and microfilm department ..... I
Circulation department:
Head, circulation department ..... 9
Circulation librarian ..... 4

[^49]TABLE 9-Contimued
Office and Officers No. of Univer-
sities Listing
Loan librarian ..... 3
Extension librarian ..... 2
Chief of reader's department ..... 1
Supervisor of circulation ..... I
Lending librarian ..... I
Photography department:
Head, libraries department of photographic reproduction. ..... I
Supervisor of periodicals and microfilm department ..... I
Supervisor of binding and photography department. ..... I
Binding department:
Binding librarian. ..... I
Head, binding department ..... I
Head binder ..... I
Supervisor of binding and photography department ..... I
Serials department:
Serials librarian. ..... I
Periodicals and serials librarian ..... I
Reading rooms:
Browsing room librarian ..... I
Custodian of the browsing room ..... I
Librarian of reserve book room ..... I
Head of reserve book room ..... I
Reserve book librarian ..... I
In charge, reserve book room ..... I
Curator of rare book room ..... 1
Curator of rare books ..... I
Museum librarian ..... I
Archivist ..... I
Map librarian ..... I
Curator of local collection ..... 3

## Duties of The Librarian

I. To act as executive officer of the library staff, charged with putting into effect the policies and regulations of the library
2. To participate in the activities of the university library committee as a member and as an officer
3. To preside over meetings of the library staff
4. To act as liaison officer to the faculty, charged with seeing that educational policies of the university are co-ordinated with those of the library
5. To bear responsibility to the president for the satisfactory government and administration of the library
6. To select a competent and harmonious administrative, technical, and service staff and to recommend their employment to the president
7. To make recommendations to the president on all matters pertaining to status, promotion, demotion, or dismissal of members of the library staff
8. To guide the building-up of the book collections of the university libraries and to be responsible for all book collections of the university
9. To represent the university library to its users, to the general public, and in educational and library groups
10. To make reports to the president or board of trustees and to library agencies
11. To assist in securing gifts for the library
12. To prepare and execute the annual budget for the operation of the library
13. To co-operate with librarians and scholars in making resources available for research.

## Duties of the Assistant Librarian

I. To supervise the work of the library staff and prepare work schedules for them
2. To help conduct staff meetings
3. To act as chief adviser to the librarian in matters of administration
4. To formulate administrative and library policies and present them to the librarian for consideration
5. To direct the attention of faculty members to the co-ordination of the instructional program of the university with the use of the library
6. To aid the librarian in the preparation of the budget
7. To make reports to the librarian regarding the work of the library
8. To supervise the technical and/or service departments
9. To co-operate with the heads of the departments in the nomination of new staff members and to make suggestions to the librarian regarding the promotion, demotion, or dismissal of staff members
10. To act as principal administrative officer during the absence of the librarian
i1. To act as liaison officer between staff members and librarian
12. To attend, when possible, professional meetings

Many of the duties of the departmental heads are similar in that they arise out of the elements of administration-planning, organizing, staffing, etc.-but they differ as they apply to specific departments. The following list of duties, therefore, applies equally to the reference librarian, the head cataloger, or the order librarian. In the following two chapters the specific duties of major departmental heads will be considered.

## Duties of the Departmental Head

I. To lay out and assign work for the departmental staff and see that they are effectively employed
2. To give directions and suggestions to the staff, aiding them in the solution of difficult problems and revising their work
3. To develop the procedures and routines of the department to meet the needs of the users of the library
4. To co-operate with the heads of other departments to co-ordinate the work of the library
5. To prepare reports and memoranda for the assistant librarian, librarian, and other members of the staff or faculty
6. To make recommendations regarding appointments, promotions, salary adjustments, and other personnel matters
7. To rate staff members on their efficiency
8. To see that essential records and s̄tatistics are kept
9. To attend professional meetings

The administrative organization of the university library is concerned with the relationship (1) of the librarian to the board of trustees and to the president or other officers and (2) of the various library

ORGANIZATION CHART OF THE UNIVERSITY OF SOUTHERN CALIFORNIA LIBRARY


Fig. 1
officers to one another. It is also concerned with the manner in which lines of responsibility descend from the superior officer or board to the librarian and other officers in the library.

## RELATION OF THE LIBRARIAN TO THE PRESIDENT

In the large majority of university library organizations the librarian is directly responsible to the president. This follows the pattern of the organization charts of the University of Southern California Library (Fig. 1) and of Harvard University (Fig. 2), which

ORGANIZATION CHART OF THE HARVARD UNIVERSITY LIBRARY


Fic. 2
are typical of most university libraries. But other lines of responsibility may be noted. For example, at the University of Pittsburgh, the librarian is immediately responsible to the provost rather than to the chancellor (Fig. 3).

Related units not included in above outline:
Medical-Dental
Pharmacy
Nursing
Fine Arts
Law
Bureau of Business Research
Retail Bureau

Schools included in general library: College
School of Education
School of Business Administration
Graduate School
School of Engineering
School of Mines
School of Applied Social Sciences

Fig. 3

Experience has demonstrated that the most workable arrangement, from the point of view of the best interests of the library, is the direct relationship of the librarian to the president; but institutional differences should be considered in any attempt to discuss the effectiveness of a particular organization. It should also be pointed out that, although the line of authority may formally extend from the librarian to some individual or board other than the president, in practice the control is delegated to the latter.

ORGANIZATION CHART OF THE COLUMBIA UNIVERSITY LIBRARIES IN 1944



## ASSISTANT LIBRARIAN AND THE LIBRARIAN

Generally, the assistant librarian in the university library is responsible for the active operation of the processes and services. As the first officer under the librarian in the hierarchy, he supervises the work of the subordinate officers and stands between the departmental heads and the librarian. In some institutions, such as the University of California, the supervisory work is divided into major functional units-the unit of activities concerning the technical processes and the unit of activities which comprise the services. The Columbia University Libraries system carries the breakdown of assistant administrators further by providing three assistant directors of li-braries-one in charge of general administration and of the director's office, one heading the technical processes (acquisitions, cataloging, binding, and photography), and the third in charge of readers' services (Fig. 4a). The assistant directors directly control all departmental heads, except those in charge of special collections, who are responsible to an assistant to the director of libraries. The changes in the Columbia organization, made in 1944, were designed to introduce firmer lines of authority and responsibility and to reduce the span of control of the director of libraries from 27 to 4 (see Figs. 4 and 4a). The organization of the University of Chicago Libraries, as recommended by the director in 1932 (Fig. 5) but which has not yet been put into full operation, also was designed to co-ordinate operations, to delegate authority, and to reduce the span of control.

A few instances exist in which there is a dual leadership in the library. Under this arrangement a director of libraries is primarily a liaison agent, making contacts with the president, faculty, friends, and other individuals and consulted by the librarian, who is the administrative officer of the library, on matters of general supervision and policy-making. Such a situation formerly existed in the University of Chicago Libraries under President Burton and until recently at Harvard. The present arrangement of the University of Pennsylvania provides for a director of libraries and a librarian. Institutions which resort to this type of arrangement justify it on the basis that their libraries require the services of individuals who possess the characteristics of a scholar, administrator, technician, and public relations man. They maintain that with both a director and a librarian, the combination of characteristics may be more easily found.

ORGANIZATION OF THE UNIVERSITY OF CHICAGO LIBRARIES IN 1932


Fic. 5

However, if such an arrangement is followed, definite areas of activity should be carefully worked out.

## DEPARTMENTAL HEADS AND THE ASSISTANT LIBRARIAN

In efficiently administered libraries the departmental heads are given freedom to supervise their specific units of work, subject to the ordinary direction of the assistant librarian and the librarian. Departmental heads usually delegate specific operations to subordinate section heads when the quantity of work requires further division.

One of the simplest ways in which the administrator of a large library can develop the effectiveness of his organization is by selecting qualified individuals and permitting them full control of certain areas of work. The delegation of authority to an individual who has been carefully selected because of his knowledge and competency will do much to develop responsibility and stimulate imagination. One of the glaring faults among university librarians has been their unwillingness to permit the departmental head to experiment with new devices or introduce new practices which have been found effective in other libraries or in comparable undertakings. The librarian and the assistant librarian, by requiring records and reports from departmental heads, by insisting upon the use of up-to-date equipment and routines, and by encouraging studies of costs and use, can effectively influence the activities of subordinate officers.

## ORGANIZATIONAL SYSTEMS

The type of departmental organization which exists in a university library depends upon such factors as the type of personnel, the nature of the building, the amount of departmentation, the relationship of the book collections to instructional departments, and the amount of funds available for administration. It is perhaps a commonplace to note that forward-looking university librarianship is an essential feature of an efficient university and that presidents and library administrators should know what is desirable in library organization if their library programs are to be based on sound policies. The organization of the library should also be of a nature that will facilitate efficiency, yet provide for institutional differences. Some librarians, growing up under a certain type of organization, have come to believe that the type of organization has little or no effect upon the quality of service. Experiences of librarians have not only disproved this assumption but have indicated that changes in ad-
ministrative organization may be of considerable importance from the standpoint of stepping up efficiency.

The form of administrative organization should be simple if efficiency is the goal. In university libraries, just as in public and college libraries, problems of administration and management have not always been carefully considered. As has already been pointed out, the growth of personnel in libraries has been gradual. Members have sometimes been added to the staffs without adequate consideration of the relationship between individuals and the operations they perform. As a result, unforeseen complications have arisen. Personnel difficulties have generally accompanied policies of unsystematic placement of staff members, and attempts at administrative reorganization by the librarian have consequently been rendered difficult or impossible of accomplishment. This fact has been made evident by surveyors of university libraries. The nature of the building likewise has a direct influence upon the type of organization that is possible. Well-co-ordinated supervision is more difficult to achieve in a poorly planned building which separates homogenous divisions and departments than in a well-planned structure.

The administrative organization of a university library may be one of three types. First, there may be the wholly centralized system of state institutions. An illustration of this type is furnished by the Oregon State System of Higher Education, in which the libraries of six state-supported institutions of higher education are administered by one head (Fig. 6). ${ }^{7}$ Second, there may be a centralized system within a specific institution-a type which is exemplified by the organizations of the Columbia University and University of Illinois libraries (Figs. $4 a$ and 7 ). Third, there may be a system of partial centralization; that is, the central library and departmental libraries may be under the control of the chief librarian, but certain special collections and professional school libraries retain their autonomy. This is illustrated by the organization chart of the Temple University Library (Fig. 8). The difficulty of arriving at principles of administrative organization for an individual institution is obvious. But it is essential for university administrators and librarians to be able to discard an organization which has only historical tradition to support it, if reorganization to meet current problems is desirable.

The external administrative organization of the university library

[^50]generally affects the internal organization. Centralization of acquisitional or cataloging policies, for example, depends primarily upon the authority given the director of the central library over all the

ORGANIZATION CHART OF THE LIBRARIES OF THE OREGON STATE
SYSTEM OF HIGHER EDUCATION


For relationships to the chancellor and the presidents see Chart C, Biennial Report, 1935-34, Oregon State Board of Higher Education.

The relationships of the librarians to the director and the presidents parallel that of the director to the chancellor and the presidents in Chart C .

Fic. 6
book collections of the university. The functional type of internal organization is prevalent in university libraries. In a few notable cases the divisional, or subject, arrangement appears.


Fig. 7

ORGANIZATION CHART OF THE TEMPLE UNIVERSITY LIBRARY


Fic. 8

The functional type of arrangement usually provides for order, cataloging, circulation, reference, and periodicals departments. Business or finance departments, and divisions of departmental libraries, professional school libraries, and special reading rooms and collections may also be present. An illustration of the functional type of arrangement is presented in Figure 9.

One of the principal criticisms of the functional arrangement, probably exaggerated in some cases, is the lack of close co-ordination between related activities, such as acquisitional and cataloging units. Another criticism which has been made of this type of organization, particularly when it involves a large number of relatively important departmental and professional school libraries and special collections, is that the span of control is often too wide to permit efficient supervision by the major administrative officers.

To offset the administrative difficulties of the common.form of functional organization, a variation has been suggested. An illustration of this type of organization is presented in Figure 1o. Under this form of arrangement, three individuals report to the librarian, five to the assistant librarian in charge of public services, and four to the assistant librarian in charge of technical processes. No subordinate head below the assistant librarian has more than four individuals reporting to him. A further variation of this organizational form has been suggested by Henkle (Fig. II). It differs from the organization in Figure 10 in that professional school libraries and research activities are removed from the immediate jurisdiction of the service department; that is, separate provisions are made for professional and graduate activities.

The concentration of all technical processes under a single supervisor and, similarly, the grouping of all service departments under one administrative officer are presumed to bring about close co-ordination of related activities, with resultant economic savings and a high type of service. Against this plan three arguments can be voiced. First, it may be said that it is difficult to secure a supervisor of technical processes who is equipped to direct and control order work, accessions, cataloging, classification, binding, and microphotography. Either the argument is open to question on the basis of false generalization, or training for library administration has been inadequate. If the type of supervisor who is able to assume responsibility for, and to exercise authority over, a series of related activities is not avail-

ORGANIZATION CHART OF A UNIVERSITY LIBRARY-I


Fig. 9

ORGANIZATION CHART OF A UNIVERSITY LIBRARY-II


Fic. 10
able, then teachers of university librarianship should revise their courses in library administration or directors of libraries should seriously consider in-service training of administrative personnel. But it is likely that individuals can be found who can administer such divisions, if given the opportunity.

It is conceivable that another argument may be advanced, namely, that a supervisor of technical processes cannot be expected to

FUNCTIONAL ORGANIZATION OF A UNIVERSITY LIBRARY


Fig. 11.-Outline of suggested organization for a university library, based on an analysis of functional relationships within the library and between the library and university community. Prepared by Herman H. Henkle to accompany a paper read before the discussion club, University of Illinois Library and Library School, April 26, 1937.
possess knowledge required for book buying, consolidating business records, cataloging, classification, and binding, as well as have qualifications essential for efficient administration. As a matter of fact, the supervisor of technical processes may be expected, on the basis of training, to possess intensive knowledge of book markets and of acquisitional and cataloging activities. This does not mean that the supervisor is to be directly concerned with mechanics per se. He is the integrator and policy-maker of the combined department, with the duty of observing and introducing methods of simplifying routines and expediting the flow of work.

A third argument may be based on finance. The employment of two assistant librarians requires the services of two additional ad-
ministrators who are relatively high-salaried. Not until adequate study is made of the effects of certain types of organization upon the economy of the library, however, can this argument be accepted as valid. It may be entirely possible that concentration of related activities in one department will eliminate tasks that are expensive and thereby increase the efficiency of the library.

What are the advantages of the concentrated form of functional arrangement? In the matter of administrative relationships, it is apparent that it reduces the amount of direct supervision on the part of the librarian. Instead of having six, ten, or twenty departmental heads reporting to him directly, the span of control is reduced to two or three. The librarian is thus provided with time for planning, promoting faculty-library and student-library relationships, making contacts, and engaging in activities of a scholarly nature. In the second place, the concentration of co-ordinated activities, in either the technical or the service departments, emphasizes the relationships of certain tasks. It also provides, within certain limitations, for a fluid personnel. These advantages are especially true of the technical processes, which, in large libraries, are amenable to the assemblyline technique of industry. The annual acquisition and preparation of fifty thousand volumes or more, as well as of thousands of pamphlets, documents, serials, newspapers, maps, films, and other materials, present formidable tasks in university libraries. There seems to be little question that all processes of acquisition and preparation of books for the shelves may be closely knit by a concentrated functional organization.

In the service departments similar advantages are to be gained. Policies that have historical reasons for existence may be scrutinized by the departmental head and restated in terms of new emphases in the instructional or research programs or of needs revealed by studies of library efficiency. Unity in service can be as important economically as unity in the preparational tasks.

## SUBJECT ARRANGEMENT

The organization of public libraries in Cleveland, Los Angeles, Baltimore, Rochester, and Toledo into subject departments has recently revived interest among university librarians in subject departmentation. It should be noted, however, that Johns Hopkins University Library and the University of Chicago Libraries were based upon subject differentiation at a much earlier period.

Almost simultaneously the libraries of Brown University and the University of Colorado have developed subject arrangements. The John Hay Library of Brown University, erected in 1910, had long been inadequate to meet student and faculty needs. The construction of a new wing in 1938 provided reading rooms in the main library for the divisions of history and social studies and for the humanities. The reading rooms for physical sciences and mathematics, biological sciences, education, engineering, and Pembroke College are outside the John Hay Library.

Ellsworth ${ }^{8}$ has described the organization of the University of Colorado Library. This library provides three subject division rooms -science, social science, and humanities-for upper-division and graduate students. A fourth major division consists of an undergraduate reading room. Order,-circulation, and catalog departments still exist as general work units for the whole library, although the circulation department has comparatively little activity.

Each of the Colorado subject division rooms contains for the special subject fields a selected collection of reference tools and journals, reserve books, and collateral materials. Arranged on open shelves according to call number, the materials may be used freely within the room. Access to the stack is direct. Conference rooms are available. Provision is made to permit students to use typewriters.

The divisional rooms are supervised by librarians who have a Master's degree in one of the subjects in their respective divisions, as well as a Bachelor's degree in library technique. They are thus considered qualified and capable of bridging the gap between the classroom and the library. Consultations are held with both students and faculty members by the librarians, and a close watch is kept on the use of reserve and nonreserve materials. Since the system was placed in operation, it has been noted that "approximately 85 per cent of the non-reserve books borrowed from the library come from the reading rooms and only 15 per cent from the stacks."9 The stacks thus are returned to their function of storing books.
Administratively, the type of arrangement provided in the Brown

[^51]and Colorado plans is more expensive to operate than the traditional functional organization. The educational implications of the subject arrangement, however, are inescapable. Whether or not the divisional organization is more educationally effective for every university library is still to be proved. It is possible that institutions of certain types and sizes are not amenable to the Colorado divisional plan.

## DEPARTMENTAL LIBRARY SYSTEMS

University librarians and educators have long discussed the administrative and educational problems which arise from housing book collections apart from the main library. Although advocates of both centralization and decentralization have offered strong arguments, neither viewpoint has succeeded in gaining complete ascendancy. ${ }^{10}$ This is attested to by the variety of ways in which universities are today handling their departmental, professional school, seminar, and laboratory libraries. The purpose of this section is to present some of the organizational, administrative, and educational aspects of these various types of libraries and collections, to record available data relating to current practices, and to summarize tentative principles'for future policy.

In recent years the trend has been toward centralization of book collections in general library buildings. Among the factors which have contributed to this development have been the construction of many new large buildings, the improvement of service techniques, and the increasing interdependence of the various branches of knowledge. ${ }^{11}$ It is unlikely, however, that departmental libraries will disappear altogether from American university campuses.

## DEPARTMENTAL AND PROFESSIONAL SCHOOL LIBRARIES

Since departmental and professional school libraries raise more complex problems than do special collections, laboratory collections, and seminar libraries, they may be dealt with first. Although these types may be similar administratively, it may be well to define what is meant by each. Generally speaking, a departmental library is a collection of books and other materials attached to a department of

[^52]instruction which forms part of a college administration. It may be housed either inside or outside the central library building. The departmental libraries of Harvard (Fig. 2) fall within this definition, as do also the Chemistry Library, Fine Arts Library, and the Music Library of Columbia University (Fig. 4a).

A professional school library (also called a "collegiate" or "college" library) in a university system is a collection of books related to the work of the particular school or college and administered either separately by the school or college or as a part of the university library system. The Avery Architectural Library and the Engineering Library of Columbia University (Fig. 4a) are examples of professional school libraries.

Organization.-The relationship of the departmental or professional school library to the central library varies from institution to institution. This fact may best be illustrated by referring to the organization charts shown in the earlier part of this chapter. It will be observed that professional school libraries, such as those for law, medicine, dentistry, engineering, pharmacy, and journalism, are more likely to be separated from the central library administration than are departmental libraries, such as those for history, philosophy, and chemistry. ${ }^{12}$ Libraries for single academic departments occur in both college and university organizations, but professional school libraries generally appear only in universities. Seminar libraries, which, as Thompson has pointed out, ${ }^{13}$ were in many instances the predecessors of departmental libraries, are not extensively developed today. Usually they are directly under central library control.

Factors which need to be considered in determining the amount of centralization which exists in a university library system include the line of responsibility of the departmental and professional school librarians, the extent to which income is derived from the general library budget, centralization of purchasing and technical processes,

[^53]appointment and control of personnel, and fluidity of the book collections.

Administrative and educational aspects.-One of the earliest and among the most complete statements on the question of departmental libraries was made by the University of Chicago Commission on the Future Policy of the University Libraries in its Tentatioe Report in 1924. ${ }^{14}$ Comments upon the problem by others since this time have merely stressed, summarized, or evaluated one or more arguments presented in the Chicago report. Because the statement is a rather comprehensive treatment of the arguments which exist today pro and con centralization, it may be given detailed consideration here.

The Commission, consisting of faculty members, presented two alternative plans for the development of the University of Chicago Libraries on the basis of estimates of needs for 1950-51. The first plan proposed the construction of a great central library building to provide for library offices, the nondepartmental books, books for the social sciences, humanities, biological sciences, and probably mathematics and the physical sciences. The libraries of such departments as art and geology and of the Law School, the School of Education, and the Divinity School could become part of the central library if so disposed. The proposal suggested an H -shaped building, organized vertically rather than horizontally, extending to a height of ten stories, and to be located in the space in the center of the present campus (Fig. 12).

In the second plan, two main units are suggested: (a).Harper Library, with new buildings to the east and west, would house history and social sciences; and (b) a Science Library, or possibly two such libraries, would be constructed in the northern section of the campus. The Divinity School, the Schools of Education, of Law, and of Geography and Geology, a classics group, a modern-language group, and also a number of smaller units would exist separately from the two main libraries. Eventually Harper Library was to be built out over the present site of Haskell Hall and later extended across to the Law Building, the latter to be used for library purposes. Thus, a library quadrangle would be formed. This was not complete decentraliza-

[^54]

Fig. 12.-The University of Chicago campus, showing location of library. Crosshatched space indicates location for expansion of the library
tion, as is to be noted, for two composite units were to form the center of the library system. ${ }^{15}$
The accompanying arrangement of the arguments is developed from the Chicago Commission's statement. While a few of the arguments arise out of the local situation, most of them pertain to the problem as it exists in other university library systems. ${ }^{16}$ The criterion to be considered is the degree to which centralization or decentralization promises to facilitate and encourage research.

The degree of closeness of library interrelations.-The essential unity of knowledge and the arbitrary demarcation set up by department barriers are strikingly presented in Figure 13, a table on the degree of closeness of library interrelations. This table was used by those favoring centralization.

The table was evolved by the following method:
Each Department and School was asked to estimate (1) what percentage of the total use of library books by its own instructors and graduate students in the next thirty years is likely to be use of books belonging primarily to each of the other Departments and Schools; and (2) what percentage of the total use of its own books in the next thirty years is likely to be by instructors and graduate students of each of the other Departments and Schools. ${ }^{17}$

The complete set of estimates thus obtained gave potentially four estimates of the extent of each interrelationship. Thus, in the case of the Departments of Philosophy and Psychology, the Department of Philosophy estimated that 6 per cent of the total use of library books by its own men would be use of psychology books, and that 4 per cent of the use of its own books would be use by psychology men; and the Department of Psychology estimated that 4 per cent of the use of books by its own men would be use of philosophy books, and that 4 per cent of the use of psychology books would be by philosophy men. ${ }^{18}$

[^55]
## Arguments for Centralization

1. Interrelation of schools and departments in use of books is close and is increasing. Every book is potentially needed by students in many departments.
2. General books are equally accessible to all departments.
3. Central catalog is equally accessible to all departments and is superior to small department catalogs because it' can be maintained at a high degree of excellence and because the habit of consultation of a general catalog is a broadening educational habit.
4. Informal conferences between researchers in various departments stimulates research. Central library affords excellent opportunity for these contacts.
5. Excellent supervision by trained librarians is possible, and this contributes to encouragement of research.
6. Immediate access by library staff and scholars to entire stock of books. Especially useful in reference work.
7. Mechanical transfer of books delays service (e.g., periodicals sent unbound to departmental libraries, called in for binding and returned

- when bound).

8. Administratively, centralization makes for greater efficiency and greater economy.
9. Upkeep of department catalogs runs to heavy expense-35-40 cents per card.
10. Charging system can be kept simple; and expense of location marks or large charging file, which take time and cost heavily, can be avoided.
11. Administration of central library is less expensive.

## Arguments for Decentralization

Consultation of books at the moment of need in the humanistic departments has the advantage of convenience. Also emphasizes and lends interest to related courses. Recognizes substantially existing interrelations of departments.

Widely ranging scholar relatively rare in comparison with restricted interest researcher.

Centralization has many advantages from point of view of library administration, but convenience of library administration must not be sought at the inconvenience of those engaged in research. Library administration exists to facilitate research and instruction by placing resources where they can be used with greatest facility.
12. Central library would release space now used for libraries for other needed purposes. Separation of library collections from laboratories is inevitable under any arrangement, and limited reserves could be maintained in laboratories.

## 13. Large central library building:

I. Magnificent architectural opportunity;
2. Would increase beauty of campus;
3. Would symbolize unity of knowledge and of educational endeavor;
4. Would serve notice on city and country that the University considers its library as the heart of its educational equipment.

This would stimulate gifts of books and other gifts to the University.
14. Expansion of a central building designed with this in view would be practicable and more economical than piecemeal additions to various buildings.

## Disadvantages of Decentralization

I. Disjoins the sciences from other departments. Tendency is toward introduction of scientific method in social sciences. Need indicated for sciences and humanities to work together.
2. Library economy demands construction and operation of library on vertical, rather than horizontal, plan (decentralization contemplates horizontal). Greater efficiency in service, delivery of books, access to books, library administration, and intensive use of ground space are inherent in vertical construction.
3. Inadequate provision for growth of social sciences and modern language departments is made by decentralization plan.
4. Duplication of building, staff, and operation unnecessarily expensive.

Some separation of library and laboratories is inevitable, but books should be kept as near the laboratories as possible. Under existing circumstances, libraries of related sciences should be grouped. Space released by centralized plan is not easily adaptable to other uses (e.g., stacks in Harper).
No difficult architectural problem is raised. A ten-story building would be a disaster to symmetry of campus architecture and is indefensible when it also sacrifices educational interests of many departments. Retention of Harper as main library conserves the sentimental interest attached to this building.

Partial completion, as necessity requires, is provided for. Centralization requires about $\$ 4,000,000$ dollars, which it will be exceedingly difficult to obtain.

## Disadvantages of Centralization

Contiguity of library and laboratory would serve interests of research ten times the extent of central location. Grouping of related sciences is best solution.

A large building would be inconvenient. A great deal of time is consumed in getting from one point of building to another and in waiting for elevator.

Proposed no use for certain vacated buildings (Classics).

Disadvantages of Decentraliza-
-tion-Continued
5. Library administration wasteful in transfer of books and necessity for staff to go from one building to another.
6. By keeping stacks in Harper, books are not readily accessible to research students, and study rooms would not remedy this difficulty.

## Disadvantages of Centralization-

Continued

Studies for graduate students could be built around Harper stacks, and Harper could be expanded.

General Considerations

1. It is wiser to make modification in plan which was approved in 1902 than to abandon it on basis of uncertain future. Evolution and modification are preferable to discarding and beginning all over again.
2. Assumption of centralization is that the University will increase in size as it has in the past. This is doubtful, and educationally the University may find it desirable to limit the number of students in order to maintain the quality of its work. Therefore, it is wiser to proceed from present status by gradual development than to formulate a plan based on a statistical prediction of future growth.

Each set of four figures was then added; the highest possible figure being 200. To reduce to a scale of 100, each set of figures was divided by 2. To simplify the table, each figure thus obtained was raised or lowered to the nearest multiple of 5. Thus, in the case of Philosophy and Psychology: $6+4+4+4=18$. This total divided by 2 equals 9; 9 raised to a multiple of 5 gives io as the interrelation of Philosophy and Psychology.

In the copy of the table presented here (Fig. 13) an additional column indicating the number of relationships of each department has been added. When this column is analyzed, it appears that the number of relationships ranges from three to sixteen. In the case of astronomy, that department and three others are interrelated. The average number of interrelationships is 8.77 . From this analysis it would seem that centralization is indicated.

If the main interrelationships are followed, as will be seen from the heavy lines superimposed on the table, it appears that four groups


Fio. 13.-The degrees of closeness of library interrelations on scale of 100 ; that is, an entry of 100 would indicate virtual identity in the use of library books by two departments. A cross $(X)$ represents a relationship less than 5 . Boxed-in figures indicate broad major relationships. Note number of relationships ignored. Source: University of Chicago, Tentative Report, Commission on the Future Policy of the University Libraries, January, 1924 (Chicago: University of Cnicago Press, 1924), p. 55.
of subjects are very closely interrelated. Yet, even in those cases, several relations are not precise. The decentralized plan recommended eleven departmental libraries: (1) Classics; (2) Modern Languages; (3) History and Social Sciences; (4) Commerce and Administration; (5) Geology; (6) Geography; (7) Divinity; (8) Education; (9) Law; (10) Medicine, Biology, and Chemistry; and (11) Physics, Mathematics, and Astronomy. An examination of the table reveals that, while this plan follows certain close interrelations, it also ignores a number of others. It is apparent that the data in this table strongly suggest centralization, other considerations being equal. The decentralist would probably argue that convenience and intensive use by major interests outweigh the use by and in related fields.

The validity of the table shown in Figure 13 obviously rests upon the accuracy of the estimates. If they are accurate, the findings should prove useful in determining which departmental libraries should be maintained and the amount of inconvenience which might result in other departments. They should also suggest which departments might be combined, in so far as their library service is concerned. As revealing as the findings are, it should be emphasized that they were arrived at by estimates of need rather than by evidence of actual use. A study of interdepartmental use might clarify the situation considerably. It should either support or invalidate the general conclusion that centralization is the more effective type of organization.

Principles for future policy.-Considerations of the problem of centralization by other writers-Works, Randall and Goodrich, Towne, and Branscomb-suggest that it is a question that cannot be answered categorically. ${ }^{19}$ Local factors and costs are important variables which make generalizations difficult. The tendency among libraries which have built or are planning new structures, however, is to bring into the new buildings as many departmental units as possible. In old organizations, careful consideration is given any suggestion or movement by faculty members to set up a new departmental library. In many organizations in which departmental systems are

[^56]strongly intrenched, more administrative organization has taken place. It is possible that the future may witness the consolidation of related departmental libraries into "branch libraries," as at California and Washington. Under this arrangement there is one library for all the biological sciences rather than a separate library for biology, botany, medicine, and opthalmology. The findings of the surveyors of the library systems of the universities of Florida, Georgia, Indiana, and Mississippi indicate that considerable administrative economy and educational efficiency can be attained by centralization of library service.

The basic principles of organization and administration of the university library apply directly to departmental and professional school libraries. New departmental collections should be established and maintained outside the general library only upon the official approval of the president and the librarian. All books and other materials constitute the university library. All expenditures for library materials and the arrangement for using them should be made under the direction of the university librarian. All libraries on the campus should be administrative parts of the general library. Duplication of library materials already existing in the general library, while recognized as desirable in the interest of teaching, should be based on real need and should be practiced only with reasonable regard for the limitations of library funds. Control of the location of library materials tests with the librarian and should be determined by him in such ways as to serve the best interests of the respective users. Whenever economy and efficiency warrant them, the librarian should institute policies of centralization in technical processes and other operations.

SPECLAL COLLECTIONS, LABORATORY COLLECTIONS, AND SEMINAR LIBRARIES
In addition to formally organized departmental and professional school libraries, there may also be present, either in the general library building or in other buildings of the university, special collections, laboratory collections, and seminar libraries. Randall and Goodrich describe a special collection as "an assemblage of materials in some field of knowledge which includes at least some of the rarer and more unusual items and a greater proportion of other titles bearing upon the special subject than would be included ordinarily in a library of the size. ${ }^{\text {²0 }}$ Generally, special collections present fewer

[^57]problems of administration than do professional or departmental libraries. Sometimes a special collection attains the proportions of a departmental or special library-particularly when it is not a part of the general library-and requires precise definitions of its relations to the librarian, financial administration, technical processes, and services to the public. The Hoover War Library of Stanford University is an example of this type of special collection. The existence of a number of special collections within a library system may warrant the establishment of a Department of Special Collections, such as is found in the Columbia University Libraries organization (Fig. 4a). At Yale, Harvard, Brown, and Chicago special collections have also been placed under the control and supervision of the central library system. Experience has demonstrated that special collections are most effectively administered when such control is present.

Laboratory collections are less likely to grow to a size which warrants organizing them into separate libraries than are special collections. Usually, laboratory collections are considered to be parts of laboratory equipment, in the same sense as microscopes, beakers, and scales. So far as possible, they should duplicate holdings of the general library. These collections of books, which are used constantly by research workers and scholars, have been recognized by most librarians as essential adjuncts to the laboratory and office. However, they present certain administrative problems which the librarian needs to consider if the collections are not to become personal assemblages of books which remain unaccessible to the university community. When these collections are under the control of the general library, they are centrally purchased and cataloged, as well as kept within reasonable bounds. The librarian should be given the responsibility of removing to the general collection those items which are no longer of immediate use to the laboratory workers. Moreover, he should be able to decide whether new and valuable acquisitions to the library should be placed in laboratories or teachers' offices or made more accessible in the general or departmental libraries.

Thompson has traced the German origin of seminar libraries in American universities. ${ }^{2 x}$ They developed because faculty members found that they served their instructional and research needs more effectively than general libraries. Although in many cases they have been transformed to departmental libraries, they may still be found on some American university campuses. They differ from depart-

[^58]mental libraries by their closer association with instruction. Seminar collections are frequently housed in classrooms, as at Fordham and Georgetown, and are used by faculty members and students during class periods. In many cases they are accessible only to those individuals who have been granted keys to the rooms, usually under the authority of members of the teaching staff. Like materials in separately housed special and laboratory collections, books in seminar libraries are not so accessible generally as those in the central library or even in departmental libraries. The inclusion of carrells and studies in the stacks of university libraries has also operated adversely against the maintenance of seminar collections. While seminar collections, like laboratory collections, may implement instruction, a precise administrative policy should define their status. The librarian should discourage the tendency of members of the teaching staff to regard seminar collections as their personal property. Moreover, he should reserve the right to remove materials when he deems it necessary for giving adequate service to the majority of readers.

## SUMMARY

Considerable variation exists in the administrative organization of university libraries. As has been pointed out, no uniform terminology is used to describe the administrative officers of the university library. Coupled with this fact is the lack of systematic description of the duties of the librarian and other administrative officers. The evidence indicates the need of thorough job analyses for the various positions of the library, as well as the need of librarians to apply generally accepted administrative principles to library organization and management.

Present practice shows that the functional administrative organization is prevalent. However, there is some indication that the subject or divisional arrangement may become more widespread in the future. Because so many variables are present, it is difficult to say whether a particular library system should be organized on a functional or a subject basis.

Departmental and professional school libraries have developed because central libraries have frequently failed to meet the needs of specialists in the sciences and humanities. Departmental libraries will probably continue to be developed in cases where the academic and research units of a university are spread widely over a campus. So far as administration is concerned, experience has demonstrated
that economical management and effective service are obtained when the librarian has direct control and supervision over all the book resources of the university, whether they are in departmental libraries, professional school libraries, special collections, laboratories, offices, or classrooms.

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## CHAPTER V

## DEPARTMENTAL ORGANIZATION: ACQUISITION AND PREPARATION

THE division of university libraries into functional departments has not followed a uniform pattern. Tradition, personnel, physical arrangements, financial considerations, types of collections, curriculums, and the personalities and attitudes of administrative officers account for variations. There has been no adequate study of the types of organization which make for the most effective service in university libraries. The large number of variables render generalizations regarding a preferred departmental organization difficult, if not impossible.

In the majority of large university libraries, departmental organization revolves about functional units. In the preceding chapter the divisional organization of departments was discussed. In this chapter attention will be directed to the organization and operations of two major functional groupings of activities: (1) acquisitions; and (2) preparations, including cataloging, microphotography, and binding. Illustrations will be drawn from the field in an effort to point out important distinctions and to suggest possible lines of effective organization. Reference will be made to various organizational charts included in chapter iv. The difficulty of applying tenets of administration to each type of organization will be apparent.

## ACQUISITION

The acquisition of materials is obviously one of the most important activities of the university library. To acquire most effectively the books and other materials needed for the instructional and research purposes of the faculty and students in a university demands a careful consideration of the factors of library organization, personnel, purchasing, and finance. Although the nature of order work may be circumscribed by physical surroundings, the principles of administration relating to centralization of homogeneous activities, direction, supervision, and control are applicable. Not only should the administrator' of the order department be cognizant of his unit of activity, but he should make provisions for the manning of the
department with qualified personnel and for the proper conditions under which they are to work.

As may have been deduced from the earlier discussion of the growth of the university library, the increase in accessions necessarily affects the work of the order department. The nature and quality of the materials acquired by the large university library makes it essential for the administration to provide a sufficient number of order librarians who are trained in bibliography, languages, and business methods.

In addition to the general duties of the department head listed previously, the order librarian is responsible for the following specific duties:

1. To develop procedures to meet the needs of the library
2. To handle personally difficult or important correspondence or problems relating to the ordering of books, serials, documents, periodicals, maps, pamphlets, films, and other materials
3. To make recommendations to the faculty concerning book selection
4. To consult with heads of other departments and divisions concerning book orders
5. To notify the faculty of the nonexpenditure of allotted book funds
6. To watch carefully auction, rare-book, and second-hand dealers' catalogs for opportunities to purchase items on desiderata lists
7. To have materials filmed or otherwise reproduced when they are out of print or otherwise unavailable
8. To interview publishers' representatives
9. To supervise the handling of all gifts and exchanges coming into the library

## ORDER PROCEDURE ${ }^{\text {r }}$

By far the largest amount of book selection in college and university libraries originates with faculty members. The classes of materials which Randall and Goodrich ${ }^{2}$ outlined as proper accessions for the college library are acquired as well by the university library. These include standard books of general reference, standard reference books useful for specific fields covered by the curriculum, an adequate stock of general books, an adequate stock for each curricular field, an adequate stock of books concerning important fields not covered by the curriculum, an adequate stock of books for leisure reading, and an adequate supply of general and standard scholarly periodicals. The university library, however, goes further; and such materials as newspapers, pamphlets, documents, periodicals, serials, theses, microfilms, photostats, maps, music scores, transcriptions,

- The financial aspects of order work are treated in chap. iii. See also chap. ix.

[^59]manuscripts, archives, and facsimiles are necessary for an effective research program. Unlike the college library, which is primarily concerned with a sufficient collection of books to satisfy its reference, curricular, and general reading functions, the university library, predominantly concerned with the research function, is responsible for the acquisition and preparation of source materials of every kind. Moreover, while efforts have been made to arrive at a maximum limit for the college library book collection, no such effort has been directed at limiting the growth of university library collections.

Book orders, originating with the faculty, usually bear the approval of faculty library representatives or the administrative heads of instructional departments. In those few universities in which funds are ample to cover practically every request, orders may go direct to the librarian from the faculty member. Records which indicate expenditures of various departments are generally maintained in the library office.

The order procedure of an effective acquisitions department will be directed toward securing quick delivery of materials by dealers. Miller, in his cost study of acquisitional work and cataloging, has sketched the major activities involved in getting material into a library. While libraries other than the one used by Miller in his study may employ either simpler or more complex routines, they usually include those in the following outline:

## Routines Involved in Acquisitional Work: Purchases ${ }^{3}$

I. Preliminary activities:
a) Order card received
b) Order card stamped
c) Order card marked by department
d) Order card placed in preliminary file
2. Checking:
c) Unchecked order cards alphabetized
f) Order cards checked against catalog
g) Order cards checked against orders-out file
$h$ ) Order cards checked against ready-to-order file
3. Bibliographical preparation:
i) Order cards prepared bibliographically
4. Ordering:
j) Order cards filed in ready-to-order file
$k$ ) Order cards sorted as to agent
${ }^{3}$ Robert A. Miller, "Cost Accounting for Libraries: A Technique for Determining the Labor Costs of Acquisition and Cataloging Work" (unpublished Ph.D. dissertation, University of Chicago, 1936), p. 57 (slightly altered). See also T. P. Fleming and J. H. Moriarty, "Essentials in the Organization of Acquisition Work in University Libraries," College and Research Libraries, 1 (1940), 229-34-
D) Order cards typed into order letters
$m$ ) Order letters revised and mailed
$n$ ) Order cards stamped and filed
5. Receiving:
o) Receipt of shipment and unpacking
p) Checking in receipts
q) Receipts and replacements counted
r) Revision of items
s) Order cards filed in orders-received file
t) Invoices filed
u) Items placed on truck

Organization.-The actual organization of the acquisitions department is so dependent upon variable factors that it is difficult to generalize as to what is best practice. However, an examination of the organizational charts of a few institutions will reveal that acquisitions departments may be divided into those arranged by types of materials and those arranged by methods of acquisition. In the first instance the organization might be illustrated by the following figure:


Under this arrangement the individual in charge of books and pamphlets would be responsible for their acquisition through purchase, exchange, or gift. Organization by method would produce the following pattern:


In a library having a relatively small number of annual accessions all materials acquired may pass through a single office or individual, regardless of the method of acquisition. Libraries with large annual accessions are likely to be organized into subsections, on the basis either of form of materials or methods of acquisition. It is impossible to generalize as to the point where a single office should be replaced by subsections. Principles of administration, such as central-
ization and control, need to be applied with wisdom. It may be said, however, that the larger libraries are, for the most part, organized on the basis of methods of acquisition, frequently with a section concerned with a special type of material. The New York University Library maintains a central acquisitions department, but the existence of an all-purpose serials department has removed from it the task of ordering all serial materials.

A question which has received some attention recently has been the unity of the technical processes. Should the acquisitions department be a separate unit or part of the whole acquisitional and preparational processes? Good administration, of course, would require co-ordination, regardless of whether or not the various technical processes were combined in name. The suggestion, however, of grouping the technical activities-accessions, acquisitions, cataloging, classification, binding, and photography-under one divisional head is worth examination. It seems that, if there is no other obstacle to such a plan than the absence of qualified personnel, ${ }^{4}$ then library training has been wanting in some respects. These activities, called the "technical processes," are "not in themselves major ends or objects of library service."s They all serve the definite purpose of aiding the user directly or supplementing the personal efforts of the staff members who form the "line" of the organization. Because they form a homogeneous group of activities, placing them under co-ordinated supervision should strengthen control, eliminate overlapping of routines, and generally improve the efficiency of the work. The few institutions which have introduced this type of organization have found it satisfactory from these points of view.

Personnel.-So much routine is involved in the work of acquisition that the administrator should be cautious about overloading it with individuals who are qualified to do work at a high professional level. This does not mean that the work of the department is unimportant. The clerical work of the department should be delegated to individuals who have had clerical or business training rather than to those who by training and experience are equipped to perform more diverse, professional activities.

[^60]
## PURCHASES

The routines for purchases in libraries are fairly simple. The information on the order cards for regular book orders is verified in trade bibliographies. In order to prevent unintentional duplication of titles, a check is made in the public or official catalog, the ordersoutstanding file, the books-received file, and the series or continuation files. Faculty members are immediately notified if the book has already been received by the library and is either available or in process.

After checking, order cards are turned over to the departmental typist. The names of the funds to which the items are charged are noted, and the dealers' names are placed on the cards. Generally, a single dealer is maintained for current American titles, while one or more dealers are used to obtain English and other foreign materials. Dealers suggested by faculty members are frequently used for unusual materials. Rare or out-of-print items located in secondhand or auction catalogs are ordered directly, sometimes by telegraph and cable, from the dealers offering the materials. In a number of instances it is also necessary to order directly from the publisher, although this occurs in relatively few cases.

In some libraries correlated or multiple-form order slips have been devised. Through the use of carbons, several records may be made at one typing. The form used in the New York University Library, for example, provides an order slip for the dealer, an order department record, a book-fund order record, an auditor's order record, a Library of Congress card order, a faculty information service slip, and a follow-up slip. Other records, such as temporary catalog cards, may also be made by this process.

## EXCHANGES AND GIFTS

While the bulk of the important acquisitions of the university library is likely to be obtained through direct purchase, accessions through gift and exchange have reached imposing totals in a number of institutions. These latter two channels of acquisition must frequently be used to secure items which are not available in the regular book trade or are not for sale. Often, too, the library does not have sufficient funds to purchase items which are desirable for instructional or research purposes.

Librarians who have paid considerable attention to the acquisition of materials through gift and exchange have generally found
their efforts well rewarded. For example, during the year 1929-30 the University of Illinois Library acquired through these means I $\mathbf{g}, 000$ titles listed in the continuations checking file, excluding college catalogs, and 5,000 periodicals, excluding United States government publications. ${ }^{6}$ The exchange assistant in the Harvard Library was directly responsible during the year 1939-40 for the acquisition of 24,608 items. These included 16,843 periodical pieces, 4,803 volumes, and 2,962 pamphlets and maps. ${ }^{7}$ Since gifts and exchanges have a vital place in building up a library's collections, they should be given a definite place in the administrative organization of the library.

The location in the library organization of the unit handling gifts and exchanges varies from institution to institution. If the volume of business is sufficiently large, the two activities may be handled as separate units. At Illinois gifts and exchanges are combined into one unit. The important point to consider from an organizational aspect is that the functions should be centralized. ${ }^{8}$ Problems involved in the acquisition and treatment of exchanges and gifts may now be discussed.

## EXCHANGE

Before considering exchanges in detail it may be well to define what constitutes exchange material. It should be apparent that anything of a graphic nature might be exchanged. As generally used, however, the term has been closely associated with serials, transactions, proceedings, university publications, and duplicates of all types of materials. ${ }^{9}$ It may also include disposal of materials which are unwanted in the library.

Organization.-There are two places in the organization of the library in which the exchange unit may be advantageously located. Looked upon primarily as an acquisitional function, it may be considered a division of the order department. It may be argued with equal force that exchange work is vitally connected with serials acquisition, since a large proportion of the materials received by ex-

[^61]change generally consists of serials. The problems of handling and accounting are involved in obtaining serials whether they are acquired by exchange or by purchase. It has also been pointed out that a proper balance should be maintained between the number of serials acquired by a library and the ability of the serials personnel to incorporate them into the collection. ${ }^{10}$

The principle that exchange work should be centralized to eliminate confusion and to provide the means for a systematic checkup does not mean that it should be segregated entirely from other functions. At the University of California Library, for example, the exchange work is carried on in the division of gifts and exchanges. The gifts and exchanges division of the University of Illinois Library is a division of the order department, with its proper functioning depending upon close co-operation with the purchase division of the same department.

Materials.-It is assumed that a profitable system of exchange will involve equal returns for materials distributed. To this end, the library should have something worth while to offer to other institutions. An important source of exchange materials in larger institutions has been the publications issued by the university-monographs, periodicals, books, pamphlets, and other items. The library, therefore, should be aware of all such publications and should, providing university regulations permit, receive a quantity of them to be used for exchange for similar publications of other institutions.

It is at this point that the university library is likely to encounter difficulties. The recent trend toward the commercialization of university presses tends to deprive the library of materials to be used for exchange purposes. ${ }^{12}$ Although some consideration may be shown for the normal desire of a university press to show a profit, usually satisfactory arrangements can be made which provide the library with materials for exchange.

Raney ${ }^{12}$ has presented a cogent argument regarding satisfactory press-library relations. He pointed out that the University of Chicago Libraries have an excellent opportunity to build up their collections with little expense to the university through the use of press

[^62]publications for exchange. Two other libraries-California and Illinois-have agreements with their university presses which are favorable from a library point of view. At the University of California, press items included in the "scientific series" are available to the library for exchange purposes as well as for regular purchase, while the "monograph series" are for sale only. ${ }^{13}$ The University of Illinois Library obtains, without cost, materials from the press for exchange purposes. Copies of publications which are issued regularly are automatically sent to the library; but an assistant checks the Press Book, which is made available to the library, to note irregular publications. ${ }^{14}$

The exchange of published dissertations or abstracts of dissertations is of large enough proportions to warrant consideration in any exchange policy. When a library receives 100 copies of each dissertation or abstract, ${ }^{15}$ it is in a strategic position to obtain other doctoral dissertations in exchange. For example, if only 75 copies of 10 titles are available for distribution, 750 different titles should be received in return. It is obvious that when a library sends out a printed dissertation it should expect to receive in return either a dissertation or a publication of equal value. ${ }^{16}$

Another source of materials for exchange purposes is the duplicate collection. The attitude taken toward duplicate exchange is important in determining the degree to which a program will be worth while to a specific library. If a library is engaging in exchange of duplicates merely to clear its shelves of worthless and worn-out copies, it probably will receive the same sort of material in return. The University of Minnesota Library has proved the usefulness of duplicate exchange in rounding out special collections and in filling in gaps in periodical runs. During the academic year 1936-37 Minnesota received almost 10,000 needed volumes from the exchange lists of American libraries. This was in addition to the foreign exchanges in which sets of nonsalable American periodicals, such as Harper's and the Atlantic Monthly, were exchanged for foreign periodicals. ${ }^{17}$

[^63]One librarian has outlined a plan for "streamlining" the exchange of duplicates. ${ }^{18}$ In this plan the first step is to gather duplicates that are not held for replacement and to eliminate from this stock allworthless and worn materials. The next step is to arrange the duplicates in broad form groups, such as books and monographs, serials, documents, dissertations, textbooks, pamphlets, and reprints. Lists of materials available for exchange should be compiled on the lines of broad subject classifications in order that the library may profit from the advice of departmental librarians and faculties.

Exchange policy.-In the conduct of the exchange program the faculty should be encouraged to participate in various ways. This does not mean that the program should be under faculty control but that the subject knowledge and personal and professional contacts of the faculty should be utilized. Members of the faculty can be helpful in making suggestions concerning needed materials and in determining the usefulness of titles under consideration. Suggestions from staff members, exchange requests of other institutions, bibliographical tools of the exchange staff, and bibliographies of particular fields of knowledge or geographical aids-all of these have been found useful in developing a well-organized exchange policy. ${ }^{19}$

Exchange of press publications or dissertations follows a rather strict procedure in most university libraries. It is in the exchange of duplicate materials that serious difficulty has arisen. In this phase of exchange work, the variety of procedures followed by university libraries has so far prevented effective interinstitutional co-operation. These procedures range from dealing only with book dealers on an exchange basis to the liberal policy of sending out material free to libraries, hoping eventually to recover the equivalent of the material distributed. While the free-distribution-return plan has some favorable features, particularly in minimizing the need of record-keeping, experience has indicated that under it larger libraries are likely to be less benefited than smaller libraries.

To make a free and liberal program of duplicate exchanges feasible and more agreeable to the larger libraries, a plan which has been indorsed by the board of directors of the Association of College and Reference Libraries for a "periodical exchange union" has been for-

[^64]mulated. ${ }^{20}$ The plan, with 17 subscribing member-libraries, was tried experimentally in 1941. In essence, it provided for free exchange of materials among the member libraries. Each library listed its duplicates, and the lists were circulated among the libraries in the order of the size of the library's periodical budget. This provision allowed the larger libraries to have first choice on all exchange lists. The accompanying disadvantage to small libraries was partially offset by their having much more material made available to them than they otherwise would have. ${ }^{2 x}$

In 1944 it was decided that the plan should be expanded to include all duplicate materials. Under the name of the Duplicate Exchange Union, librarians have thus sought to systematize the methods of handling this problem. The results of this plan should await appraisal until it has been in operation longer, since several difficulties appear-for example, one library may receive too many lists at one time to check them completely and expeditiously.

## cifts

Gifts furnish an important supply of materials in most university libraries. Their acceptance, however, should receive the full attention of the librarian, since even gifts of small collections of books can give rise to administrative problems involving relations of the librarian with donors, procedures of acceptance and publicity, and technical decisions concerning cataloging, preparation, and housing.

Organization.-The responsibility for soliciting and recording gifts should be centralized in an individual or office. Whether the person in charge of gifts is the librarian or an assistant in the order department makes little difference. The important thing is that definite responsibility should be delegated to someone who maintains contacts with the potential sources of gifts. Briefly, the outstanding sources are the friends-of-the-library groups, educational, commercial, and governmental organizations, alumni, student clubs, faculty members, prominent book collectors of the community, and learned societies and other organizations. The extent to which each of these sources may serve to build up the book collections of a library is treated in detail in chapter ix.

Materials.-Gifts to the university library may be in the form of money or books or other graphic materials. Gifts of money present

[^65]several problems to the librarian. In the first place, the librarian himself may be instrumental in obtaining money for library purposes. Generally he turns the money over to the business office, and the administration and trustees and possibly other interested members of the university or friends group may make official acknowledgments. But the librarian may have an important role in obtaining and acknowledging gifts of money. In the second place, the librarian will usually be charged with the expenditure of the money. Similarly, gifts of books, paintings, portraits, statuary, or museum pieces are often obtained by the librarian and acknowledged by him, the president, the trustees, or other officers.

Gift policy.-A primary consideration in gifts of books involves the responsibility of the librarian to accept or decline them. The attitude that a librarian should accept everything offered the library has definitely changed into a more critical appraisal of the gift. Not infrequently, the librarian may do the institution more good by refusing to accept a gift which, because of stipulations by the donor or because of the nature of the materials, may create internal problems in the library. Refusal of a gift is a delicate procedure, and the librarian should consider the possible effects of such an act. Extenuating circumstances arising from the position of the donor and his past and possible future gifts to the institution may make it necessary, at times, to accept gifts which are of doubtful value. If the librarian decides that an offered collection should be refused, he generally should take upon himself the obligation of recommending a more suitable place for it. ${ }^{22}$

There are several factors which the librarian should consider in accepting or rejecting a gift of books. First among the factors that should help the librarian to decide as to the value of a gift is whether or not, by its quality and subject matter, it may be useful in the educational program of the institution. In reaching a decision on this point a long-range view is essential. Possible future developments of the educational program, as well as the present curriculum, need to be considered.

A second factor is the effect the gift will have upon the technical department of the library. Will the acceptance of the gift add materially to the work of the staff and create new arrears? The librarian

[^66]should decide whether or not the costs of technical preparation and housing outweigh the potential value of the materials.

A third factor is the freedom with which the library can handle the gift. In many instances a gift should be declined if too many restrictions or stipulations are imposed by the donor. Gifts are generally welcomed by the librarian if he is permitted to use his judgment in integrating, discarding, selling, or exchanging items included in the collection. Except on rare occasions the librarian should avoid the acceptance of gifts which call for separate shelving or housing, since stipulations of this character involve problems of classification and cataloging and increased administrative costs. If a collection has a high monetary value or approximate completeness, it justifies separation. Special bookplates are generally provided for extensive gifts.

A fourth factor concerns the use to which the collection may be put. Restrictions on the use of materials may reduce the value of the gift to the library, since materials take up space and require attention that could better be devoted to other materials. If the collection consists of rare items, the library staff, as well as the donor, should be interested in limiting use.

A final factor is the cost of maintenance. A special collection may involve high maintenance costs if it is to be kept up to date. A donation may be sufficiently great to require an addition to the library to house it. Would the expenditure of money for such an enlargement of the university library prevent future additions that would eventually be required by normal growth? Another question involves the extent to which the library will endeavor to purchase items in the field of the special collection. If the gift is accompanied by endowment, this problem will not become serious. However, if the library must divert some of its funds for normal purposes to maintain the special collection, its acceptance will be of doubtful value. As will be demonstrated in the section on specialization in book collecting in chapter xiii, librarians as a group can serve scholarship better by declining gifts which belong in other institutions or in other locations than by accepting them for prestige value.

## PREPARATION OF MATERIALS <br> CATALOG DEPARTMENT

The acquisitional processes form one of the three major technical aspects of library work. The preparational processes-classification,
cataloging, and mechanical preparation-form the second major aspect. Although in recent years considerable emphasis has been placed upon the analysis of the individual reader and upon the historical and educational aspects of academic libraries, the importance of the problems associated with the preparation of materials has not been minimized. In most libraries expenditures for the preparational processes comprise a large item in the administrative budget.

Since the growth of book collections is attended by numerous problems of integrating the materials, it is perhaps not surprising that critics of formal librarianship have adversely criticized its technical aspects. Able library administrators, however, have not lost sight of the fact that classification systems, catalogs, and similar devices are means to an end. Despite this recognition, they have also observed that the unitary dictionary catalog of the American library is bulky, complex, costly to maintain, and difficult to use. Many assumptions concerning both the classification and catalog, however, have been made without substantiation by systematic investigation.

The development of card catalogs received its greatest impetus in the 1880 's, but many libraries did not abandon the book catalog until the first decade of the twentieth century. There is little doubt that the initiation of card printing and distribution by the Library of Congress hastened the change from the printed book catalog to the catalog in card form. Because it contained many advantages over the inflexible book catalog, the card catalog was hailed as one of the greatest improvements in library technology. But its disadvantages have been singled out frequently. ${ }^{23}$ Despite suggestions that it be discarded or radically modified, practical applications of the suggestions have not been worked out. Since the basic theory and practice of cataloging and classification have been vigorously discussed recently, consideration of them may be presented under the following heads: (1) the scope of work of the catalog and classification department of the university library, with special emphasis on the purposes and functions of the various types of catalogs prepared; (2) the physical arrangement and internal organization of the department; (3) administrative standards, codes, and measurements of efficiency; (4) special problems of administration, involving such

[^67]matters as accessioning, inventory, assistance in the use of the catalog, reclassification, noncodex materials, and special collections and departmental libraries; (5) costs of cataloging; and (6) utility of the card catalog and its future development.

## SCOPE OF WORK

The principal functions of the catalog department may be stated as those operations which lead to the production of records concerned with the contents of the library collections. Since the majority of departments combine the cataloging and classifying processes, reference to the catalog department will hereafter imply inclusion of classification. The classification function itself is directed toward an orderly arrangement within subject groups of books on the shelves. Classification and subject-cataloging may be considered interpretative functions of the library.

In the university library the operations consist of cataloging and classifying books, bound periodicals, newspapers, pamphlets, clippings, phonograph records, music, archives, manuscripts, documents, serials, and films. The product of the department consists of necessary records for the public catalog, the official catalog, the shelf list, departmental library catalogs, and other special catalogs, such as those for films, theses, and dissertations. In addition, the catalog department may be responsible for the maintenance of a depository or union catalog. At Harvard the catalog department has the new responsibility of making records for the catalog of a storage library.

Producing records, however, is not the only duty of the catalog department. Such processes as accessioning and inventory are frequently part of its work. Not a few catalog departments are responsible for notifying faculty members that materials they have ordered or might be interested in have been prepared for use, and for compiling bulletins of books added to the collections.

The purposes and functions of five catalogs that have been men-tioned-the public, official, depository, and union catalogs, and the shelf list-may now be treated at more length.

Public catalog.-The public catalog is the principal tool resulting from the work of the catalog department, so far as the users of the library and the staff are concerned. In the American academic library this is usually a dictionary catalog containing author, subject, title, reference, and other cards, intended to enable the reader to find either a definite work or a class of works and to choose different books or different editions of a work on the basis of information given
on the catalog entry. ${ }^{24}$ It may be a catalog for materials only in the main building or a union catalog of materials in that unit and in branch or departmental libraries as well. The public catalog appears rarely in forms other than the dictionary type, such as the alpha-betic-classed catalog and the systematic or classed catalog. There are also variations of these types. Arguments pro and con the merits of each type have appeared in library literature. The dictionary catalog is predominant in America. The word "dictionary" should be used in quotation marks, however, because the various alphabets within the main alphabet, chronological arrangements of historical materials, and other modifications make it dissimilar to the telephone directory, to which it has been incorrectly compared. These modifications add to the difficulty of the average library patron in using the tool, even though filing codes may be available to him. The variation of practices among libraries likewise augments the confusion, particularly to academic workers, who find it necessary to use various types of libraries. The present efforts to simplify filing are directed at removing some of the difficulties patrons have met in their use of the catalog. The filing code of the University of Chicago Libraries is an example of the so-called "simplified filing." It attempts to reduce to a minimum the number of subalphabets within the main alphabet. It is also possible to improve the usability of a large public catalog by adequate guides displaying the various subschemes of card arrangement. No complete study has been made of the users' approach to the catalog.

Not all libraries use the dictionary catalog. John Crerar Library, for example, uses a classed catalog, arranged by the Decimal Classification. In addition, it also maintains an alphabetical file of the names of authors, translators, editors, titles, etc., and an alphabetical index to subjects. Whether or not the Crerar arrangement is likely to become more common in university and reference libraries is problematical. ${ }^{25}$ A recent activity different from this is the movement to divide the catalog. The University of California Library, among others, has recently split its catalog into two main divisions: the alphabetical subject catalog; and a catalog of authors, titles, editors, etc. ${ }^{26}$ An

[^68]objection to this plan apparently has been the cost of duplicating the cards needed in both catalogs, which incidentally increases, rather than reduces, the bulk of the catalog. However, one does not need to labor the point that, if facilitated use of the catalog results from division into units, the additional work and cost become less important. Studies of these problems are needed.

In recent years the subject catalog, either as a separate unit or as a part of a dictionary catalog, has been criticized sharply. While the critics are willing to accept the idea that a particular library requires an author record of its holdings for inventory purposes, they consider that subject bibliographies and subject indexes, developed on a universal basis, are more effective than the subject catalog in meeting the needs of scholars.

Swank ${ }^{27}$ recently studied the relative usefulness of subject catalogs, classifications, and bibliographies. From the point of view of research students working in the field of English literature, his study tests the assumption that the general catalog and classification are more efficient and necessary than bibliographies and that the latter should be conceived primarily as supplements to the former. It challenges the modern library policy of compiling and exploiting subject catalogs and classifications to the comparative neglect of bibliography.

For information about the kinds of subjects studied and the kinds of library materials consulted by the English scholar, one hundred and eight doctoral dissertations accepted by the Department of English Language and Literature at the University of Chicago from $193^{\circ}$ to 1942 were examined and classified. Examples (ten in all) of the six types of studies which occurred most frequently were selected as case studies, and lists of the sources cited in each case were compiled. The general catalog and classification of the University of Chicago Libraries and the available published bibliographies and catalogs were brought together under headings which corresponded more or less exactly to the subjects of the case studies. This method provided a rough measure of the help which different devices could have given the research worker, if he consulted them, in assembling the materials which he ultimately employed.

Swank concluded that in all ten areas covered by the case studies,

[^69]individual bibliographies, or combinations of bibliographies, were found to produce better results-sometimes far better results-than the subject catalog and classification. For studies of literary works and literary criticism, the Cambridge Bibliography of English Literature and the Cambridge History of American Literature, together with current bibliographies in the field, proved to be more useful than the catalog and classification. The catalog and classification, moreover, did not supplement the bibliographies in any important way. For studies of literary works and of literary criticism the cata$\log$ and classification revealed only occasional unique titles; and for studies of general cultural background they revealed only a few unanalyzed periodicals and recent secondary sources which were omitted from the bibliographies. In some instances the bibliographies provided headings which were better adapted to the types of studies at hand, but the principal reason for their superior performance was their greater ability to analyze materials and to duplicate entries under overlapping headings.

On the basis of his findings Swank suggests that more and better bibliographies be compiled to fill what now are gaps. He favors that procedure primarily for economic reasons. He suggests that librarians might forego the general subject catalog as a future means of serving the research worker in this field and that they might adopt a more aggressive program for the co-operative production and exploitation of scholarly subject bibliographies. Period classification is suggested as a possible means of giving the shelf arrangement a function which is consistent with its limitations and which is of distinctive value to literary scholars, as well as to other historians.

Official catalog.-At the time of the survey of the American Library Association ${ }^{28}$ in 1926 it was found that official catalogs were being maintained by 38 public libraries and 7 college and university libraries of more than 100,000 volumes and by 12 public libraries and 4 college and university libraries of from 50,000 to 100,000 volumes. This type of card catalog may be described as a "card catalog which is kept in the central catalog department for the exclusive use of staff members; it contains a main entry card for every title in the library system, and it may include secondary entries as well." ${ }^{29}$ At

[^70]the University of Chicago Libraries an official catalog is combined with the union catalog of cards from the Library of Congress, John Crerar, and Newberry libraries, and the libraries of Illinois, Harvard, and Michigan, and with the received-orders file, the authority file, cross-references, and other information cards. Morgan, ${ }^{30}$ in her study of the official catalog for the large public library, found that this tool might contain cards of the following kinds: personal and corporate author entries, tracings for added entries on mainentry cards, name cross-reference cards, name added entries, title main entries; title added entries, subject entries, subject cross-reference cards, series cards, series cross-reference cards, authority list, references to records outside the official catalog, and records of withdrawn books.
The official catalog has developed in libraries because of either or both of two reasons: (1) it is a tool which makes it possible for catalogers and other members of the staff to investigate library records without causing considerable annoyance to patrons; and (2) it has developed as a result of the physical arrangement of the library or, more exactly, because of the distance between the catalog department and the public catalog. The double-faced catalog, one side of which is used by the public and the other by the cataloging staff, has been used, to some extent, in public libraries but rarely in university libraries. One of the difficulties in its use is that it is not readily susceptible of expansion.

In her study Morgan reported that one institution, in which the official catalog was started when the library was established, estimated that the cost of the tool was $\$ 4,423$. This sum represented the annual salaries of filers plus the cost of the trays. No data regarding the size of the catalog, however, are presented. On the basis of her data Morgan recommends that the public library of 150,000 or more volumes should have an official catalog. One would be inclined to suggest, also, that the university library of this size should have an official catalog, but factors other than size should be considered. The determinants should be conflict in use or physical peculiarities of the building.

Depository and union catalogs.-The value of the depository cata$\log$ in the large library depends, to a large degree, upon the amount of research carried on by the faculty and students and of searching by library staff members. In a large university it will provide a
${ }^{30}$ Ibid., p. 216.
certain amount of needed information to members of the order, catalog, and reference departments. In every case it is essential that the administrator of the library estimate the values received against the accelerating costs of maintenance. Costs of filing, cata$\log$ trays, space, printed cards of other libraries-these are all measurable items. Depository catalogs made up of clipped Library of Congress proof sheets have been found useful in a few libraries which cannot secure full card depositories. While the thinness of the slips makes it possible to reduce the number of trays needed, the proof-sheet catalog is more difficult to file and to consult. Many university libraries have subscribed to the new lithoprinted catalog of printed books of the Library of Congress. ${ }^{3 r}$ Some libraries having card or proof-sheet depositories will discard them, filing only the new cards in a separate catalog.

What does it cost to file into a depository catalog? To maintain the Wesleyan University Library depository catalog, it required an expenditure of $\$ 1,074.23$ annually. ${ }^{32}$ The cost of filing into the de-pository-union catalog of the University of Chicago Libraries in 1940 was calculated at $\$ 1,704$. This annual figure, of course, did not take into account the cost of cabinets or the costs which accrued in connection with the consolidation of various types of catalogs.

Who uses the depository catalog? At the moment, this can be answered solely on the basis of observation, since no systematic study has been made of its use. Order and catalog departments generally find it useful. If it is easily accessible, the circulation department is likely to refer to it often. The reference librarians frequently use it for locating, through analytical cards, materials in the library not locally analyzed. Faculty members and graduate students frequently use it for bibliographical information.

Shelf list.-The shelf list is found in practically every library. In some libraries, it is kept on slips or sheets. Generally speaking, it is most economically produced by making an extra card at the time other records are being prepared. By purchasing an extra Library of Congress card or by typing or otherwise reproducing an extra card for books for which there are no printed cards, a shelf list is built up simultaneously with the card catalog. In library systems with branch or departmental libraries the shelf list in the central library should

[^71]be a union list, designating the location of materials in all units. More often than not the departmental library or professional school library is also provided with a shelf list for its particular collection.

The shelf list has many advantages from an administrative point of view. It may be utilized as a classified catalog to indicate the weaknesses or strength of the collections. The exclusion of patrons from the use of the shelf list as a classified catalog in many libraries is largely due to physical arrangements. The shelf list, however, may well be used by the public if it is practical to permit accessibility to it. The shelf list may also be used by the administrator as an insurance record and in taking inventory. For classifiers it is an indispensable record of previous classification, since it reflects the physical arrangement of the books already incorporated in the library collections.

## ORGANIZATION AND ADMINISTRATION

To produce catalogs carefully and efficiently, to classify books systematically, and to carry on the other functions which have been delegated to the catalog department, it is essential that the librarian and the head cataloger thoughtfully plan the unit with consideration of its internal organization and its physical arrangement. Under the heading of internal organization, such topics as "interdepartmental relations," "personnel," "division of work," and "reference tools" will be discussed. Physical arrangement will be considered in chapter xiv.

The administrative organization of the catalog and classification department presents a varied pattern in university libraries, but it is evident that "administration" as such becomes more important as the size of the library increases. It has been suggested that when a library approximates 200,000 volumes the technical processes cease to be a casual secondary activity and become a primary level of administration. ${ }^{33}$ A library of 200,000 volumes, of course, is an arbitrary starting-point, subject to the influence of many other variables.

Organization.-Although emphasis has been placed on a department of cataloging and classification which is separated from the order or other departments, there are certain values to be attained in combining functional units under the supervision of one person. These were considered in the section on the acquisitions department.

[^72]A functional organization on the widest possible scale would include the technical processes which are indicated in Figure 14. All divisions of work which are concerned with receiving and integrating materials in the library are included in this organization. In connection with consolidating related preparational functions, the point made by Joeckel and Carnovsky applies to the university library:

The intent in putting all technical processes under the direction of an assistant director is to emphasize the essential unity of the whole process of acquisition and preparation of library materials. The processing of 200,000 volumes annually, together with pamphlets, serials, and much other material, is a task of great magnitude. Every effort and every device should be used to simplify routines and records and to expedite the flow of books through the various stages of preparation for use. ${ }^{34}$

FUNCTIONAL ORGANIZATION OF A TECHNICAL DEPARTMENT OF A UNIVERSITY LIBRARY


Fic. 14
Centralized cataloging and classification do not mean that departmental or branch differences may not be recognized. An efficient administrator will utilize the expert knowledge of the departmental librarian. It may also be pointed out that the centralization of technical processes permits the departmental or branch librarians to devote more time to the service requirements of their patrons. ${ }^{35}$

Although the theory of complete functional organization is essentially sound, it is often impractical or economically impossible to put theory into practice. In the large university library the cataloging and classifying processes may be so complex that differentiation from other processes may be necessary. An example of such a complex organization is shown in Figure 15, a chart of the catalog department of the Harvard College Library. In this organization there are six major divisions-the clerical group, the searchers, the public catalog, the union catalog, the serial division, and the catalogers. It will be observed that the catalogers are divided into three groups-

[^73]ORGANIZATION CHART OF THE CATALOG DEPARTMENT OF THE HARVARD COLLEGE LIBRARY, DECEMBER, 1940


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subject and language catalogers, catalogers of slow-moving materials, and catalogers of fast-moving materials.

This raises the question of the internal organization of the department. There are four methods, other than those based on the difficulty of cataloging, whereby the work of the catalog department may be organized.
First, the work may be organized by process. This procedure disregards the subject and type of material. One group takes care of accessioning; another, of author cataloging; another, of classifying; and still another, of subject cataloging. For example, at Michigan a separate classification department is maintained. At the University of Chicago all processes were combined in 1936 under single catalogers, with the result that materials are said to move through the department more quickly than before this practice was instituted. ${ }^{36}$ Since 1941 Chicago has experimented with a descriptive-cataloging unit and a subject-cataloging and classification unit.

The question of combining cataloging and classifying operations is an interesting one. Generally, the organization is either one of two types: (1) classifying is handled apart from cataloging by an individual (or by several individuals) or (2) the two processes are combined in the work of the catalogers. A variation of the internal organization of the catalog department is to separate descriptive cataloging from subject-heading work and classification. ${ }^{37}$ In most libraries cataloging is combined with classifying in the hands of several catalogers. Donald Coney, who investigated the division of the processes in a group of 53 college and university libraries; found that 44 combined cataloging and classifying and 9. maintained separate classifying units. ${ }^{38}$ Only 4 of the 9 separated departments resulted from a reclassification department set up for the purpose of reorganizing the technical processes. ${ }^{39}$ The professional opinion offered

[^74]in this survey indicated that more economical and more uniform results were obtained by combining classification and subject-heading work in the hands of the catalogers. The experience of libraries which have attempted to separate the processes has not always been unsuccessful, but it is admitted that dividing classification from subject-cataloging is probably more expensive.

Second, the materials may be divided by subject or subject division. Under this arrangement a professional worker, assisted by clerical assistants, will have charge-probably after the books have been centrally accessioned-of all books on chemistry, if enough works on chemistry are acquired; or he may be assigned all books in the physical sciences; or all books in both the physical and biological sciences. The cataloger establishes the author entry, conducts bibliographical research, and assigns subject headings and classification numbers to all books within the subject or subject division for which he is responsible.

The third method is to divide the material by language. This may be a desirable procedure in a large university library which receives considerable materials in oriental languages and less commonly known European languages.

The fourth method of division is by form or type of material. For example, there may be separate units for the cataloging and classifying of serials, documents, pamphlets, or theses.

Local conditions determine whether one or several of these methods should be employed. Harvard, for example, has divisions of work based upon subject, language, and form. The consensus, as indicated by a survey reported in the Catalogers' and Classifiers' Yearbook, 1936, favors division by subject rather than by process or type of material. It seems safe to conclude, however, that division by process makes for economy; by subject, for "scholarly" classification and subject-cataloging. Frequently it may be necessary to introduce variations, particularly in the case of titles in less known languages. Any collection of materials in Chinese or Arabic will require handling by skilled linguists, and such matters as form or subject become relatively unimportant.

The question of centralized versus decentralized cataloging and classification is linked with the problem of distribution of materials. Shall the central catalog department prepare cards and classify
books for the departmental and professional school libraries? This is an important question for university library administrators. Those who favor decentralization argue that the experts in the special departments or schools are better acquainted with the specialized sub-ject-heading and classification problems than are catalogers in the central department. Concerning this point, it may be suggested that subject specialist-librarians are less likely to need mechanical aids in serving students and faculty in their use of library materials than nonspecialist-librarians. The trend toward centralization of cataloging and classification is evident. The University of Georgia survey committee recommended centralization of technical processes for the various units of the library. Similar consolidation of functional units have occurred in other institutions.

Personnel.-At this point the "who" of the cataloging and classification problem may be considered. What sort of person is to administer the catalog department? What sort of individuals are necessary to carry on the work of the department? How may the activities within the catalog department be classified as either professional or nonprofessional?

It has been pointed out that the head of the catalog department of the large university library should possess a combination of scholarship, administrative ability, technical training, and experience if he is to operate his organization smoothly. ${ }^{40}$ In addition to the general duties of the departmental head outlined in the preceding chapter, the head cataloger is specifically concerned with the following activities:

1. To lay out the cataloging and related work for the cataloging staff
2. To aid staff members in their difficult cataloging and classification problems
3. To develop the catalogs and cataloging procedures to meet the needs of the general library, departmental libraries, and special collections
4. To see that necessary bibliographical tools, reference works, and mechanical equipment are available
5. To co-ordinate the routines of the catalog department with those of the order, circulation, and other departments
6. To co-operate with the faculty and departments in the placement of materials

The importance of selecting an individual who can place the technical processes in their proper relation to the other activities of the li-

[^75]brary cannot be overestimated, since the librarian cannot assume direct responsibility for the supervision of the catalog department. This must be delegated to the head of the department. The librarian, however, should be equipped to do more than criticize the mounting costs of the technical processes. He should be aware of the fundamental problems that exist in preparing books for the shelves and be able to point out inefficiencies in either policy or procedure.

While the librarian should be able to comprehend the complexity of the technical processes, the head cataloger should have a definite program relating the technical work to the aims, services, and policies of the entire library organization. So far as his specific administrative responsibility is concerned, it is particularly important that the head cataloger should be able to plan, lay out, and co-ordinate the work of others. Although knowledge of rules is important, common sense in application is more so. Technical perfection for the sake of perfection only can delay the processes sufficiently to defeat the primary purposes of the library. Bibliographical accuracy is essential, but bibliographical completeness requires discrimination. So long as the cataloger keeps the user in mind, he is likely to avoid the excessive attention given to detail-an error of which the technician has so frequently been guilty.

According to the experience of administrators, training for head catalogers in large libraries has been inadequate. Moreover, recruiting for cataloging personnel has not been adequately planned. In many instances in the past the catalog department has been regarded as a working place for individuals who cannot succeed in other aspects of librarianship. The professional and personal qualifications of subordinate members of the catalog department should be subjected to the same rigorous examination as the qualifications of other members of the staff. The various classifications and pay plans recently issued appear to recognize this fact. ${ }^{4 \mathrm{~K}}$

The distribution of duties in the catalog department among the professional and clerical assistants presents an important administrative problem. Putnam enumerated 52 distinct processes for cataloging alone. ${ }^{42}$ Which of these are professional and which are clerical?

[^76]In her study of the division of cataloging duties, Akers ${ }^{43}$ attempted to answer this question. She assumed that a selected number of chief catalogers are competent to apportion the activities of the professional and clerical workers. If this assumption is valid, her study is the best answer to the question to date. She and her collaborators considered one hundred and seventeen different activities which are carried on in a catalog department, of which some were characterized as professional, others as clerical. Typical professional activities included such matters as making master cards (unit cards), assignment of subject headings, and classification. Clerical tasks involved reproducing cards, shelf-listing, filing, accessioning, and plating, pocketing, and labeling of books. Not only should a careful differentiation of duties result in a better catalog, but it should also remove inefficiencies in processing.

Reference and bibliographical apparatus.-One has only to examine the shelves of such a catalog department as that of the University of Chicago Libraries to realize the proportions to which a collection of catalogers' reference works may grow. This collection totals some 3,600 volumes. The administrator of the catalog department should be held responsible for building up this collection. When the library is so arranged that such works may be used in conjunction with the order and reference departments, much expensive duplication of titles may be eliminated. The exchange division of the library should watch carefully for opportunities to secure duplicate copies of reference works of this character. A desiderata file, compiled by the chief cataloger, may aid in securing such items.

## ADMINISTRATIVE STANDARDS

The work of the catalog department should be constantly routinized and evaluated. Efficient departments make use of manuals and codes for establishing regularity in procedures. In addition, various devices are available for determining the relative efficiency of the department.

[^77]Manuals and codes.-The insistence upon uniformity and consistency in the work of the catalog department has made it desirable to organize general policies and specific routines into staff manuals and codes. The extent to which a library department should go in listing procedures depends largely upon the size and diversity of the system, the nature of the personnel, and the types and quantity of materials received. The contents of the "Catalog Division Manual" of Montana State University, ${ }^{44}$ for example, include the following topics: analytics, lists of new books, lost books, missing and withdrawn books, receiving books, preparation of cards, cataloging codes, catalogs maintained, author numbers, departmental books, documents, duplicates and revised editions, filing, maps, mechanical preparation of books, Montana State University publications, pamphlets, periodicals, recataloging, rush books, serials, series cards, shelf lists, special collections, statistics, subject headings, and typing rules. An examination of the manuals of other institutions, such as those of Pennsylvania State College, the University of Illinois, the University of Nebraska, and Temple University reveal the extensiveness of the work involved in the catalog departments of large libraries.
In general, it may be said that the department should list the policies of the unit, as well as the routines for specific processes or groups of processes, such as accessioning, inventory, cataloging and classification variations from generally accepted codes and classification schedules, and filing. In recataloging and reclassification special procedures should be recorded in order to insure consistency and efficient administration. Libraries cataloging by the Library of Congress rules may well use a system of recording their variations on cards and interpolating them in their proper places in the Library of Congress rules on cards.

A manual is particularly useful in the catalog department because of the numerous routines involved in its operation. It should reduce to a minimum the need to repeat routine directions, facilitate the training of new assistants, and make available to the administrator and other staff members a statement of policy and procedure.

Measurement of efficiency.-The work of the catalog department may be measured both quantitatively and qualitatively. From a quantitative standpoint, such items as arrears, rapidity of processing materials, and success in obtaining simultaneous mechanical prepa-

[^78]ration of books and reproduction and filing of cards measure the efficiency of the department. The number of titles processed annually may be used to judge roughly the work of the department. Depending upon the definition of "volume," it may be used comparatively. Qualitative measurements may be concerned with the degree of the success users and staff members meet in having the catalog answer their questions or with the success with which the classification system groups books to the satisfaction of stack-users. The need for studies of reader use has been expressed by critics of catalogs and classifications.

Centralization of cataloging may be considered as an indication of co-ordination, particularly if arrears of departmental libraries are kept at a minimum. Centralization, likewise, should result in a complete record of the holdings of the entire system of libraries of a uni-versity-a product which sometimes is not obtained by a decentralization of technical processes.

Many university catalog departments have received considerable criticism, often with some justification, for the delay in processing materials. The delay has generally been attributed to the slowness in the printing and distributing of Library of Congress cards. Heavy reliance upon this distributing center has in some cases hampered the services of a library. A system of arranging books received into date periods has been used effectively in expediting the preparation of items which otherwise might remain in the department longer than the allotted time-which may be placed at two weeks or a month. A "fast cataloging unit," such as exists at Harvard and several other libraries, makes it possible to process additional copies, editions, and continuations immediately upon receipt. Libraries with a Library of Congress depository and printed cards of other libraries can sometimes speed card-manufacturing by reproducing those cards in place of ordering Library of Congress cards. The actual ordering of Library of Congress cards simultaneously with the ordering of books should enable the catalog department to process most books the same day or a day or two after they have been received in the department. This has been particularly true of books published in America during the last five years. The correlated order form, referred to earlier, has been found a useful device for reducing clerical help, establishing uniformity, and eliminating the time lag between the receipt of books and their cataloging. More frequent exchange of cards by libraries which contribute to union catalogs should also
help to speed up the cataloging of materials for which no Library of Congress cards are printed. Under the reorganization of the processing department of the Library of Congress, speedier service in the printing and distributing of cards may be expected. ${ }^{45}$

## SPECIAL ADMINISTRATIVE PROBLEMS

Several administrative problems which have generally been thought of as special because they do not apply to all catalog departments may be considered briefly. These include: accessioning, inventory, assistance in the use of the catalog, reclassification, handling of microfilms and other noncodex materials, and cataloging for special collections and departmental libraries.

Accessioning.-The practice of accessioning individual items varies considerably among libraries. This activity is often performed by the book selection or order department. It may be done by a separate department. The tendency among many large libraries is to abandon accessioning individual items in special books and to keep records of acquisitions by bills and lists. This is the practice at Columbia and at several other institutions. At Chicago the accession records are retained only on the order, official, and shelf-list cards. As a process of the catalog department, the administrator should be interested in reducing accession work to rapid routine, with a minimum of detail. The catalog departments of the libraries of the University of Pennsylvania and Temple University type accession records on standard loose sheets, which are later bound into volumes. Accessioning should be performed by clerical assistants.

Inventory.-Generally, the responsibility for taking inventory is delegated to the catalog department. Sometimes it is shared with the circulation department. Inventories may be continual or may be made at stated intervals.

Inventories usually reveal situations which affect the catalog department and other members of the staff. The administrator must make decisions concerning the withdrawal of cards for books which are missing, stolen, or discarded; suggest replacements with the cooperation of circulation and departmental librarians; and select

[^79]items for rebinding. Inventories may reveal inconsistencies in cataloging and classification which require correction.

Assistance in the use of the catalog.-Assistance in the use of the catalog is usually an activity of the reference department, although it is engaged in by the circulation and catalog departments as well. At California, for example, a member of the catalog department is stationed near the card catalog to advise and help users. However, since the card catalog is a fundamental tool of the reference librarians, it seems that assisting readers should be their task if the duty is formally assigned. Close collaboration between the reference and cataloging personnel should result in the discovery and elimination of difficulties. Any aid the catalog department can render by posting directions or exhibiting samples of entries, such as is given at Cincinnati, Minnesota, Stanford, and Temple, should be valuable in orienting the user.

Reclassification and recataloging.-Little has been said, up to this point, concerning classification as a separate process. It has been assumed to be a part of the general cataloging routine. This, as has been pointed out, is not true in all libraries. Problems of classification, however, may be important to the administrator of the library. The survey committee of the University of Georgia Library, for example, found that the classification in use had been complicated by the adoption of Biscoe numbers. As a result, assistants found it difficult to locate books or to put them back on the shelves when they were returned. ${ }^{6}$ The costs of running the circulation department may thus be higher than they should be normally. In library systems with a number of departmental libraries, classification assumes considerable importance in respect to the physical location of materials. This is particularly true if location is based primarily upon strict adherence to a system which segregates materials by subject classes according to the major interests of the departmental libraries, such as education, psychology, or chemistry.

The need and expense of reclassification are questions which have recurred in academic libraries for many years. Until the Library of Congress classification was formulated and the schedules printed, there was no system that was generally considered suitable for large university and research libraries. Reclassification, therefore, is usual-

[^80]ly associated with a change to the Library of Congress schedules. ${ }^{47}$ Of course, there may be changes within a classification, such as partial reclassification or incidental reclassification resulting from errors or inconsistencies.

Since many academic libraries antedate the Library of Congress classification, they were forced to devise local schemes or adopt some standard system which has proved inadequate. Administrators in these libraries thus have been faced with the problem of reclassifying or of tolerating a situation in which constant revision of schedules, variations, exceptions, and minor reclassifications are necessary. ${ }^{48}$ Partial reclassification, based on a careful study of. use, has been found satisfactory in a few institutions.

The administrator is faced with some very real problems in carrying out a reclassification of his collection. These problems relate to the establishment of sound relationships with administrative officials to insure adequate financial support, the execution of a clearly defined policy of classification and cataloging, the careful planning of procedures and techniques, the control of personnel and materials, the operation of the processes at a maximal efficiency, and the maintenance of all elements of the reclassification project in a state of proper balance with the work of the catalog department and in effective co-ordination with other aspects of service within the library.

The catalog, too, needs constant attention if errors and inconsistencies are to be eliminated. Mistakes in the text of the cards, incorrect cross-references, incorrect use of subjects, and typographical errors are among failures which add to the difficulty of using the catalog. It seems clear that large catalogs require the supervision of a responsible member of the library staff.

Microfilms and other noncodex materials.-The introduction of such materials as microfilms, music, phonograph records, manuscripts, maps, archives, and broadsides into university libraries usually carries with it problems for the administrator of the department. The situation has been clarified to an acceptable degree in the handling of most of the above types of materials. The professional literature on the cataloging of these materials is voluminous, and the

[^81]various methods suggested and employed need not be reviewed at this point.

It should be pointed out, however, that all too frequently administrators and catalogers have lost sight of the user in their preparation of rules for the handling of noncodex materials. Assumptions have been made regarding the approach of the user-either patron or member of the staff-which might prove invalid if systematic studies of use were made.

Special collections.-The maintenance of special collections within a library presents problems for the catalog department administrator in the form of special catalogs, special types of cataloging, and, often, special systems of classification. So far as the historical situation will permit it, the administrator should insist upon uniformity unless it can be shown that special treatment is essential in facilitating use.

Similar problems arise in the handling of materials for departmental or professional school libraries. Many systems provide a complete catalog for each department library, but generally the procedure is to prepare only an author catalog through the central catalog department and permit the departmental unit to make subject and other cards as are needed. Despite this practice, it is probably more sensible to supply only a main entry for the main public catalog and a complete catalog display for the departmental library where the book is located and by whose clientele it will be most used. In recent years more librarians have recognized the values to be obtained by having at least an author union catalog of all library holdings in the central building. Not only is duplication in acquisition kept at a minimum, but patrons are provided with one source of information concerning the entire resources of the library system.

## costs of Cataloging

The problem of cataloging costs has been discussed since 1877. Recently Miller ${ }^{49}$ and MacPherson ${ }^{50}$ have summarized most studies on this problem; so only a brief recapitulation will be made here in chronological form:
1877 Cutter estimated cost of cataloging a volume at 50 cents.
1914 Cataloging test of 17 institutions revealed a range of from 64 to 10 cents per volume.

* Miller, op. cit., chap. iii.
${ }^{\text {so }}$ H. D. MacPherson, Some Practical Problems in Cataloging (Chicago: American Library Association, 1936), chap. vii.

1929 University of California cost survey. Cataloging costs were 65.5 cents per volume.
1930 Mann's ideal library processed books at 25.3 cents per volume.
$193^{\text {. University }}$ of Rochester reclassification study. To reclassify a title, 54.5 cents; to reclassify a volume, 26.2 cents.
1936 Wesleyan University cost study. Reported on basis of 14,461 volumes. When total cost (administration, materials, labor) was included, 90 cents per volume; when only overhead labor and direct labor was included, 70 cents per volume; and when only direct was considered, 66 cents per volume.
1936 Miller study. Findings limited to I university library, 77-4 cents per volume. His cost figures are given in Table 10.
1941 Tauber reclassification study. Range of costs of reclassification in 6 libraries was from 23.4 to 53.1 cents per unit volume.

TABLE 10*
Cost of Cataloging Various Types of Materials in Miller's Test Library

| Type of Materlal Cataloged | Total Laboz Unit Cost |  |
| :---: | :---: | :---: |
|  | Title | Volume |
| New books. | \$1.902 | \$1.385 |
| New serials. | 5.223 | 0.956 |
| Recataloged books. | 1.040 | 0.714 |
| Recataloged serials. | 3.212 | 0.399 |
| Short-form cataloging. | 0.441 | 0.44 I |
| New editions. | 1.262 | 0.655 |
| Added copies... |  | 1.235 |
| Added volumes. |  | 0.279 |

[^82]Filing costs.-In 1934 Currier ${ }^{\text {sx }}$ reported that it cost 80 cents per hundred to file 274,000 cards into the Harvard Library public cata$\log$ of $3,000,000$ cards. There seems to be no question that the size of the catalog raises the costs of filing. Reporting on a symposium concerning union catalogs, Wood and Holcomb ${ }^{52}$ in 1936 indicated that the cost of filing into such tools is approximately $\$ 7.00$ per thousand, depending upon the size of the catalog, number of cards filed, rate of pay, and skill of workers. On the basis of available evidence concerning filing into union catalogs, Merritt concluded that the figure of $\$ 7.00$ per thousand, or $\$ 0.0070$ per card, was a reason-

[^83]able filing cost. ${ }^{53}$ This cost is exclusive of editing. In his test library Miller ${ }^{54}$ found that it cost 50 cents per hundred to file cards into the dictionary catalog; 13 cents per hundred to file into the depository catalog.

Value of cost studies.-Various rough studies of the cost of cataloging, arrived at by dividing the total salaries by the total number of volumes cataloged, have also been made by librarians. It is natural to ask: What is the purpose of these studies of cataloging costs, be they exact, approximate, or rough? The values of cost studies, either of cataloging or of other processes, center about the need of the administrator's knowing the expenditures of certain departments in order to determine which units are functioning efficiently. The knowledge of cataloging costs may specifically enable the administrator to determine whether or not a large gift of books may be processed within the limits of the departmental budget. Moreover, it is evident that funds put into cataloging or other routine processes must necessarily reduce the total sum available for purchasing books or other materials. This does not mean that cataloging has no value. Obviously, service costs of other departments would rise if cataloging and classification were discarded. But the administrator who is interested in an efficient organization will, through knowledge of costs, be in a position to be critical of established library practices, to review routines in relation to objectives, and to consider new ways of doing things.

## UTILITY AND FUTURE DEVELOPMENT

Because card catalogs and cataloging are expensive matters, it is not surprising that considerable attention has been paid to them in library literature. Such matters as the use of the card catalog, selective cataloging, simplified cataloging, co-operative cataloging,s ${ }^{\text {ss }}$ the card catalog versus the book catalog, administrative relations to union catalogs, and effects of microfilms upon cataloging processes are among the topics which have received attention. Each of these matters has implications for the administrator and the chief cataloger of the university library.

Use of the card catalog.-Interest in the use which patrons of the library make of the card catalog has greatly increased in recent

[^84]years. Some individuals who have not thought through all the problems involved in cataloging are willing to abolish the catalog without providing a satisfactory substitute for it. Others wish to reduce it in various ways. But many librarians, noncatalogers as well as catalogers, hold the conservative view that is presented by McColvin, ${ }^{56}$ who notes that the catalog cannot be a scientific tool with its essential cross-references, analytical entries, and other complications of modern practice and at the same time be "understandable by the veriest child." Although written from a public library viewpoint, the statement seems to apply as well to university libraries. But McColvin avoids the basic question of the need of the complex tool.

Mention may be made of four studies which provide some facts regarding the usefulness of subject catalogs and the uses made of them. Kelley, in her study of the subject approach to books, concluded that "of all the material on a subject in a well-made dictionary catalog, one third is shelved under the subject's specific class number, one third appears in the form of analytical entries shelved in the main series, and one third is shelved elsewhere."'s7 The results are calculated on the basis of the number of pages devoted to the subject. Thus it is concluded that the subject catalog supplements classification and that its flexibility makes it a better medium than classification for indicating the subject resources of the library.

Kelley's findings indicate the quantity of material one might expect to find through the subject catalog. They do not indicate what actual use is made of subject entries, nor do they give a clear picture of the proportions of facts involved. A preliminary study of the use of the card catalog is reported by Miller. ${ }^{58} \mathrm{He}$ found that, of 870 patrons interviewed in the libraries of the universities of Colorado, Nebraska, and Wisconsin, 52 per cent used the catalog to locate specific books already known to them, 41 per cent to select books on a given subject, and 7 per cent for bibliographical information. Undergraduate students at the three institutions "used the catalog more as an aid in selecting books on a given subject than did the graduate students." The latter used the catalog mostly for locating books. Quantitative evidence leads Miller to suggest that subject headings might be developed for undergraduate needs and vocabulary rather

[^85]than for graduate demands. ${ }^{59}$ Local conditions, of course, should be considered, for instructional and research programs directly affect the use of library materials. The real reason for the absence of use by graduate students and specialists may well lie in the fact that catalogs which meet special needs are seldom made.

The third study of the use of the subject catalog was made by Knapp. ${ }^{60}$ This investigation had as its objective the classification of the differences between terms used by college students in consulting the subject catalog and the terms actually used as subject headings in the catalog. The data indicate that, for the situation studied, the subject catalog is unsuccessful in achieving its purpose one-third of the time. Analysis of the terminology of students who were unsuccessful in their use of the catalog revealed a pattern of relationship between students' terms and subject headings. Eleven classes of relationship were established, the four most prevalent types of difference being, first, that in which the student used a term more general than the subject heading; second, that in which the student used a specific term rather than a subdivision under a more general term; third, that in which the student looked under the subject rather than the place with a subject subdivision; and, fourth, that in which the student used a term more modern than the subject heading. An interpretation of the classes of difference in the light of principles of subject cataloging indicates that some of the findings do not bear out the assumptions behind these principles.

The fourth study, that by Swank, ${ }^{6{ }_{2}}$ was referred to earlier. His findings in regard to the subject catalog are consistent with those of other investigators in the field.

Thus, librarians are questioning the assumption of the present type of dictionary catalog. It is likely that the future will see active attempts to settle the question of whether the catalog is a finding list or a bibliography or a reference tool, or all three. Moreover, there seems to be no question that the subject catalog has failed to do many of the things librarians have assumed it should do. On the other hand, it has been criticized frequently for things for which it never was intended. The solution to this problem probably lies in

[^86]the area of co-operatively produced subject bibliographies and indexes in conjunction with selective subject cataloging.

Selective cataloging.-Closely allied to the preceding discussion is the question of selective cataloging. In her study of university library catalogs Hitchcock ${ }^{62}$ found that selection was practiced to a considerable extent in subject cataloging. Subject cards were found to be omitted for fourteen types of material in more than half of the 89 libraries which supplied data. These materials included popular fiction, popular periodicals, material with an indefinable subject, material in departmental libraries off campus, pamphlet collections, government document collections, dissertation collections, newspapers, college administrative reports, annual reports of institutions, legislative proceedings, autobiographies, single works in literary form, and collected works in literary form. ${ }^{63}$ The general principle of assigning a subject "to every book with a definable subject" is now qualified by such considerations as use, economy, and uniqueness. To the administrator the problem is to decide whether or not special groups of persons, such as those who use departmental libraries, should be served by the main catalog or by departmental subject catalogs. Hitchcock concludes that small catalogs are more valuable if they are made with the purpose of serving definite readers. There seems to be little doubt that the divided catalog is an attempt to serve different types of catalog users in the general library.

Simplified cataloging.-Simplified, or short, cataloging has been suggested as a means for reducing the cost of cataloging as well as for speeding up the process. In the past it has been the small, rather than the large, library which has omitted certain items from catalog cards. Procedures generally include placing a limit on the amount of time spent in establishing authors' full names and dates, shortening titles, abbreviating collations, limiting the number of subject entries, eliminating bibliographical and other notes, omitting series entries, and not repeating the author data following titles. Conservative librarians frown upon eliminating any information which might have some value to a patron or member of the library staff. Except where literary, historical, or bibliographical reasons justify full treatment, the following types of material may well be cataloged

[^87]${ }_{63}$ Ibid., p. 103.
under short-form rules: mimeographed and other processed materials, elementary- and secondary-school textbooks, juvenile literature and picture books, pseudo-scientific works, minor pamphlets on all subjects, occult literature, devotional works, minor fictional works, dissertations, and minor works of only local interest.

The card catalog versus the book catalog.-The advantages claimed for the book catalog, which was ushered out of existence in the United States by the card catalog, are: great availability, compactness, simplicity, adaptability to co-operative enterprise, and visibility of many items simultaneously. On the other hand, it wears out more quickly than the card catalog; is inflexible, is hard to revise, and is expensive. The proponents of the book catalog, however, are fairly certain that, if it were published co-operatively, cost would not be a disadvantage. In fact, it is claimed that funds would be saved by all co-operating agencies. Difficulties are observed in the fact that there is no central office in the country through which all books flow. While the plan may appear sound on paper, as do some of the other suggestions concerning cataloging by Rider, ${ }^{64}$ it is doubtful whether libraries will soon discard their investments in card catalogs, particularly if the Library of Congress improves and expands its service. Greater aid to the Library of Congress by American libraries which benefit from its services should react to the advantage of the libraries.

Relations to union catalogs.-The development of union catalogs has placed new responsibilities upon a number of university library administrators. Connections with these catalogs carry certain obligations for the library. Notices of accessions and withdrawals should be sent regularly to the union catalogs if the latter are to be efficient tools. On the other side of the ledger, the union catalog can do much in establishing uniformity in cataloging within an area, in furnishing specific information regarding entries to catalogers, and in generally aiding the technical functions of the contributing libraries.

Effects of microfilms.-Some mention has been made earlier of the cataloging of films. However, microfilms may be put to other uses which should be significant to administrators and head catalogers. One is the possibility of filming little-used portions of card catalogs and storing or discarding the original cards. Studies of the use of

[^88]book collections in particular institutions will be necessary if valid criteria for selecting cards for filming are to be established.

## DEPARTMENT OF PHOTOGRAPHY ${ }^{65}$

Before discussing the problem of integrating a laboratory in the university library and providing for its administration, one point should be made in regard to the utilization of films and other methods of reproducing textual materials. The possibilities of mediumlow reductions on paper in multiple editions and of light-sensitive diazo materials for facsimile reproduction-both at extremely low prices-may cause librarians to pause in their haste to equip microphotographic laboratories of the present type. The university librarian who wishes to benefit by the developments in the field of reproducing research materials should examine professional journals and consult with experts in the field before undertaking the equipment of a laboratory.

## ADMINISTRATION OF THE DEPARTMENT OF PHOTOGRAPHY

A primary point which must be decided at the outset in a discussion of a photographic department in a university library is whether or not commercial, rather than institutional, operation will be permitted. The University of Michigan Library, for example, provides film copies through the firm of University Microfilms, at Ann Arbor. Harvard has utilized the Graphic Microfilm Service, Incorporated, in Boston, for much of its film work. Expert professional opinion, however, tends to favor institutional over commercial operation of the department. Experience has shown that, when the institution operates the department, costs are usually lower, orders are filled more promptly, and administrative conflicts are absent. When the commercial laboratory is off-campus, special problems of control arise. First of all, librarians are frequently not willing to loan expensive or rare materials for use outside the building. Further, the separation from the library makes it difficult to check references, secure materials readily, determine immediately whether or not materials are suitable for photography, settle problems of copyright, estimate prices for the work, maintain high quality in work, and supervise the use to which a reproduction may be put.

[^89]Whether or not a separate department for photographic work should be set up depends largely upon the extent and type of work the library expects to do. If the photographic work of the library can be combined with similar work performed by other units of the university, the advantages of consolidation-reduced personnel, less work space and equipment, and lower unit costs of operation and ad-ministration-are gained. In those universities in which photographic units are already existent, such as in the hospitals or scientific laboratories, the better procedure may well be for the library to establish its own department, especially if it intends to be concerned primarily with microphotographic reproduction. It is generally agreed that, whether or not the department is an independent unit or part of a larger photographic division, it should be practically self-supporting after the initial expense for equipment, with the possible exception of costs for administration in whole or in part.

The demand of high standards and quality in library microfilm activity requires that the photographic technicians be reasonably well trained in both the technical phases of photography and the bibliographic aspects of library work. Microfilming has developed so rapidly that the present personnel have been recruited from various fields. University departments have resorted, at times, to the use of student assistants, who, although amateur photographers, have not always performed their duties with the high degree of good workmanship that should be present. Fussler ${ }^{66}$ cites the need for special training of technicians and the present attempts to meet the demand. In order to acquaint librarians, administrators, and others with the many problems that are presented by the development of the microphotographic processes, formal courses in microphotography at the Columbia University and the University of Chicago library schools have been provided. The publication, the Fournal of Documentary Reproduction, and special field courses supported by the Rockefeller Foundation are-likewise devoted to this purpose.

## RELATION TO OTHER DEPARTMENTS OF THE LIBRARY

It should be evident that the photographic department of the library is closely related to the various departments of the library. The circulation department will be concerned with checking records for interlibrary loans, the reference department with checking entries

[^90]and information, and the rare-book and special-collection departments with the loan and physical handling of items. The librarian must establish the policy in regard to the restriction of reproduction, starting special filming projects, and the like.

No doubt the strongest link of relationship exists between the person in charge of interlibrary loans and the head of photographic work. The degree to which this relationship is definitely established will determine the smoothness with which materials may be loaned or borrowed for photographic purposes. According to Fussler, microphotography might well be the technique for servicing several welldefined groups of materials. These are as follows:

1. All rare, fragile, or expensive items
2. All items where the expense of physical shipment will be greater than or equal to the cost of microfilm
3. All material in constant use in the lending library
4. Material from periodical or serial sets where loss would be serious, owing to the break in continuity
5. Items of a few pages, separately or in a large volume
6. Cases where the item is borrowed regularly or where the borrowing library wishes to have a permanent copy
7. Newspapers
8. Instances where the lender would prefer not to loan the original
-9. Thesis and archival material, with certain restrictions ${ }^{67}$
It is important to note that the lending of these various types of materials through the use of film carries further the interlibrary cooperation of libraries. Hitherto much of the material in the above list could not be borrowed through the regular interlibrary lending channels.

The loan of the films themselves raises a question which has not been definitely settled by librarians. There seems to be no doubt, however, that if the item is not expensive to reproduce, the requesting library should purchase a copy rather than borrow the film. The chances of damaging a film in transit or in use are greater than in the case of books. One of the large university libraries recently placed a ban on borrowing films for which there were no master negatives, because of an unfortunate instance of a user blistering a unique copy in the reading machine. If the master negative of a film exists, however, there seems to be no good reason why loans cannot be made. Although each case must be decided upon its own merits, expert

[^91]opinion holds that in those instances in which master negatives are not owned it is probably a wiser policy not to lend the film.

If the department is a separate unit in the library, it should have charge of all routines concerned with orders and accounting. Orders should be taken directly from the public, so that no confusion as to the type of job, costs, and time promised will arise. While the department should collect charges for work, to save annoyance to the patrons, the actual depositing of funds may be done through the li brarian's office.

The actual preparation of the film, for the shelves so that it may be used by the patrons of the library is generally not in the hands of the chief of the photographic work. While he may supervise the inspection of film coming into the library, the cataloging, classification, and shelving of the material may go through the same processes as do books or other items acquired by the library.

The cataloging of film has been given some attention by technical workers. In a special study of the problem it was found that there has been a tendency for librarians to attempt to introduce too much in the way of detail in cataloging film. ${ }^{68}$ Only those items which are absolutely essential to the users and to the staff members should be included. Placement of notes and other items on the cards just because they might be useful to someone in the distant future is scarcely a scientific way of introducing routines. Notes to the effect that the item is a film, that the material was copied from the original, and what the contents of the reels are seem sufficient. One point seems clear, namely, that a centralized catalog of all visual materials owned by the university should be maintained by the main library.

The matter of classifying microfilm makes greater controversy. The assumption is made that films may not be consulted at the shelves, and hence the classification applied to books is not necessary. Since the materials which are not placed on regular shelves are usually secured through the catalog, it seems that a rough classification or serial order is sufficient. Dummies for film copies of books and other items placed in the shelf list may give the scholar a complete approach to all materials on a certain subject.

A university library which operates a photographic department will generally build up collections of both positive and negative films. The negatives are generally to be used, not in reading machines, but

[^92]as a reserve file for the duplication of film either for the particular university library or for individuals and libraries in other institutions. The problem of the storage of properly processed film has probably been exaggerated. Cautions which the university librarian must take in the preservation of film are to provide a storage place free from dust and to maintain in this location a temperature of about $70^{\circ} \mathrm{F}$. and a relative humidity of 50 per cent.

Among the duties of the librarian in the question of microphotography is his responsibility' in the matter of copyright. Fussler, ${ }^{69}$ who has studied this problem carefully, outlined the three main classifications of material to be taken into account under the copyright. These are: ( I ) published materials which are not copyrighted or on which the copyright has expired, (2) copyrighted materials or items on which copyrights have not expired, and (3) unpublished material. The first group, which includes many scholarly and scientific journals and some newspapers, may be reproduced without permission. The second group requires the written permission of the author. An agreement directed at granting greater privileges in the reproduction of materials for scholarly purposes was reached by the National Association of Book Publishers and the Joint Committee on Materials for Research in 1939. ${ }^{\circ}$ Many journals, of course, were not controlled by the National Association of Book Publishers. So far as the third group of material is concerned, common-law copyright prevails, and the scholar runs the risk of suit if he does not learn whether or not both the "ordinary right of tangible property and the incorporeal right of literary property" ${ }^{7}$ are owned by the library.

## BINDING DEPARTMENT

The third major aspect of the technical work of the library is binding. While photography is relatively new, binding has always been a problem, even in the smallest library.

The question of whether or not the university library should

[^93]${ }^{r}$ Legal opinion given in private correspondence to Mr. Herman H. Fussler.
maintain its own bindery cannot be categorically settled. Several of the larger university libraries, such as Minnesota and Rochester, have binderies of their own. Columbia and Temple universities do a considerable amount of pamphlet and small book binding. A few university libraries, such as Chicago, have their binding done by the university press. Most libraries, however, use commercial binderies. In the latter case a binding preparational department is necessary for effective service.

The various advantages which have been claimed for the university bindery in the library may be noted. It has been said that a bindery in the library permits personal supervision and the application of special methods to the needs and conditions of the institution. Moreover, it has been found that financial savings can be made in those institutions in which university binderies are operated. The most significant advantage is the fact that a greater degree of accessibility to the materials which are in the process of binding generally exists. In order to take full advantage of a bindery within the library, several factors need to be considered. In the first place, it is essential that the regular binding load each year amount to several thousands of dollars. For example, the number of volumes bound in the university bindery at Minnesota in 1940-41 was 16,458.22 From 1922-23 to $1940-4 \mathrm{I}$ a total of 211,199 items was bound. ${ }^{73}$ The second essential is adequate quarters for the work. Finally, it is necessary to have an adequate supply of skilled labor. In small towns this is not often possible. If these requirements are met, the librarian may well consider the establishment of a bindery within the library.

Objections to the university bindery arise not so much from disagreement with the advantages cited as from the practical difficulties of obtaining the type of bindery that is effective. The services of reputable commercial binderies have been directed at making the binding problems of university libraries relatively simple. They not only give special attention to difficult binding jobs, but they have formulated standards by which the university librarian can estimate the quality of the product. ${ }^{74}$ If the commercial bindery is within a short distance of the library, it may be more economical to employ it to do the work than to set up an elaborate department. This is

[^94][^95]especially true, as in the case of a state university bindery, when the binding bids are relatively low. When the bindery is near by, personal supervision of the work is possible. The use of a commercial bindery also eliminates the overhead expenses of equipment and materials and the selection, organization, and direction of special personnel.

## MODERN BINDING PRACTICE

Despite the lack of studies concerning many problems of bookbinding and conservation, university librarians today are faced with preserving book collections. If a bindery is maintained, the librarian has the responsibility of securing capable personnel, of providing adequate working quarters, of devising criteria for binding, ${ }^{75}$ of recognizing the different styles of work which should be applied to different types of materials, and of keeping the costs of operation within reasonable bounds.

But whether a library operates a bindery or not, it seems obvious that it will handle its binding problems best by centralizing them in one department. If this is done, the department may be held responsible for all decisions concerning binding, repairing, and discarding materials. The department will also prepare all specifications for binding. To insure adequate service while materials are being bound, it is important that appropriate binding records be maintained. ${ }^{76}$

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## CHAPTERVI

## DEPARTMENTAL ORGANIZATION: SERVICE

THE principal object of the administrative officers and the staffs of the acquisitions and preparations departments of the university library is to enable the service personnel to meet the instructional and research needs of students and faculty members. In a large university library system the provision of service to users is a complex task. It may be achieved in various ways. Service units found in university libraries include the general reference department, the circulation department, the departmental and professional school libraries and reading rooms, the reserve book room, the periodicals department, the serials department, the rare book room, and the extension department.

## REFERENCE SERVICE

The term "reference service" in libraries has not been defined with sufficient clarity to be universally accepted. Possibly it may be described by referring to those activities performed by members of the reference department for the benefit of students, faculty members, and other clients of the library. For the reference librarians these activities or duties are of a twofold nature; they involve: (1) assistance to students and faculty members in becoming acquainted with the scope and character of libraries and publications and (2) instruction of the clientele in the most effective methods of using library materials and facilities. If this dual function is to be performed effectively , the administrator should give careful attention to the organization of reference work; the place of the reference department within the service program of the library; the qualifications, responsibilities, and duties of the reference personnel; and the apparatus of teference service.

## ADMINISTRATIVE ORGANIZATION

In university libraries, reference service may be provided by (i) a central reference department in a general library building or (2) decentralized departments either within the central library building or in separate departmental libraries on or off the campus. In most
instances, service through both agencies is offered. The predominant type of organization, however, as was pointed out in chapter iv, is the centralized system with a minimum of departmental libraries. Proponents of centralization have argued that a central reference department, equipped with a well-qualified personnel and an adequate collection of bibliographical and reference tools, is in a more favorable position to offer effective reference service than is a system of scattered departmental libraries. Actually, the central reference department in the average university library is rarely equipped with the personnel or reference works to give the complete service claimed for it. For one thing, the reference materials of the subject fields contained in departmental libraries are not conveniently available to the staff or clientele of the central reference department unless there is expensive and virtually complete duplication. For another, universities are unwilling to duplicate personnel having specialized knowledge of the various fields of literature both in the branch libraries and in the central reference department. Given the choice of placing a good chemistry librarian having familiarity with chemical literature, the average administrator will place him in the chemistry library rather than in the central reference department. Other advantages which have been claimed for the central reference service have been noted in chapter iv. It was especially pointed out that it is more economical from the standpoint of building needs, equipment, book stock, administrative cost of operation, and total personnel; but it also gives the faculty members and students the opportunity to use, in one place, materials in fields which definitely overlap in subject matter. The fact, however, that a strong case can be made for subject departmentalization indicates that conclusive generalization cannot be made concerning this controversial matter until extensive data have been systematically gathered and analyzed. It may be said, at this point, that in larger university libraries languages and literatures tend to remain in the central building, whereas the literature of science, technology, and the professions tends to be dispersed among branch libraries. This is true at Columbia, Chicago, and Harvard and at the universities of California, Texas, North Carolina, and Michigan. It may be the course of natural library development. It conforms to the assumption that materials in fields which definitely overlap in subject matter are best kept together, inasmuch as workers in the fields first mentioned generally use materials in adjacent fields, whereas workers in the sciences,
technologies, and professions tend to restrict themselves pretty much to their own literature.

General readers' department.-The consolidation of all services to the reader under one supervision has been effected in some large university libraries (see Fig. 4a). In its most comprehensive aspects and on a theoretical basis a co-ordinated readers' department would include all units which serve the reader or circulate materials. Such a department would include an assistant librarian as head, with divisional heads in charge of circulation, reference, special collections, and branch or departmental libraries. The circulation unit would include the loan desk, reserve book room, recreational reading room, stack control, information desk, rental l brary, dormitory libraries, and fraternity libraries. The reference unit would include the reference desk, interlibrary loan service, exhibits, and periodicals. The special-collections unit would include documents, newspapers, pamphlet files, rare books, and archives. The branch or departmental libraries unit would include the botany, chemistry, education, law, and medical libraries. On a less extensive and more practical basis, it would comprise only the reference and circulation units. In library systems in which there is considerable departmentation (i.e., a series of special departments and departmental libraries), it should be apparent that unless some centralized supervision is provided the resulting service will lack unity. Since each special subject department and departmental library performs a reference function, the range and quality of service will depend largely upon the qualifications of the personnel responsible for integrating the reference collection and the resources of the library as a whole.

The assistant librarian in charge of readers' services should be an able administrator, sensitive to the clients' problems in using a large research library. The assistant director in charge of readers' services at Columbia, for example, has been assigned three groups of responsibilities: (i) to superintend and promote the development of the collections of the libraries (except special collections), (2) to superintend and promote the improvement of the services provided those authorized to use the libraries; and (3) to serve as the "line officer' in charge of readers' services-that is, as an intermediate link in the line or chain of authority between the director of libraries and the heads of the departments which make up the division. It is clear that in order to perform on a high level he should have exten-
sive knowledge of modern library organization, procedure, and policy, particularly as they relate to the administration of a complex university library system having departmental and professional school and college libraries under the control of a central library. He should be able to work with faculty members and research workers, understand fully the problems of scholarship and research methodology, and possess a good knowledge of the objectives and procedures of higher education.

Reference department.-Since the prevailing type of reference organization in the university library consists of the general reference department, supplemented by the services of special departments and departmental libraries, it may be considered in detail. Variations in this type of organization occur in relation to building conditions, the amount of departmentation, and the personnel available. The general reference department of the University of California Library, for example, includes the large reading room; the periodical room; space on three stack tiers housing serials, perodicals, newspapers, pamphlets, and United States documents; and the map room.

The central reference department integrates reference functions and methods throughout the library system, in the main building, and in the departmental libraries. Its activities, of course, are likely to involve those of other departments, since reference work is necessarily related to book selection and the preparation and circulation of materials.

Except in the very largest organizations, the head of the reference department is likely to have fewer administrative duties than the heads of other departments of the library, such as the catalog and circulation departments. His general administrative duties, however, are similar to those outlined in chapter iv.

The activities of the reference librarian have been discussed by such writers as Wyer, Hutchins, and others. ${ }^{\text { }}$ The routines may be conveniently grouped about the two major functions of the reference department-namely, (I) making resources available and (2) instruction. In the first category such routines as the following may be included: building up the reference collection; maintaining a clipping and pamphlet file; exhibiting materials for publicity or for public

[^97]information; preparing new book lists and bibliographies; preserving university ephemera; compiling lists of faculty publications; providing materials through interlibrary loan service or photography; suggesting items for purchase; reviewing books; indexing materials; cooperating with union catalogs; and amassing information regarding library resources of the region, nation, and foreign countries. In the second category the reference librarian is concerned with helping students and faculty members to use the catalog and reference tools in preparing special bibliographies, in supervising readers, and in teaching.

Personnel.-The special qualifications of the reference librarian and his staff should be determined largely by the functions which the department is to perform. Not only should the reference librarian possess the training and experience for departmental heads as outlined in chapter iv, but he should have a thorough knowledge of reference procedure. This calls for a wide knowledge of reference tools and other materials. He should be able to use efficiently card catalogs, bibliographies, book lists, indexes, dictionaries, encyclopedias, and abstracts. He should have a thorough knowledge of the aims of library service; he should understand the principles and procedures of library organizaton; and he should be able to integrate these effectively with the educational objectives and procedures of the university. Familiarity with foreign languages, extensive knowledge of foreign literatures, appreciation of the history of scholarship, understanding of the methods and spirit of research, and knowledge of the educational program and research program of the institution are likewise indispensable for the reference librarian. In addition, he should be able to bring his varied abilities to bear upon the solution of the problems of students and faculty members; and since his work is so closely related to that of students and faculty, he should possess teaching ability of a high order. This teaching differs somewhat from that of the classroom instructor. The reference librarian's teaching activities are confined largely to a man-to-man instructional relationship on an informal and limited, rather than on a formal and systematic, basis.

Research and the reference librarian.-Since it is taken for granted that furthering research is a function of the university, it follows that the library should have an important role in the process. While service to undergraduates occupies an important, though often neg-
lected, ${ }^{2}$ place in the functions of the university, such service is of secondary importance.

Despite the fact that university libraries have introduced numerous devices and procedures to help the scholars locate the materials they need, in many respects the service afforded them by libraries has been haphazard. Librarians have been cognizant of this deficiency in integration, and several aspects of the relation of the library to research have been considered. Three suggestions for increasing qualitatively the service that might be rendered to scholars may be cited.

The first was made by Noé $^{3}$ in 1934 . He suggested that a bibliographic research department be established in the university library that would concern itself with assembling library catalogs, reviewing journals and regular book lists, and recording the location of bibliographies in books and other publications. The personnel of the division would be well qualified in special subject fields and able to command the respect of scholars and research workers. They would engage not in the preparation of the more obvious, superficial type of bibliographies, such as might be prepared by the usual type of reference department, but in guiding and advising the investigator and in indicating to him the relationships of knowledge and data likely to be overlooked by the specialist in a narrow field. In this role the bibliographer would serve as an aid to the scholar in the humanities and social sciences in a manner comparable to that of an assistant to the scientist in the physical and biological sciences.

A second plan for integrating and unifying academic research was carried out in 1932, with the aid of the Carnegie Corporation, at Cornell and Pennsylvania. ${ }^{4}$ In three instances, research librarians were selected to assist scholars through the library as the "logical place for the specialist to find a relating and fusing influence."s Although Borden and Noé both admit the usefulness of the reference department as usually constituted in the typical university library, it does not provide, in their estimation, the carefully planned and directed service which can be made available by the special bibliog-

[^98]rapher or research librarian. The busy reference librarian is not usually equipped to carry on the prolonged research necessary to solve complex problems. Moreover, the research librarian will concern himself with investigation of problems which involve primary and documentary sources. To perform well the tasks demanded of the research librarian, Borden ${ }^{6}$ suggests that a certain frame of mindthe ability to concentrate on a problem for a long period-is fundamental. On the basis of his three years' experience at the University of Pennsylvania Library he was convinced that service of this character is practical and that, by conserving the time and energy of creative workers, the research librarian is in a position to make a valuable contribution to scholarship.

A third suggestion for aid to the scholar was made by Hurt ${ }^{7}$ in 1935. Concerned with the growth of departmental libraries and the cost of maintaining them, Hurt suggested that staff specialization should be stressed as a way of giving efficient service economically. He held that by these means the effectiveness of the general library could be preserved. Assuming that special librarians become familiar with the materials in their special fields through constant association with them, Hurt insisted that other members of a library staff could acquire special knowledge of the literature of a subject by systematic study. It is important, of course, to distinguish between the knowledge of a subject possessed by a scholar and the knowledge of the literature of the subject and of the resources of the library possessed by the special librarian. The special librarian should have gained considerable familiarity with the subject of his specialization through his previous undergraduate or graduate training, or he should take additional courses ${ }^{8}$ in the field after he has entered it.

The procedure for acquiring specialized knowledge of the literature of a subject as outlined by Hart is not dissimilar to that often employed by reference librarians in mastering an unfamiliar subject field. The procedure involves securing a topical outline of the subject content of the field, briefly considering the principal encyclopedic works, examining all guides to the literature of the field, preparing a

[^99][^100]basic list of textbooks and treatises devoted to the entire field and examining selected titles, studying materials on the special aspects of the field, noting the sources of printed materials, familiarizing one's self with the periodical and serial literature, considering the pamphlet and ephemeral material, studying thoroughly the reference works, observing publications appearing in related fields, and learning the trends of research in the subject. ${ }^{9}$ In examining any item in the literature of the field, it has been suggested that critical evaluation be applied regarding the extent and nature of the field, its significance to the subject, and its possible use. There is no question that many reference librarians follow some of the procedures mentioned. It can hardly be claimed, however, that many librarians approach the study of the literature of a subject in the systematic manner outlined by Hurt. Rarely does the entire professional staff of a library equip itself as a group of specialist-librarians who are capable of offering a high level of service to research workers in all the subject fields covered by the departments of a large university.

If service to scholars and research workers is a primary function of the university library, it is apparent that a careful consideration of means to improve this service is essential. The routine reference or readers' advisory service is not sufficient. The university librarian, by carefully selecting the members of his staff and encouraging systematic study of literatures of subjects, can build up a type of service which many research workers fail to find in most libraries.
A note of caution should be added. Admirable as is Hurt's plan for specializing the staff in research service, attention should be called to the administrative problem created by any extensive following of the plan. Presumably, staff members in the catalog and order departments and in other nonservice areas would be involved. Any considerable invasion of their time for work other than that to which they are assigned would disrupt the careful planning of their departments. For example, it would be difficult to carry on a cataloging program at a normal rate if, from time to time, members of the catalog department were pulled out for a day or several hours a day for reference work.

Reference collections.-Despite the existence of an intelligent and resourceful reference personnel, service on both an informational and research level will not be fruitful unless a well-selected and adequate collection of tools is assembled. Dictionaries, encyclopedias, com-

[^101]pendiums, yearbooks, indexes, bibliographies, atlases, and similar materials constitute the basic types of materials which reference librarians use in their work. It should not benassumed, however, that the reference librarian is restricted to the use of any particular type of material in his service to patrons. Graphic materials of many kinds, not only on the immediate campus but in all near-by and distant libraries, may be called upon to meet the demands of the scholar. Although any book at any time may be used from a reference point of view, the stock-in-trade of the reference librarian includes items of the type noted above. The works of Mudge, ${ }^{10}$ Minto, ${ }^{11}$ Shores, ${ }^{12}$ and Hirshberg ${ }^{23}$ indicate the extensiveness of the basic literature which the reference librarian requires to carry on an effective service. In chapters $x$ and $x i$ a detailed discussion of the whole range of library resources and methods of integrating them is presented.

## CIRCULATION DEPARTMENT

The circulation department is a unit of the public service of the library. In the university library the lending of materials to readers is not carried on exclusively by the general circulation department. Like reference service, the work is divided among the central loan department, the reserve department, the departmental libraries, the periodicals department, and other units of the library. However, in the traditional type of university library the greatest percentage of loans will be made through the central circulation department. ${ }^{14}$ The functions and organization of this type of department will be considered in the following paragraphs.

## ADMINISTRATIVE ORGANIZATION

If the circulation department is a part of the general readers' department described in the preceding section, the head of the depart-

[^102]ment is directly responsible to the chief of the larger unit. For example, the loan department of the University of California Library is under the supervision of the associate librarian, who has charge of the public departments (Fig. I6). At the University of Illinois Library, the loan department is a separate unit, directly responsible to the director of libraries (Fig. 17). This is the more typical arrangement in university libraries.

Just as in other departments of the library, centralization of authority is necessary if a uniform lending policy is to be established throughout the library system. Nothing seems to be more annoying to students and faculty members who use various departments and

## ORGANIZATION OF THE LOAN DEPARTMENT OF THE UNIVERSITY of California library



Fig. 16
branches of a library than to find dissimilar hours of opening, borrowing privileges, lending periods, and fines. Sometimes, however, particularly in the interest of economy, service hours are bound to vary. Whereas a main building or a very active branch library may be open continuously or approximately fourteen hours a day, most branches may easily close for meal hours or may eliminate evening hours. To open them then would mean a waste of money. Loan periods should be adjusted to the need and demand for materials and should be as flexible as possible. Borrowing privileges and fines should, of course, be uniform throughout the different units.

It is to be observed that local conditions affect the type or number of units controlled by the circulation department. At the University of Chicago, for example, interlibrary lending and borrowing are activities of the reference librarian. At Illinois, lending is a responsibility of the loan department, while interlibrary borrowing is an activity of the reference department.

## FUNCTIONS OF THE CIRCULATION DEPARTMENT

The primary function of the circulation department is to get materials to the reader expeditiously. In America quick service is the rule. Foreigners visiting American libraries are frequently astonished by the fact that a reader may be presented with a volume two or three minutes after he handed the call slip to the attendant at the loan desk. Because of the multitude of tasks that require prompt and efficient performance, it is relatively easy for librarians to consider such activities as speedy circulation as the only objective of the loan department rather than as a means for achieving the main pur-

## ORGANIZATION OF THE LOAN DEPARTMENT OF THE UNIVERSITY OF ILLINOIS LIBRARY



Fic. 17
pose of the university library, namely, the promotion of the instructional and research program of the university. There is also the danger that certain aspects of the library service will be overlooked or neglected because of the failure to outline specific progsams or procedures. Instances of this sort, particularly in connection with rec-ord-keeping in university libraries, will be discussed later in this section.

Brown and Bousfield, ${ }^{55}$ in their careful study of circulation work in college and university libraries, point out that the work of the circulation department is not restricted to quick delivery of reading matter to the library clientele. In addition, the loan assistants may give assistance and instruction in the use of the card catalog and reference works, aid students in selecting books, and stimulate in-

[^103]dividual reading interests. When a university loan department has control over the reserve book room, rental library, browsing room, interlibrary loan, and similar activities, it is not difficult to conclude that various assistants in the unit will be concerned with some duties which are commonly allotted to the reference department. The loan desk itself, however, will be concerned primarily with the delivery of materials to readers. Precise delimitation of activity is difficult in the large university library, but experience in most libraries indi- . cates that it is in the best interests of the user to refer him to the reference department on questions which involve search.

Routines.-A concrete illustration of the activities performed by a university circulation department may be found in the staff manual of the University of California Library. These activities are as follows:

1. To circulate books for home or library use to faculty and students and to keep records of all books so circulated
2. To circulate books from the General Library collection to other departments of the Library, and to the departmental and branch libraries, and to keep record of such charges
3. To supervise the stack and shelve all books therein
4. To take inventory once each year of the General Library collection
5. To keep record of all lost or missing books and to arrange for replacement or withdrawal
6. To handle correspondence pertaining to overdue books and to prepare and send to comptroller, for collection, bills for fines for failure to return books when due
7. Interlibrary loans:
a) To conduct correspondence with other libraries dealing with both borrowing and loaning of books
b) To collect and prepare for shipment books requested by other libraries
c) To issue to individuals books which have been borrowed for their use from other institutions
d) To keep record of all borrowing and loaning transactions
8. To issue special library privilege cards and stack permits
9. To sell rental coupons ${ }^{16}$

It will be observed that Brown and Bousfield raise the level of the circulation librarian's work from mere routine to a level of administration and instruction. When circulation work is carried on at this level, it is important that the personnel of the circulation department be carefully selected.

Personnel.-The qualifications necessary for the chief circulation librarian are similar to those required of other departmental heads. In addition to knowledge of books, reference tools, and library or-

[^104]ganization, he should be acquainted with the special procedures and problems of circulation work. He should have the ability to direct large-scale, co-operative work within the central library and the other units of the library system.

Because the contacts of faculty members and students with the library are frequently largely confined to the circulation desk, it is important that the professional, clerical, and student assistants recognize the strategic importance of their position. The circulation staff not only should be able to get along well with people but should meet the students and faculty. members pleasantly. Such qualities as initiative, good judgment, tact, orderliness, accuracy, good memory, adaptability, sense of humor, and patience are necessary in any phase of librarianship; but they are particularly significant in loan work.

Division of work.-Often the bases for the division of duties of staff members of the circulation department are the working schedules of the assistants and the amount of time needed for the tasks. In an efficient organization a clear distinction is made between professional and clerical duties. Canova, in a study of the division of duties of the circulation departments of four western universities, found that there was no clear pattern of professional duties (Table in). In one of the institutions all the duties were performed by a combined clerical and student staff.

It should be noted that the point of view of Brown and Bousfield in their Circulation Work may be considered by some librarians as that of the specialist who tends to seek expansion and honor for his specialty and is not justified either by logic or experience. Indeed, it may be argued that the functions of a loan department should be limited to the delivery of books, the record-keeping relating thereto, and the clearing of records on the return of loaned books, leaving even stack maintenance to a separate unit and assigning all informational work of the clientele to, say, an information desk managed by the reference department. This depends on the class of personnel available, economy, and the kind of administrative organization used. This extreme may not be an example of good organization; but it is possible that, as libraries increase in size and volume of work, the tendency will be in this direction rather than in the direction recommended by Brown and Bousfield. However, it represents administration at a stripped-down, housekeeping rather than at a teaching level.

TABLE 11*
The Circulation Department: Organization of Duties


[^105]Efficiency of service.-Prompt delivery of materials to readers on request is the principal service required of the circulation department. A measure of efficiency of the department used by surveyors of libraries is the proportion (in percentage) of deliveries and reports of locations (in other units of the library system) to the total number of requests. ${ }^{\text {r7 }}$

Routines for checking of "snags," or unlocated books, are important if the library is interested in giving effective service to its users. The universities of Nebraska, North Carolina, Michigan, and Texas have reduced the checking to a careful routine. In the library at Ne braska, ${ }^{18}$ for example, when a book is not located at the time of a request, a record is made and placed on a "snag spindle." The search for the item, after the call number is checked against the shelf-list cards, includes rechecking the shelves, stacks, returned-book shelves, new-book shelves, and the tray for new-book cards. In addition, the closed reference shelves, circulation files, special shelves at the loan desk, and the inventory and bindery files are searched. Definite attempts are made to notify the unsatisfied patron of the whereabouts of the missing book, and if the item is found at a later date he is notified. It should be apparent that the circulation department should maintain close relations with other units of the library if efficient service is to be provided.

Regulations.-Policies concerning the use of books will be decided by the librarian and the circulation librarian. Most libraries permit books to circulate to students for two-week periods. Some current books of special interest circulate for three or seven days; rare books generally are not permitted to leave the library; reserve books circulate for a fixed period, for overnight, or for slightly longer periods. Faculty members and graduate students are usually given special privileges as to the length of time they may retain books. Library staff members are likely to be given the privileges accorded faculty members, unless this interferes with the service to the patrons. In some institutions, library staff members and university employees are given loan privileges similar to those granted students.

The librarian should be aware of faculty abuses of lending privi-

[^106]leges. In recent years there has been a tendency to re-examine the practice of lending materials to faculty members for indeterminate periods. The fact that many books are lost and hundreds of others are made inaccessible by faculty members' infrequent return of borrowed books has been the occasion for this new attitude. The procedure generally has been to require each faculty member to return all the books he has out at the end of a certain semester or quarter. Renewals are permitted to instructional staff members who still require the volumes. The act of returning the books for a checkup, however, usually results in the relinquishment of a large proportion of the titles held by faculty members. Some abuse of $\mathrm{l}_{\mathrm{i}}$ brary privileges occurs when faculty members stock their personal libraries or office shelves with borrowed books. This practice becomes serious when libraries place no limitation on the number of books which may be held by faculty members at one time. A library policy which strives to meet the needs of the majority of its clientele will correct this abuse without diminishing service to the instructional staff.

Fines.-In order to make the greatest number of books available to the greatest number of students and faculty members at all times, a system of fines is generally employed in libraries. Three studies of practices and regulations concerning fines may be noted.

In 1933 Baber ${ }^{19}$ found many variations in rates and rules among 24 college and university libraries. He questioned the practice of permitting a fine to become fixed in amount after it reached a figure equal to the price of the book involved. This practice is said to have the effect of granting a reward to the extensive violator but assessing the full penalty upon the moderate violator.

Stokes surveyed 53 land-grant college and university libraries in 1938 to find solutions other than that of assessing fines for reducing violations of lending rules. ${ }^{20}$ The majority of the librarians were of the opinion that no other solution would be as satisfactory. Four of the librarians relied upon disciplinary measures by the librarian, dean, or student body instead of fines.

A survey of 2I university libraries ${ }^{21}$ showed that fines ranged from
is C. P. Baber, "Fines Findings," Library fournal, LVIII (1933), 485-90.
${ }^{20}$ Katharine M. Stokes, "Land Grant College Fines Survey," Wilson Bulletin, XII (1938), 512-13.

[^107]two to five cents a day for each overdue book. "About two-thirds of the libraries set a limit to the amount of the fine . . . .; the limit of half of these is the value of the book. Other limits, such as one dollar and fifty cents, are apparently arbitrary." Fines on reserve books, which circulate usually only on an overnight basis, generally are greater than those assessed on books in the general collection. Faculty members are usually not subject to the fine regulations of libraries. Exceptions are sometimes made in the case of books not required in instruction and research.

Effective administration of the overdue problem requires close co-operation between the librarian and the dean, registrar, and bursar or comptroller. These officers are not appealed to until the library has exhausted its own procedures. Delinquencies that reach maturity during the progress of a quarter may be adjusted through the office of the dean. The office of the registrar, however, may prove more effective; but it can act only at the close of one quarter or at the beginning of another. The registrar may withhold grades, transcripts, certificates, or degrees from delinquent students. He may also refuse enrolment to such students until they have settled their delinquencies. Some libraries turn over delinquent accounts to the business office for collection. This may result in much petty bookkeeping unless the office has adopted the punched-card method for all its records. Where business offices have installed these modern bookkeeping machines, libraries are likely to report all uncollected fines at the end of each week or month. These are entered on the students' accounts and collected with other bills due the university. In some instances where this is done, a service charge of from twenty-five to fifty cents is added to cover the cost of collecting the fine. Actually, this penalty is considered an extra incentive to pay fines promptly. A practice, reported by Stokes, which seems to effect a saving of routine, is that of giving a discount for cash payment at the loan desk when a fine is incurred.

## OTHER CIRCULATION SERVICES

Reserve book room.-Fundamental changes in teaching methods in colleges and universities which involve class reading in many books rather than in a single textbook have made necessary certain restrictions on the use of books in order that all students of a class may have equal access to them. At first, books which were in constant use were placed on a restricted shelf at the loan desk and circulated for a lim-
ited number of hours. As this collection of books grew, special facilities were needed to house the books and to provide reading space for students. Plans for new library buildings generally include special rooms to meet this need, which are designated "reserve book rooms." The reserved books may be "open" or "closed." The open reserves are usually kept on shelves which are directly accessible to students. Closed reserves are supervised by staff assistants, and students withdraw books by filling out call slips. Frequently, closed reserves are loaned for stipulated time periods, such as two hours. The assumed advantages for closed reserves are that the books are more equitably distributed to students and that a more careful control is exercised than under a system of open reserves. However, it is a more expensive system to operate.

Certain disturbing practices have grown up in connection with the reserve book room and present an important administrative problem. In a symposium ${ }^{22}$ on the reserve book system which outlined practices from about 20 university libraries, it was found that at least two problems were common to all libraries: (I) an increasing reserve book collection which overcrowded the available shelf space, and (2) a lack of understanding on the part of professors as to the real purpose of the reserve system.

Efforts to secure the understanding and co-operation of the faculty are usually made. It is customary, at the beginning of the academic year, for the librarian to send a letter to each faculty member stating the rules concerning reserve books and asking for the professor's cooperation in handing in his list sufficiently early for the book to be placed on reserve and for necessary records to be made.

Surveys of the actual use of reserve books have been made by many libraries; and when the statistics have been shown to professors, their co-operation in limiting the number of books placed on reserve is usually obtained. Coney ${ }^{23}$ made such a survey of the University of Texas. The figures in Table 12 reveal that a high percentage of books placed on reserve for special courses remain unused. They also show that copies were unnecessarily duplicated.

Certain books in which long assignments are made or which are recommended for optional reading are usually loaned for a period

[^108]of two or three days. Open-shelf reserves are, of course, preferable; but in an undergraduate room they are impractical unless there is close supervision of students at the exit.

In the large university library, provision is often made for divisional reading rooms for the use of graduate students and upperclassmen. In these graduate reading rooms most of the books are on open reserve. The criterion for open or closed reserves is the specific assignment within a limited time. An assignment might be made to a certain number of pages in a book, but the time allowed so great as to permit the book to remain on open shelves. On the other hand, a whole book may have been assigned for reading within the semester, but so many people may have put off using it as to require it to be restricted toward the end of the semester.

TABLE 12
Use of Books on Reserve, University of Texas Library

|  | No. | Percentage |
| :---: | :---: | :---: |
| 1. Copies on reserve. | 7,060 |  |
| Copies unused. | 2,133 | 30.2 |
| 2. Titles on reserve | 3,198 |  |
| Titles unused | 544 | 17.0 |
| 3. Courses with books on reserve. | 148 |  |
| Courses with some unused books | 125 | 84.4 |
| 4. Instructors using reserve. ......... | 97 |  |
| Instructors with some unused books. | 79 | 8 I .4 |

Books in the reserve room may be arranged either by course number in the curriculum or by author and title of the book. Many professors favor arrangement by course number because it enables them and their students to see all of the titles reserved for their courses at one time. However, many books may be recommended in a number of courses, and the same title may be needed by more than one class. The usual arrangement is by author of the book. An author list, usually on cards, is kept of all books on reserve. This straight author list may be supplemented by a list of the books by course number.

The number of assistants needed to administer the reserve book room depends on the number of students to be served and the number of books kept on closed reserve. For the undergraduate reserve room it is usually not considered necessary to place a trained librarian in charge, especially if the room is under the general supervision of a competent loan librarian. It is unwise, however, to leave an isolated reserve room in charge of clerical assistants unless the staff in-
cludes persons of maturity of judgment and considerable experience in the library system in which they work. Immature and inexperienced personnel with a high turnover rate is unsatisfactory even with some skilled supervision from the main loan desk. This is true because too much of the necessary knowledge of activities is lost in the turnover and too little good judgment is present in dealing with faculty and students concerning various loan and disciplinary regulations and other small but sometimes irritating problems which arise in reserve rooms. Proper administration of divisional and graduate reading rooms requires the services of a trained librarian or a subject specialist.

Book stacks.-Efficient operation of the book stacks is essential if good service is to be provided. In some of the larger libraries a superintendent of the stacks, usually responsible to the head of the circulation department, has a number of important duties. These include obtaining books from the shelves for readers, shelving returned books, arranging books on the shelves at regular intervals, supervising the cleaning of books and shelves, participating in inventories, removing damaged books for the bindery, assisting readers, and generally maintaining discipline among users in the stacks. In many instances student assistants are used for some of these tasks, especially those concerned with locating and arranging books. The superintendent of the stacks should have administrative ability, a keen sense of orderliness, and the ability to get along well with faculty members, students, departmental heads, and other staff members.

Rental collections.-Rental libraries supplement the general library book collection with books needed for class work and also with general books for recreational reading. In view of the enormous demands made on university libraries for sufficient books to cover the curriculum, several large libraries, including the University of Washington and the University of California, maintain rental collections in connection with the reserve book room. The rental collection at the University of Chicago was removed to the university bookstore in 1929. Cards for these books are filed in the public catalog in the general library.

Other rental libraries may consist mainly of current books of general interest. Columbia University maintains such a collection for use not only of the students but also of the families of faculty members.

Browsing rooms and dormitory and fraternity libraries.-Provision for some type of browsing room is usually found in the plans of new library buildings. Older libraries have also made provisions for recreational reading. At the new University of Oregon Library the browsing room has been placed conspicuously in the front central portion of the first floor of the building.

Experience has demonstrated that if browsing rooms are to be successful devices for developing good reading habits among college students, the books assembled in them should be well selected and should be allowed to circulate. The most effective browsing rooms are usually supervised, and a readers' advisory service is made available to the students. Strategically placed near the circulation desk, the browsing room can be easily supervised. Moreover, such an arrangement makes materials easily accessible to passing students and faculty and presents an element of spontaneity that is often lacking in formal browsing rooms located in the less-used portions of the building. Administratively, the browsing room is generally under the supervision of the circulation or reference librarian.

Dormitory and fraternity-house libraries are fairly common in university libraries. Books housed in dormitory libraries are generally the property of the university, whereas the fraternity libraries are frequently owned by the organizations. In a number of institutions, such as Harvard, Chicago, and Oregon, dormitory or house libraries are supplied with books and equipment through the central libraries. If any supervision of these types of libraries is provided, generally it is student assistance. Books are sometimes charged not only to the dormitories and residence halls but also to individual students for a school term. These books are usually of a popular nature, though the collections at Chicago and Harvard include books for the support of curricular work.

## DOCUMENTS DEPARTMENT

The importance of government publications in university libraries is discussed in some detail in chapter xi, "Book Collections." Few university libraries maintain a separately organized documents department. ${ }^{24}$ In most cases, documents represent a form of material handled by the major departments-acquisitions, catalog, circulation, and reference-of the library. However, at the universities of

[^109]Colorado and Iowa and at Stanford and Northwestern separate departments have been established in order to give special service to users. At Colorado both federal and local documents are shelved in a single room. Instead of the documents being cataloged, they are arranged and shelf-listed according to issuing office. Access to the collections is made through the printed catalogs, indexes, and bibliographies. This procedure has been found to be satisfactory and has made it possible to acquire and make available quickly and economically some 30,000 documents annually. Moreover, the proponents of the separate documents department claim that more effective service can be provided in this way because the librarian of the unit becomes thoroughly familiar with the contents of the collection and handles the materials in it as a specialist. When the documents department is set up separately, it is generally concerned not only with the care of the materials but also with their acquisition and the supervision of their use. Their cataloging and classification are generally left to the catalog department.

Attention should be called to the inevitable need for some classes of documents in departmental libraries. It is easily conceivable that documents would be more frequently used if they were not segregated but placed with collections of like materials. This practice is followed, to a considerable extent, in every library where the Bureau of Standards publications are put in the chemistry, physics, or engineering libraries or the U.S. Office of Education publications are put in the education library. If planned and carried out consciously, this procedure should benefit the user and increase document use. However, it would limit the activities of the independent document unit to the handling of the little-used material and the central record of acquisitions. It may be observed, too, that the value of familiarity, so useful in document reference work, is decidedly reduced if the document staff consists largely of assistants of clerical rank.

## PERIODICALS DEPARTMENT

It is more usual to find a separate periodicals department in a university library than one devoted solely to documents. However, the administration of periodicals is generally associated with the circulation or reference departments, even though a separate room is provided for housing current publications.

The separation of periodicals work from other services rests upon the assumption that more effective service may be given in this way.

The factors which warrant the establishment of such a unit are similar to those outlined in the preceding section on documents. The routines of periodical librarians are well defined and may be listed as follows:

1. Receiving, recording, and stamping periodicals acquired by the library
2. Distributing periodicals to the current reading room shelves or to departmental and professional school libraries
3. Claiming missing numbers; returning imperfect numbers
4. Keeping necessary records and statistics
5. Developing periodical procedures
6. Checking exchange lists
7. Examining periodicals and rendering reference service in connection with them
8. Maintaining exhibits
9. Preparing periodicals for binding

To insure effective service in periodicals work in a university library, the personnel in charge must know the role which learned journals play, as well as the best methods necessary for their care and use. A thorough acquaintance with periodical indexes and bibliographical tools and the ability to read titles in foreign languages are indispensable.

## SERIALS DEPARTMENT

Many documents and all periodicals may be described as "serials." Other serials include society transactions, continuations, yearbooks, and similar materials. In university libraries these publications represent an important unit of the collections. They require special administrative attention if they are to be acquired systematically, processed quickly and cheaply, and made available for reference use.

In a recent report of a survey of the acquisition and handling of serials in university and public libraries, it was concluded that the best solution to vexing problems relating to serials lies in the complete centralization of functions. ${ }^{25}$ Centralization of serials was recommended on the grounds that (1) the work may be more efficiently performed where the records are kept, (2) trained serial workers would be available, (3) overdepartmentalization would be eliminated, (4) duplication of records would be eliminated; (5) duplication of materials would be minimized, and (6) service to readers would be generally improved. ${ }^{26}$ Thus, the selection, acquisition, cataloging,

[^110]classification, binding, shelving, circulation, and reference work regarding serials would be concentrated in one department. These claims fit in with the general principle of administration that, when a certain type of work becomes extensive enough to warrant the handling by specialists, it is advisable to isolate the work in a special unit.

The important problem is to determine when such specialization is necessary. The major question is whether an office of record should also be an agency of service. The administrator should be cautious in adopting any policy which necessitates the establishment of duplicate departments, such as acquisitions and catalog departments. But because serials possess certain distinct peculiarities, it is justifiable to consider the possibility of separate handling.

Since a subscription to a serial usually represents a permanent charge against the budget, it is understandable that the selection of serials may be a more serious matter than the selection of books. Only infrequently does a library discontinue a subscription to a serial. Selection may be concerned with first orders, renewals, and purchase of back volumes. Renewals are made more or less automatically, especially if there has been no reduction in the budget. Back volumes are generally acquired as they appear on the market at acceptable prices. University libraries are probably more concerned with purchasing back volumes than are either public or college libraries.

The acquisition procedures involve first orders, renewals, ordering of back numbers, follow-up, checking, and claiming. Since the ordering of serials does not differ materially from the ordering of books, it should be done in the order department. Orders for back numbers may issue from the bindery department. It is important that the division of labor on this matter be flexible. The serials division or the bindery department should also be held responsible for acquiring back issues.

Although a separate serials department may catalog and classify the materials handled by it, this practice is not general. The serials department of the New York University Library is an example of a unit which catalogs and classifies its materials. Despite the irregularities in frequency, imprints, collation, editors, mergers, absorptions, births, deaths, and headings which occur in serials, these facts in themselves are probably not sufficient for removing the cataloging from the general catalog department. A special serial-unit in the general catalog department may be equally as effective.

Libraries vary in their policies of classifying documents, periodicals, and other serials. Apparently, such factors as the size of the collection, the type of materials, the amount of indexing available, and the relative searching ability of students and faculty members determine whether or not close classification of serials should be introduced.

It has been argued that the reader is best served when he is able to obtain in one place all serials, whether they are bound, unbound, or current. Casford ${ }^{27}$ found that in 40 libraries which she surveyed, current issues were administered by the periodical or serial department in 20 libraries; by the reference department in 6 libraries; and by special departments in $1_{4}$ libraries. The distribution of bound serials was even more varied. Although many libraries do not allow serial materials, particularly bound periodicals, to circulate, a tendency has been noted in research libraries to be more flexible in the application of this rule to these materials.

Serial departments may also be given the responsibility of preparing materials for binding. This is particularly true where there is not a separate binding department. Assembling materials for binding obviously requires consultation of the various records of the serials department. Consequently, it is not unusual to find much of the work of preparing material for binding done by serials assistants.

Reference service of the serials department involves giving specific information on serials through consultation of trade bibliographies, directories, union lists, and similar tools; guiding readers to find facts that can be obtained in periodical articles; aiding in the preparation of bibliographies; and providing assistance, in the use of indexes and abstracts. These services are identical with those usually offered by the reference department of a university library. It is even likely that reference librarians who are acquainted with the entire range of reference works are in a better position to give general service than are those persons whose knowledge of reference tools is concentrated in a few titles. This fact is recognized at the University of California Library, and the same assistants work at both the serials desk and the reference desk. Physical conditions, of course, will be a determinant of how extensive consolidation of functions may be.

It may be observed from this discussion that it is difficult to state

[^111]categorically whether a separate serials department is desirable or not for a particular library. It should be borne in mind, nevertheless, that conditions may be such that a separate unit may be advantageous, from the standpoint of both service to readers and administrative efficiency. The mere fact that serials departments have been established in a few libraries is an empirical indication, at least, that centralized responsibility may provide a satisfactory solution to the problem of handling a complex group of library materials.

## LIBRARY EXTENSION DEPARTMENT

Library extension service, like other informal services offered by universities, has generally been developed in response to public demand. Faced with the inadequacy of library facilities in extensive rural areas, a few institutions of higher learning have realized for more than thirty years that many citizens would have little access to printed materials unless they were furnished directly by them. This need, combined with the demand for library materials required in their general extension programs, has led these institutions to provide some form of library extension service. As a result, these universities are supplying large quantities of printed materials to numerous individuals and groups.

Library services have followed, generally, the development of university extension work itself, beginning with furnishing materials for formal credit and noncredit courses on the subjects offered on the campus and gradually expanding to furnish materials for informal educational services. At present these include programs which involve lectures; forums; conferences; radio broadcasts; institutes; contests; publications; advisory assistance to groups; vocational guidance; promotion of study programs; assistance in community organization; informational, advisory, and demonstration services in public health; community recreation; child welfare; dramatics; music; art; and visual education. ${ }^{28}$ It is obvious that the university library or some agency for the distribution of printed materials is a vital link in such activities. While private institutions have joined in such activities, extension of informal education has been primarily the function of the tax-supported state institution.

[^112]
## OPERATING EXPENSES

In state institutions the greater portion of the funds for library extension comes from the general appropriation for the university and is allocated to the library extension division. In private institutions the grants may come from the general budget, or in some cases from special funds. Funds to offset a part of the operating expense may also be secured through sales of study outlines, from fees for the loan of books or package libraries, and from charges for transportation. At North Carolina funds from these sources have at times represented as much as 50 per cent of the total operating costs.

## AREA SERVED

Library extension service provided by state institutions is generally limited to the state in which the university is located. Private institutions are restricted only by the funds available for extension service. By means of the interlibrary loan, often indistinguishable from the library extension service, any university library, public or private, can and does cross state lines with its extension services. Reading lists and study outlines are frequently sold to individuals and groups outside the state.

## ORGANIZATION OF EXTENSION SERVICE

The organization of library extension service varies from university to university. Usually the extension division is responsible for it. In this case, a special bureau or department of the division usually, but not always, performs the work. At the University of Wisconsin, the department of debating and public discussion of the extension division, and at the University of Kansas, the bureau of general information, are responsible for library extension service. In some universities the work is divided among two or more bureaus. In others, generally those in which the service is not highly developed, no special bureau or department has been set up for it. In a very few institutions, a division of the state library agency located at the university provides the service. At the University of Texas the extension division operates what it calls the "package loan library," which lends pamphlet material and magazine articles to borrowers throughout the state. The various teaching departments of the extension division maintain informal library collections and services operating through the instructors. The state library has no part in this. The following discussion, however, deals with those institutions in which library service is given and supervised by the university library. The
universities of Colorado, Michigan, and North Carolina are examples of this kind of organization.

## FACILITIES AND RESOURCES FOR LIBRARY EXTENSION

The library extension division usually possesses a special collection which includes many different types of materials, such as package libraries, plays, pamphlets, documents, motion pictures, photographs, slides, prints, phonograph records, study outlines, readings, recitations, posters, and charts. It may also have the privilege of drawing on the whole university library for materials. Generally, campus needs take precedence over off-campus requests, and only those materials that are not in demand for course work on the campus may be sent out as extension loans. Difficulties are encountered when the same courses are given on the campus and by the extension division at the same time. Sorenson ${ }^{29}$ has pointed out how the lack of library facilities has hindered effective extension teaching.

## SERVICES OF LIBRARY EXTENSION DEPARTMENT

Books for courses.-The provision of books for courses conducted off campus is one of the primary functions of the library extension division. Lack of adequate library facilities is a definite handicap to effective extension teaching when courses are held in communities that have poor local library service. In some institutions the resources of the whole library are made available to extension students but with the stipulation that any materials in demand for courses on the campus shall not be sent to classes or students off the campus. It is obvious that particular care should be taken to see that there is no conflict in needed materials.

Package libraries.-The package library is one of the most common devices used for library extension service. It is a simple device for supplying pertinent material on topics of current interest to individuals or groups. It consists of a collection of material on one subject, assembled from various sources and made up of clippings, pamphlets, documents, and other ephemeral materials. Social, political, and economic problems, international affairs, literature, and art are topics most frequently represented. Lists of topics on which material is available are usually published. In 1940-41 the University of Michigan Library published a list of over 625 topics. It is also cus-

[^113]tomary for some library extension divisions to make up libraries on almost any subject requested to meet the requirements of individual or groups. Other divisions limit their services to specific fields.

In addition to these general package libraries, some institutions supply collections on special subjects. Indiana University conducts a package medical library service, and Iowa State College sends out material on engineering and industrial subjects.

Reading courses and lists.-The provision of reading courses and lists is regarded as a type of informal instruction which goes beyond the mere provision of printed materials. The reading course is a short introductory presentation of a specific field with suggestions for further study. Extension divisions using this device generally rely on the "Reading with a Purpose Series" or on the U.S. Bureau of Education reading courses. A few, with the assistance of the faculty, prepare and publish their own reading courses. ${ }^{30}$ Indiana University has prepared about fifty courses, on such topics as American self-government, American democracy, and similar subjects of general interest. These reading courses are either loaned or sold. They have also been organized into more or less formal courses with reports of reading sent in to the university, with certificates issued on completion.

Provision of reading lists is another form of extension service. Such lists may vary from complete bibliographies to short lists on current topics. By collecting large numbers of printed lists and supplementing them by preparation of lists on subjects not covered, the library can meet any demand for guides to reading.

Study outlines.-Study outlines are quite similar to the aforementioned reading courses but differ in that they are prepared for use by groups in studying economic and social problems or cultural subjects. They suggest aspects of the subject that should be studied in detail, and they recommend printed materials to help in the preparation of articles on the various phases of the subject. Some institutions prepare and publish such outlines for the use of clubs and local societies. Publications of this character have been issued by the University of North Carolina since 1916 and now number more than one hundred.

Drama and related materials.-Plays, readings, recitations, orations, pageants, operettas, and information concerning staging, cos-

[^114]tuming, lighting, and makeup are frequently made available to teachers and directors of dramatics through library extension service. Some libraries also maintain extensive collections of plays which are loaned for reading or for performance. The University of Denver Library extension service has a large collection of low-royalty plays suitable for production by amateurs in schools or little theaters.

Information and reference service.-Some university library extension agencies provide reference and information service for persons who have limited library service or who are entirely without such service. The resources and facilities of the library are placed at the service of residents in such areas. In some instances the response made to a request for information may be answered through a reference to a publication that can be found in a local library. Other requests may involve extensive investigation and the sending of several publications. Several universities provide reference service in special fields. The University of Minnesota maintains a municipal reference bureau which supplies information on problems in the field of government, and Iowa State College supplies technical information and engineering advice on municipal and industrial problems.

Debating materials.-Much of the material mentioned under the heading of package libraries contains printed materials useful for high-school and other debating teams. But some libraries make up special collections on subjects used by debating teams. The University of Michigan, for example, collects material for the yearly debating subject of the Michigan High School Forensic Association.

Alumni.-A responsibility which many university libraries have assumed is service to alumni. This service appears in various forms: (1) full use of the library-either entirely free, upon payment of a fee, or upon a returnable deposit; (2) distribution of reading lists, compiled either by members of the library staff or members of the instructional staff; ${ }^{3 x}$ (3) direct loan service, at the transportation expense of the alumnus; (4) loan service to alumni through interlibrary loans to public libraries; and (5) rental library service, ranging from three to five cents per day, exclusive of the time necessary for mailing the books.

Of increasing importance to the university library in its relationship to alumni is the growth of friends-of-the-library groups. Predominant among the friends in many of these groups are alumni,

[^115]who, appreciating the services of the university library, are willing to help it expand its program. Of the 409 members in the Society of Friends of New York University in 1939, 90, or about 22 per cent, were alumni. In other groups the percentage of alumni is higher.

Services to other libraries.-Universities in areas in which general library service is poorly developed are frequently called upon to aid local libraries by sending books for use by local readers. While such services may be handled by the interloan department of the university library, it is usually handled by the library extension division. Such services are particularly needed in the South and in the West.

## CO-ORDINATION OF EXTENSION SERVICES

It is apparent from the foregoing discussion that university library extension service has reached many groups of people. It is also apparent that this service has not been closely co-ordinated with other local, university, or state-wide libraries or related services. ${ }^{32}$

As a preliminary to making university extension library service more effective, its functions should be restudied and reorganized in the light of new groups to be served and of the possibilities of cooperation with other agencies. Since it is evident that such service is of a supplementary character, its relation to public libraries, public schools, parent-teachers organizations, and other local agencies for the promotion of urban and rural health and public welfare should be studied and developed in accord with their interests as a co-operative whole. The university extension agencies should also restudy their functions in relation to the extension divisions of land-grant colleges, the state libraries or other state library extension agencies, and other university and state organizations that maintain statewide service. No single agency can supply all the library service of the locality or state. In Wisconsin, Van Male has shown that, although there are six state agencies which supply library service, it is still inadequate. ${ }^{33}$ It is only through co-operation of the various agencies that the needs of the communities can be met.

## SUMMARY

In order to perform the functions of the university library, most institutions have organized their activities into departments. These

[^116]activities may be categorized under two major headings: (i) technical processes, including acquisitions and preparations; and (2) 'service. Local conditions largely determine which type of organization is most effective for a particular library. However, it behooves the university librarian to study carefully the departmentalization of his institution in order to arrive at efficient groupings of related activities. Because of the lack of systematic studies in both the preparational and service operations of the library, practice has been built up almost entirely on an empirical basis.

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## CHAPTERVII

## PERSONNEL: TRAINING AND SELECTION OF THE STAFF

WHILE a university library is an organization which promotes educational and scholarly pursuits, it is at the same time a human organization in which the hopes and aspirations of staff members seek expression. Since this is true, the library administrator has two functions to perform: (1) he has to acquire and organize books, periodicals, and other graphic materials and see that they are made easily available to students, faculty members, and other members of the university clientele; and (2) he must maintain an administrative organization in which a sufficient number of appropriately qualified workers may serve the clientele effectively and at the same time attain a maximum of professional development and satisfaction.

As may have been observed from the discussion in the preceding chapters, a great deal of attention has been devoted by university librarians to the first function. New ideas in book selection, cataloging, classification, and circulation and reference work have been proposed, studied, and subjected to experiment. Little consideration, however, has been given by them to the second function. This has been true even though great progress has been made in recent years in the study and clarification of personnel problems and administra-tor-employee relations in other fields, such as business, industry, and government.

University library staffs are generally not so large as groups of workers in business, industry, or government, or even in large public libraries. Yet problems of personnel management in university libraries are present and are constantly growing in scope and complexity. In fact, there is probably no area of university library administration in which more acute problems arise than in that of personnel management, because of institutional tradition; undue influence of members of the board of governors, administration, and faculty in controlling appointments; the tendency of university libraries to attract local residents, with good general education but no library
training, to unclassified positions at low salaries; and the failure of universities to establish well-conceived pay plans and retirement systems for the library staff. It is the purpose of this chapter and the next to consider some of these problems under eight major headings: (1) the nature and size of the staff, (2) training, (3) selection of staff members, (4) the measurement of staff effectiveness, (5) salaries, (6) hours of service, (7) professional development of staff members, and (8) staff relations. Topics $1-4$ will be considered in this chapter and topics $5-8$ in chapter viii.

## NATURE AND SIZE OF THE STAFF

TYPES OF WORKERS
The history of university libraries reveals considerable change in the nature of library staffs, as well as a progressive growth in their size. In order to meet the demands made upon the university library by increased book collections, by greater numbers of students and faculty members, and by additional services, the employment of large and varied staffs, many of whose members are specialists in limited fields of librarianship and scholarship, has been required.

The list of officers and the organization charts of university libraries included in chapters ii and iv suggest the different types of workers usually employed in the operation of the university library. They further suggest that the organization of the university library is very complex and that staff members may be classified in various ways.

In European libraries the members of the university library staff, together with members of the staffs of national and other major scholarly libraries, have usually been classified in three groups: (1) the scientific or superior service, (2) the middle service, and (3) the lower service. ${ }^{x}$ Head librarians, experts in charge of major departments, and subject specialists constitute the first group; the main group of professional workers constitute the second; and clerical workers and other nonprofessional workers the third. Specific types of training are prescribed for the three services.

In the United States the emphasis in classification has not been so definitely fixed. Usually two categories have been indicated: (1) professional workers; and (2) nonprofessional or clerical, and others. The American scheme, when reduced to graphic form, may be represented as follows:

[^117]General Classification Professional

Firat Expansion
Professional Administrative

Technical

Research

Instructional

Non-professional, or cler- Clerical ical and other

Other

Second Expansion
Professional
Administrative
Librarian
Assistant librarian
Departmental heads
Special librarians
Technical
Order librarian
Catalog librarian
Research
Reference librarian
Periodical librarian
Special librarian
Instructional
Reference librarian
Circulation librarian
Reserve book librarian
Clerical
Secretaries
Typists
Filers
Other
Routine workers (students, etc.) in all departments, janitors, and cleaners

There is a close relation between the systems of "ranking" of workers in libraries and the type of work they perform. In a few library systems, such as those of the University of California and Columbia University, schemes of grading are used to distinguish certain classes of personnel. The California and Columbia systems, which typify schemes in a state university and in a private university, respectively, are as follows:

## University of California <br> Ranking System of Library Staff <br> PROFESSIONAL

1. Administrative officers (librarians and assistant librarians)
2. Heads of departments
3. Chiefs of divisions and branch librarians
4. Librarians-senior grade
5. Librarians-junior grade
[^118]NONPROFESSIONAL
6. Clerical assistants

NONPROFESSIONAL
6. Senior clerk
7. Junior clerk
8. Assistant clerk
9. Senior page
10. Junior page

In the section on training of staff members, presented later in this chapter, workers are classified under the major rubrics of "professional" and "nonprofessional." In the first group are included chief librarians, assistant librarians, departmental heads, departmental or special librarians, and senior and junior librarians. The second group consists of "subprofessional" and clerical workers, including searchers, typists, filers, pages, and various other workers.

Precise systems of classifications of professional and clerical workers are devised as bases for personnel procedures and provide a con-: sistent pattern for action on matters involving appointments, promotions, salary scales, vacations, sabbatical leaves, and other privileges. It should be observed that the distinctions, when directly related to types of work, are not always so discrete as, for example, the distinction between the tasks of a physician and those of a nurse. It is not unusual to find that activities which have been classified as professional in one library are regarded as nonprofessional or clerical in another. ${ }^{3}$

Job analysis is a relatively new procedure in American libraries. However, it is likely to become more prevalent in the future; and doubtless it will be included in university, as well as in other types of, libraries. It should be basic to any system of personnel classification or pay plan. The Subcommittee on Budgets, Compensation and Schemes of Service for Libraries Connected with Universities, Colleges and Teacher Training Institutions of the American Library Association Board on Salaries, Staff and Tenure is currently engaged in the preparation of classification and pay plans for libraries in institutions of higher education. In its present draft ${ }^{4}$ it reflects the absence of validated research, but it marks a step forward in the movement to differentiate between types of work and service.

[^119]
## SLZE OF STAFP

Table 13 shows the growth in the size of the staffs of 25 university libraries from 1925 to 1940. The question of how large the university library staff should be can be answered, of course, only in terms of the specific institution involved. Attempts have been. made, how-

TABLE 13*
Growth in Size of Staff in 25 University Libraries, 1925-40

| Institution | No. of Stapr Members |  | Increase | Percentage of Increase |
| :---: | :---: | :---: | :---: | :---: |
|  | 1925 | 1940 |  |  |
| Brown... | 21 | 54 | 33 | 157 |
| California | 47 | 80 | 33 | 142 |
| Chicago. | 99 | ror | 2 | 2 |
| Columbia. | 86 | 283 | 197 | 230 |
| Cornell. | 22 | 45 | 23 | 105 |
| Harvard | 106 $\dagger$ | 169 | 63 | 59 |
| Illinois. | 57 | 126 | 69 | 130 |
| Indiana. | 11. | 22 | - II | 100 |
| Iowa. . . . | 47 | 53 | 6 | 13 |
| Johns Hopkins. | 23 | 41 | 18 | 78 |
| Kansas. | 18 | 21 | 3 | 17 |
| Michigan. | 93 | 138 | 45 | 48 |
| Minnesota | 49 | 126 | 77 | 157 |
| Missouri. | 21 | 29 | 8 | 38 |
| Nebraska. | 23 | 30 | 7 | 30 |
| North Carolina. | 17 | 33 | 16 | 94 |
| Northwestern. | 21 | 74 | 53 | 252 |
| Ohio State. | 33 | 67 | 34 | 103 |
| Oregon. . | 19 | 24 | 5 | 26 |
| Pennsylvania. | 61 | 89 | 28 | 46 |
| Princeton.... | 57 | 69 | 12 | $2{ }^{1}$ |
| Stanford. | 34 | 58 | 24 | 70 |
| Texas. . . . . . . . | 30 | 53 | 23 | 77 |
| Washington (Seattl | 16 | 38 | 22 | 137 |
| Yale. . . . . . | 68 | 163 | 95 | 140 |

[^120]ever, to show that the size of the staff bears a definite relation to the number of volumes added annually, the number and types of students and faculty members served, the teaching and research programs of the university, the number of departmental libraries operated, the number of service desks maintained, and the nature of the internal organization of the library. The evidence indicates that all these factors are involved in determining the size of university library staffs. It hardly seems necessary to add that the financial condition of the institution and the interest of the university adminis-
tration in library service are basic factors in determining the number and quality of staff members ultimately provided.

An examination of the sizes of the staffs of 50 large college and university libraries reveals that 53 per cent of the libraries have less

TABLE 14*
Size of Staffs in go Large College and
University Libraries in 1940

| Size of Staff (Persons) | No. of Libraries | Percentage |
| :---: | :---: | :---: |
| 22I-40. | 1 | 2.0 |
| 201-20. | 0 | 0.0 |
| 181-200. | 0 | 0.0 |
| 工6ı-80. | I | 2.0 |
| 141-60. | 1 | 2.0 |
| 121-40. | 0 | 0.0 |
| 101-20. | 3 | 6.0 |
| 8I-100 | 1 | 2.0 |
| 6r-80. | 3 | 6.0 |
| 41-60. | 14 | 28.0 |
| 21-40. | 13 | 26.0 |
| 1-20. | 13 | 26.0 |
| Total. | 50 | 100.0 |

[^121]TABLE 15
Slee of Professional Staffs in go Large College and UNIVERSITY Libraries in 1940

| Size of Staff (Persons) | No. of Libraries |
| :---: | :---: |
| sor-200 or more. | 1 |
| 8I-100. | 2 |
| 6r-80. | 2 |
| 41-60. | 4 |
| 21-40. | 19 |
| 1-20. | 22 |
| Total....... | 50 |

than 40 staff members, 84 per cent have less than 80 . Table $1_{4}$ shows a distribution of the libraries by size of staff.

When the staffs of these same libraries are broken down into professional and nonprofessional workers, it is found that 82 per cent of the libraries have less than 40 professionals and 44 per cent less than 20 (Table 15). In these 50 libraries the range in the size of the total staffs is from 15 to 231.8 persons (Table 16). The range of professional workers is from 8 to 114.4, and the median size total staff is 66.6 .

TABLE 16*

## Ratio of Professional to Other Types of Workers

 IN 50 UNIVERSITY LIBRARIES| University Libzaries | Stayp |  |  |  |  |  | Percent- <br> age or <br> Total <br> Teat Are <br> Profes- <br> sional |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Professional | Subpro-fessional | Clerical $\dagger$ | Administrative Office Assistants | Other | Total |  |
| Louisiana. | 41.0 |  | 1.0 | 1.0 | ....... | 43.0 | 95.3 |
| Syracuse. | 35.0 |  | 1.0 | 1.0 |  | 37.0 | 94.6 |
| Oregon State | 21.88 |  |  | 1.5 |  | 23.38 | 93.5 |
| Pennsylvania State | 24.0 |  | 1.0 | 1.0 |  | 26.0 | 92.3 |
| Colorado. . . . . . . . | 20.0 | 2.0 |  | 1.0 |  | 23.0 | 87.0 |
| Kansas. | 17.0 | 1.0 | 1.0 | 1.0 |  | 20.0 | 85.0 |
| Kentucky | 14.0 | 1.0 | 0.5 | 1.0 |  | 16.5 | 84.8 |
| Arkansas. | 15.0 | 1.0 | 2.0 |  |  | 18.0 | 83.3 |
| Illinois. | 94.5 | 5.0 | 15.0 |  |  | 114.5 | 82.5 |
| Iowa. . | 43.5 | 4.0 | 3.5 | 2.0 |  | 53.0 | 82.1 |
| Missouri. | 24.0 | .... | 4.0 | 1.0 | 1.0 | 30.0 | 80.0 |
| Oklahoma | 12.0 | 2.0 |  | 1.0 |  | 15.0 | 80.0 |
| California (Los Angeles)... | 35.0 |  | 9.0 | 1.0 |  | 45.0 | 77.8 |
| Michigan...... | 88.5 | 7.0 | 10.5 | . . . . . . | 9.0 | 115.0 | 77.0 |
| Joint University Libraries. | 26.5 | 5.0 | 2.5 | 1.0 |  | 35.0 | 75.7 |
| Oregon.. | 20.74 | 4.75 | 2.5 | 1.0 |  | 28.99 | 74.0 |
| Nebraska. | 19.5 | 4.0 | 1.0 | 1.0 | 1.0 | 26.5 | 73.6 |
| North Carolina. | 26.5 | 15.25 | ....... | 1.0 |  | 42.75 | 72.0 |
| Indiana: | 12.0 | 5.0 |  |  |  | 17.0 | 70.6 |
| California | 53.5 | 2.34 | 19.5 | 1.0 |  | 76.34 | 70.0 |
| St. Louis Univ.. . . . . . . . . | 11.5 | 3.5 | 1.5 | ..... |  | 16.5 | 69.7 |
| Washington (St. Louis).... | 11.0 | 1.0 | 1.0 | 1.0 | 2.0 | 16.0 | 68.8 |
| Georgia. . . . . . . . . . . . . . . | 18.0 |  | 8.0 | 1.0 | . ..... . | 27.0 | 66.7 |
| Maryland. | 12.0 | 4.0 | 2.0 |  |  | 18.0 | 66.7 |
| West Virginia | 8.0 | 5.0 | 1.0 | 1.0 |  | 15.0 | 66.7 |
| Texas...... | 34.38 | 9.25 | 5.75 | 1.0 | 2.0 | 52.38 | 65.5 |
| Notre Dame | 11.0 | 1.0 | 4.0 | 1.0 |  | 17.0 | 64.7 |
| Wayne. | 11.0 | 4.0 | 2.0 |  |  | 17.0 | 64.7 |
| Chicago | 63.425 | 25.35 | 6.0 | 1.5 | 2.0 | 98.275 | 64.5 |
| Duke.. | 35.0 | 14.0 | 9.0 |  |  | 58.0 | 60.3 |
| Southern California. | 30.0 | 6.0 | 3.0 | 1.0 | 10.0 | 50.0 | 60.0 |
| Northwestern | 25.0 | 9.0 | 9.0 | 1.0 | 1.0 | 45.0 | 55.6 |
| Temple. . | 18.0 | 5.64 | 3.77 | 1.0 | 4.0 | 32.41 | 55.5 |
| Iowa State. | 17.0 | 7.0 | 7.0 | 1.0 | .... | 32.0 | 53.1 |
| Cincinnati. | 17.0 | 6.0 | 10.5 | 1.0 | 1.0 | 35.5 | 50.7 |
| Wesleyan. | 10.0 | 2.0 | 3.0 | 1.0 | 4.0 | 20.0 | 50.0 |
| Columbia. | 114.4 | .... |  | ..... | 117.4 | 231.8 | 49.4 |
| Rochester. | 21.0 | 5.5 | 12.5 | 1.0 | 3.0 | 43.0 | 48.8 |
| Utah. . . . . . . . . . . . . . . | 12.0 | 2.0 |  |  | 11.0 | 25.0 | 48.0 |
| Washington (Seattle) . . . . | 32.0 |  | 21.5 | 1.0 | 14.0 | 68.5 | 46.7 |

[^122]TABLE 16-Continued

| Univensity Libearies | Stary |  |  |  |  |  | Percent age oy Total That Aze shonal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Professional | $\begin{gathered} \text { Subpro- } \\ \text { fes- } \\ \text { sional } \end{gathered}$ | Cleri- | Administrative Office Assistants | Other | Total |  |
| Princeton. | 32.0 | 2.0 | 28.0 | 3.0 | 4.0 | 69.0 | 46.4 |
|  | 72.0 | 29.0 | 21.0 | 7.0 | 28.0 | 157.0 | 45.9 |
| Brown. | 24.34 | 5.0 | 18.34 | I. 0 | 5.0 | 53.68 | 45.3 |
| Catholic. | 8.0 | 9.0 | 2.0 |  |  | 19.0 | 42.1 |
| Pittsburgh | 19.0 |  | 26.5 |  |  | 45.5 | 41.8 |
| Virginia. | 23.0 | 9.0 | 21.0 | 2.0 |  | 55.0 | 4 4 .8 |
| Dartmouth. | 24.0 | 10.5 | 11.5 | 1.0 | 11.0 | 58.0 | 41.4 |
| Pennsylvania | 21.0 | 23.0 | 6.0 |  | 6.0 | 56.0 | 37.5 |
| New York | 34.0 |  | 74.0 | 2.0 |  | 110.0 | 30.9 |
| Harvard. | 51.8 | 38.48 | 49.0 | 5.0 | 24.17 | 169.45 | 30.5 |
| Median. |  |  |  |  |  |  | 66.6 |

In an effort to show the present practice in regard to the relation of certain factors to size of professional staff, Table 17 has been prepared. In this table are shown the number of professional assistants in the principal departments in 39 university libraries, with comparative figures for book stock, annual expenditures for books and periodicals, student enrolment, and number of faculty members. Although a rough measure of staff adequacy may be found by institutional comparison, a formula based on student enrolment and number of faculty has been tentatively suggested by the Board on Salaries, Staff and Tenure of the American Library Association. ${ }^{5}$ In discussing the staff organization it was suggested that not over 60 per cent of the total number of staff positions, and not less than 40 per cent, should be clerical or nonprofessional. ${ }^{6}$

## TRAINING OF THE STAFF

The effective administration of a university library calls for the steady application of experience and training to complex academic and technical problems. It likewise demands the pursuit of definite lines of action which conform to the needs of the university community and which are capable of being followed continuously or readily readjusted as conditions require. Because administrative decisions may be expected to have consequences long after the individuals who

[^123]TABLE 17*
Professional Assistants in the Principal Departments of 39 University Libraries, with Comparative Figures for book Stock, Annual Expenditures for Books and Periodicals, Student Enrolment, and faculty Members

| University Library | Boor Stoce | Annoar Expinditures yon Boors and PeriodiCals | Stodent Enroligent |  |  | Faculty <br> Meubers | Professional Stafy |  |  |  |  | Total ExPLOYEES (FullTinct EquivaLENT) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Undergraduate | Graduate | Total |  | Order | Catalog and Classification | Reference | Circula- <br> lation, <br> Includ- <br> ing Re- <br> serve | Total |  |
| Columbia | 1,715,263 | \$144,818 | 2,844 | 11,429 | 14,273 | 3,012 |  |  |  |  |  | 231.8 |
| Harvard. | 4,159,606 | 105,158t | 3,574 | 4,805 | 8,379 | 1,984 | 3 | 27.63 | 4.0 | 2.0 | 36.63 | 169.24 |
| Yale. | 2,219,642 | .95, 18It | 3,171 | 2,573 | 5,744 | 979 | 6 | 26.0 | 6.0 | 7.0 | 45.0 | 157.00 |
| Michigan | 1,098,197 | $138,823 \ddagger$ | 9,634 | 2,464 | 12,098 | 773 | 10 | 16.0 | 13.0 | 9.0 | 48.0 | II5.00 |
| Illinois. . | 1,217,675 | 135,1897 | 11,712 | 1,469 | 13,181 | 2,011 | 17.5 | 25.5 | 5.0 | -13.75 | 61.75 | 114.50 |
| New York | 592,041 | 58,945 | 11,808 | 7,112 | 18,920 | 1,340 | 2 | 6.0 | 3.0 | 2.0 | 13.0 | 110.00 |
| Chicago. | 1,300,785 | 86,809 | 3,420 | 3,324 | 6,744 | 901 | $4 \cdot 3$ | 16.5 | 2.0 | 2.5 | 25.3 | 98.03 |
| California | 1,08x,151 | 99,779 | 13,236 | 2,963 | 16,199 | 1,956 | 7.5 | 14.5 | 7.0 | 13.5 | 42.5 | 75.34 |
| Princeton. | 959,645 | 52,385 | 2,415 | 299 | 2,714 | 403 | 4.0 | 10.0 | 0.0 | 5.0 | 19.0 | 69.00 |
| Washington | 452,644 | 24,948 | 8,709 | 985 | 9,694 | 657 | 4.0 | 6.0 | 10.0 | 6.0 | 26.0 | 68.50 |
| Duke..... | 600,235 | 119,078 $\ddagger$ | 2,687 | 296 | 2,983 | 514 | 3.0 | 10.0 | 0.0 | 2.0 | 15.0 | 58.00 |
| Pennsylvania. | 934, 150 | 52,141 | 5,970 | 2,230 | 8,200 | 1,608 | 0.0 | 10.0 | 2.0 | 1.0 | 13.0 | 56.00 |
| Iowa. . . . . . | 473,238 | 38,699 | 5,431 | I, 225 | 6,656 | 728 | 6.0 | 8.5 | 2.0 | 5.0 | 21.5 | 53.00 |
| Texas. . | 639,732 | 87,917 | 9,472 | 726 | 10, 198 | 4883 | 1.0 | 6.0 | 1.5 | 1.5 | 10.0 | 52.38 |
| Pittsburgh. | 191,048 | 27,926 | 3,776 | 3,518 | 7,294 | 69 x | 0.0 | 4.0 | 2.0 | 1.0 | 7.0 | 45.50 |
| Northwestern | 637,795 | 76,487\% | 5,551 | $\quad 774$ | 6,325 | 962 | 1.5 | 6.0 | 2.0 | 5.5 | 15.0 | 45.00 |
| Louisiana. | 269,733 | 43,823 $\dagger$ | 8,426 | . 716 | 9,142 | 6 II | 2.0 | 7.0 | 2.0 | 3.0 | 14.0 | 43.00 |

"Data adapted from "College and Univeraity Library General and Salary Statistics," Bulletin of the American Library Association, XXXV (1941), 104-6.
Central library only.
$\ddagger$ Includes binding and rebinding.

TABLE 17-Conlinued

| Univergity Library | Book <br> Stock | Annual Expenditures for Books and Periodicals | Student Enrovirint |  |  | Facolty <br> Meybers | Promessional Starf |  |  |  |  | Total Enployees (FullTine EquivaLient) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Under* graduate | Graduate | Total |  | Order | Cata$\log$ and Classification | Reference | Circula- <br> lation, <br> Includ- <br> ing Re- <br> serve | Total |  |
| Rochester. | 360,184 | \$44,067 | 1,826 | 522 | 2,348 | 476 | 0.0 | 4.0 | I. 5 | 1.5 | 7.0 | 43.00 |
| North Carolina | 386,390 | 26,118 | 3,488 | 677 | 4,165 | 36 I 亲 | 3.0 | 4.0 | 1.0 | 1.0 | 9.0 | 42.75 |
| Syracuse | 270,025 | 25,464 | 5,471 | 831 | 6,302 | 745 | 5.0 | 5.0 | 0.0 | 6.511 | 16.5 | 37.00 |
| Cincinnati. . . . . . . | 491,537 | 25,965 | 4,028 | 550 | 4,578 | 970 | 2.0 | 5.0 | 1.0 | 0.0 | 8.0 | 35.50 |
| Joint University Libraries | 374,340 | 41,161 | 2,123 | 770 | 2,893 | 539 | 0.0 | 5.0 | 0.0 | 1.0 | 6.0 | 35.00 |
| Iowa State. . | 297,507 | 37,699 | 5,830 | 554 | 6,384 | 847 | 1.0 | 6.0 | 1.5 | 1.5 | 10.0 | 33.00 |
| Temple. | 149,152 | 20,585t | 6,966 | 777 | 7,743 | 829 | 1.0 | 3.0 | 2.0 | 5.0 | 11.0 | 32.41 |
| Missouri | 395,780 | 30,481 | 5,000 | 576 | 5,576 | 495 | 5.0 | 4.0 | 1.0 | 3.0 | 13.0 | 30.00 |
| Oregon. | 307,603 | 22,049 | 3,414 | 187 | 3,601 | 232 | 2.5 | 3.0 | 2.0 | 3.0 | 10.5 | 29.25 |
| Georgia. | 146,772 | 35,500\$ | 3,368 | 86 | 3,454 | 194 | 0.0 | 4.0 | 1.0 | 0.0 | 5.0 | 27.00 |
| Nebraska. .. | 353,431 | 28,700 | 6,322 | 457 | 6,779 | 568 | 1.0 | 5.0 | 1.0 | 1.0 | 8.0 | 26.50 |
| Pennsylvania State | 207,403 | 17,725 | 6,150 | 512 | 6,662 | 1,394 | 1.0 | 5.0 | 0.0 | 3.0 | 9.0 | 26.00 |
| Oregon State. | 172,951 | 17,007 | 4,344 | 195 | 4,539 | 424 | 3.5 | 4.5 | 4.0 | 4.0 | 16.0 | 23.38 |
| Kansas. | 320,082 | 31,361 | 4,267 | 370 | 4,637 | ** | 1.0 | 1.0 | 0.0 | 1.0 | 3.0 | 20.00 |
| Arkansas. | 161,182 | 23,019 | 2,386 | 79 | 2,465 | 164 | 0.0 | 2.0 | 1.0 | 2.0 | 5.0 | 18.00 |
| Wayne. . . . . . . . . . . . | 168,233 | 23,046 | 6,999 | 1,482 | 8,481 | 427 | 0.0 | 0.0 | 1.0 | 3.0 | 4.0 | 17.00 |
| Washington (St. Louis). | 409,872 | 14,5358 | 2,679 | 833 | 3,512 | 656 | 0.0 | 2.0 | 1.0 | 3.0 | 6.0 | 16.00 |
| Oklahoma. . . . . . . . . . . | 217,053 | 21,730 | 6,155 | 437 | 6,592 | 292 | 1.0 | 3.0 | 1.0 | 1.0 | 6.0 | 15.00 |
| Howard. . . | 128,96x | 18,297 | 1,351 | 248 | 1,599 | 247 | 0.0 | 2.0 | 1.0 | 1.0 | 4.0 | 13.00 |
| Michigan State. | 152,263 | 17,803 | 6,560 | 453 | 7,013 | 680 | 0.0 | 2.0 | 1.0 | I. 0 | 4.0 | 11.75 |
| Arizona.. | 138,804 | 13,348 | 2,466 | 150 | 2,616 | 210 | 1.0 | 1.0 | 0.0 | 1.5 | 3.5 | 8.50 |
| North Dakota. | 89, 193 | 4,752 | 1,664 | 71 | 1,735 | 140 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 4.00 |

[^124]have made them have passed on, it is the responsibility of the president of a university to select a librarian who possesses a thorough knowledge not only of methods and purposes of instruction and research but also of the subject matter and techniques of librarianship broadly conceived.

In considering the essentials in a training program for the prospective university librarian, three important factors should be taken into account: (1) the nature and complexity of the position for which the university librarian is to be trained; (2) the character and extent of the demands which the university administration may make upon the university librarian and the library staff; and (3) the appropriate preparation of the librarian and the library staff for the effective discharge of their duties. In chapter iv the complexity of the administrative organization of the university library was outlined. Earlier, the growth of university libraries and the continued development of the universities themselves were pointed out. It was noted that the growth in student enrolments, physical plants, curricular offerings, and research has directly affected and expanded, intensively and extensively, the program of the university library. At this point, therefore, attention will be given to the third factor, namely, the preparation of the chief librarian and other members of the library staf.

Education for librarianship in the United States follows a fairly well-defined pattern. This pattern embraces three types of training: (1) undergraduate or preprofessional, leading to a Bachelor's degree; (2) professional, based, usually, upon graduation from a college or university and leading to a Bachelor's degree in library science; and (3) advanced professional, leading to the Master's degree and the doctorate.

## THE CHIEF LIBRARIAN

Training for the chief librarian of a university obviously should be extensive and specialized. The doctorate in librarianship is increasingly demanded, the reasons for which are easily apparent. The nature of the different stages of this training may now be indicated.

Basic training.-Fundamentally, the preprofessional training should consist of a broad general education. Through connected, well-ordered courses in the humanities, the social sciences, the biological sciences, and the physical sciences, the prospective university librarian should be introduced to the various subjects within these broad fields. During the first two years of college, in which this acquaintance is gained, he should also lay the foundation for special-
ization in the Junior and Senior years. The completion of this program usually leads to the Bachelor's degree. The value of such training would be enhanced if.it included courses in the ancient and modern languages, the elements and principles of administration and statistics, and the educational objectives and administrative practices of universities. Courses in the use of reference materials and libraries and part-time assistantships in actual library activities would contribute a final desired element of such training.

The first-year professional training.-The major objectives of the first year of professional training of the prospective university librarian should be (1) to give him a broad overview of librarianship, (2) to acquaint him with the principles and theories underlying the major subjects in the library field and with the literature relating to them, (3) to give him command of usual library procedures and practices, and (4) to make clear to him the role which the university library plays in the attainment of the university's objectives. Such professional training is provided for by library schools in 32 colleges and universities accredited by the Board of Education of the American Library Association.

Advanced training.-Upon such a foundation, followed by a period of service, if possible, specialization in the university library field should be begun. This may be carried on in two stages. At the Master's level the student should be expected (i) to become acquainted with the methods and spirit of graduate study and research in library science and related fields; (2) to extend his knowledge of library science generally; (3) to increase considerably his knowledge of the special field of university librarianship and related subjects; and (4) to demonstrate his ability to use research methods in the preparation of a report or thesis in his field of specialization.

At the Ph.D. level the student should be expected (1) to extend greatly his general knowledge of certain fields of library science; (2) to master the particular field of university and scholarly libraries; (3) to supplement his knowledge of this field with that of other subjects related to it; and (4) to carry out an original investigation within it. At both the M.A. and Ph.D. levels he should take courses in related, supporting subjects which would extend his mastery of his special field. In this way he should become thoroughly acquainted with the methods and spirit of graduate instruction and research. His thesis should grow out of research carried on independently and should make some new contribution to the subject chosen.

The recognition of the problems peculiar to university librarianship has led a number of library schools to provide special courses in the subject. The Graduate Library School of the University of Chicago differentiates the training of the university librarian sharply from that of other types of librarians. Programs of study for the M.A. and Ph.D. degrees for students who choose university librarianship as their objective include, in addition to the basic courses in the first-year professional curriculum, courses in the types and func-tions of scholarly libraries; in general administration; in the administration, curriculums, and objectives of universities; in the various methods employed in scientific investigation in different fields; and in the principles of bibliography and the history of manuscripts, books, and libraries in their relation to the development of universities and scholarship. In carrying out such programs and in the preparation of their dissertations, students elect graduate courses in other departments and secure direction from other instructors, thereby gaining further knowledge. In fact, the entire course offerings and resources of the University of Chicago are available to the students and may be drawn upon in support of their programs of study.

The School of Library Service of Columbia University offers basic and advanced courses in "College and University Libraries," and the department of library science of the University of Michigan conducts a graduate seminar in "University Library Administration." Specialization in the subject is possible at all five of the institutions giving advanced training; and scholarships, fellowships, and parttime or full-time positions as research or library assistants are open to advanced students of unusual ability. Thus, through courses designed to acquaint the student with the principles of administration in general and with the objectives of universities; through instruction in the literature and methods of investigation applicable to the subject; through service in the library schools as assistants in research or instruction; and through training received in other fields which bears upon his work and broadens and deepens his under-standing-by these the student of university librarianship can and does secure the same kind of graduate training that graduate students in other subjects receive-training that gives not only competence in the technical and functional operation of the library but, more important, an understanding of the nature and objectives of
universities and of the role which libraries have played and are now playing in the development and enrichment of scholarship.

Two other programs of advanced professional training are followed by prospective university librarians. Students (1) combine librarianship as a minor with some other subject as a major and take the doctorate in the subject field, or (2) they take an advanced degree in a subject field and then take an additional degree (sometimes the doctorate) in librarianship. One library school offers work leading to the doctorate in librarianship; four schools offer work in librarianship leading to the Master's degree in librarianship or to the doctorate in a subject field with librarianship as a minor; and all accredited library schools admit holders of higher degrees in subject fields to the basic first-year curriculum in librarianship. The number of such students in the decade from 1928-29 to 1937-38 was over seven hundred.

Reference to the training of university librarians in European countries may be pertinent at this point. In a study of the appropriate training for librarians for different types of libraries made in 1935 by a committee of experts for the Institut international de Coopération intellectuelle of the League of Nations ${ }^{7}$ it was recommended that librarians of major scholarly and scientific libraries should combine theoretical and practical studies of librarianship with a thorough grounding in university courses such as those leading to the doctorate. In France, prior to World War II, university librarians were appointed by the Ministry of Public Instruction and were usually required to be graduates of the Ecole des Chartes, a division of the Sorbonne, founded in 1821 and devoted to the study of language and literature, paleography, bibliography, the history of manuscripts, books, libraries, archives, and related subjects. Very rigid oral and written examinations were required, and a thesis had to be presented dealing with the investigation of some subject in the field.

In Germany as far back as the 1890's, thorough training in university studies and librarianship was required of university librarians by the various states. ${ }^{8}$ In accord with a decree in 1928, candidates for the higher positions in university libraries in Prussia were required to possess a Doctor's degree, pass an examination in a chosen subject field, complete a two-year course in librarianship, and pass a state examination in that field. Training in librarianship was provided in Prussia by the University of Berlin and the Prussian State Library.

[^125]In England there has been less insistence on formal training in librarianship than in France and Germany, but informal training in service has been required. Many members of the staffs of the libraries at Oxford, Cambridge, and other universities have been recruited from the graduates of those institutions who have combined theoretical and practical studies in librarianship with their university studies, thereby extending the time normally spent in obtaining university degrees.

Nonlibrarian appointees.-Occasionally, nonlibrarians are appointed to important university and research librarianships. This procedure is important because it raises the question of whether librarianship is a profession, requiring extended training and experience in research, or a technical craft that may be easily learned on the job by a scholar from such fields as literature, history, and economics or by a professional administrator or educator. It also makes clear certain assumptions concerning the nature of university librarianship upon which such appointments are made.

Three statements made in the last two decades embody this question and supporting assumptions. In 1930 Flexner, ${ }^{\text {in }}$ in criticism of American universities, characterized librarianship as a vocation which should be taught by a technical institute rather than by a university. In 1924 the University of Chicago Commission on the Future Policy of the University Libraries ${ }^{50}$ declared that the library existed solely for the facilitation and encouragement of research and that, therefore, it must be directed by a member of the faculty who had demonstrated such interest in his work. And in 1939 Wriston wrote that "the least important qualification of the librarian is his training. . . . The individual with ideas and appreciation of problems, with resourcefulness and energy, can learn many of the technical things which were omitted in his training as he administers the library, but all the courses in the world will not supply imagination or tact, industry, or scholarly feeling.' ${ }^{\prime \prime}$

Three observations may be made concerning these pronouncements. First of all, university librarianship may be considered a "profession" in the defined sense of the word. Flexner in an earlier

[^126]statement ${ }^{12}$ listed the criteria of a profession as follows: ( 1 ) it involves essentially intellectual operations, accompanied by large individual responsibility; (2) it is learned by nature, and its members constantly turn to the laboratories and seminar for a fresh supply of facts and discovery of new truths; (3) it is definitely practical; (4) it possesses a technique capable of communication through a highly specialized educational discipline; (5) it is a brotherhood which engenders group consciousness which is expressed in a professional organization; and (6) it is becoming increasingly concerned with the achievement of social ends.
When the characteristics of university librarianship are viewed in relation to these criteria, the following situation is revealed. (1) The work in which the librarian engages in integrating the resources of a major university library with the instructional and research programs of the university involves intellectual operations of a highly responsible nature. Failure of the librarian to match his thinking concerning the function and use of the library with that of the administration and the faculty reduces the possibility of maximum success by the university in the attainment of its objectives. (2) The range of subject matter with which the librarian must deal, the complexity of the interrelationships involved in the operation of the library, and the understanding of ways and means of making the contents of the library available to its varied users are such as to call for constant study and the application of the results of experimentation and research to all phases of library activity. (3) University librarianship is definitely practical. (4) As indicated above, in the section dealing with the training of the librarian, the procedures of librarianship are communicated through a highly specialized educational discipline.
(5) Its practitioners are motivated by definite professional standards.
(6) It is concerned with the achievement of major social goals-the conservation and extension of knowledge.

In the second place, these statements clearly fail to recognize that, since librarianship, instead of being concerned with mere technical routines, is a many-sided, far-ranging subject, an individual possessing tact, imagination, and resourcefulness may achieve scholarly distinction in dealing with the problems of this field as well as in other fields of learning. They overlook the fundamental fact that the education of the university librarian is designed to give him not only a

[^127]scholarly command of his field but a knowledge of the functional organization and administration of the materials and personnel under his control, a knowledge with which the scholar or specialist trained in another field is wholly unacquainted. Although a scholar may be quite profound in one field, this carries no guaranty of particular competence in another field; and, in fact, it is also conceivable that a too narrow subject specialization may lead to a parochial, rather than a universal, point of view.

The major objection to these statements is that they do not go far enough. They mistake the indispensable for the possibly sufficient. Because it is vital that the university librarian have an appreciation of research and an understanding of research needs, it does not follow that he cannot acquire them in the study of some aspect of librarianship or that this is all he must have. Provision for such study in librarianship was not made a generation ago; but it is today, and the field is as amenable to such study as many of the fields of humanistic and scientific interest. When one argues in favor of the individual with library training, he does not urge the exclusion of training in research; he simply insists that training in both librarianship and research are indispensable and that neither one by itself is enough. It might even be said that in the light of the changes which are taking place in student selection by library schools, and considering the nature of the training which is now available, the prospective librarian should possess an enthusiasm for research and the capacity to carry it on himself-and all this without sacrificing an interest in, and an ability to look after, the administrative and technical processes of the university library.

In the third place, it may be noted that, while certain individuals without formal library training have made notable contributions to university librarianship in the past, all have not been successful; and it does not follow that they will be effective in the future. Most of the successes were achieved when the administration of a major university library was very much simpler than it is at present-or than it will be in the future-and before systematic training for such positions had been provided through universities. The integration of the functions of a university library with educational and research programs calls for more than demonstrated scholarship in some subject or competence in administration in a field not related to librarianship. The appointment of an associate librarian to direct the technical operations of the library may not insure such integration, since
such an appointment leads to a division of the final responsibility for the unified administration of the library.

The contributions to scholarship of Justin Winsor ${ }^{13}$ and J. S. Billings ${ }^{14}$ (both notable librarians who had not been trained formally as librarians but who were students of bibliography before they became librarians) were made in large measure through their direct interest in those aspects of scholarship which were dependent upon library organization and use for their successful development. These librarians studied the problems of librarianship and contributed to library literature and thought in order that through them they might promote and enrich scholarship generally. As is shown in chapters ii and $\mathbf{x v}$, the relations of the librarian to scholarly interests on and off the campus are such that the head of a major university library who continues to spend his principal energies and abilities upon his teaching and writing in a special field not related to the general interests of the library may fail signally to utilize them at the point where they would be most valuable. The ultimate success, therefore, of appointments of nonlibrarians to important headships of university and other scholarly libraries should be determined by the contributions which the appointees make to the extension and enrichment of learning through their libraries rather than through continued teaching or publication in their fields of specialization. The American scholar has library resources for study and research at hand today many of which have been made possible not so much by his own activities as by the skill and the sustained, organized effort of university and research librarians in general.

These observations, however, should not close the door to entrance into university librarianship for persons of ability and scholarship in other fields. A director drawn from the ranks of the faculty may bring rare ability and knowledge to the administration of a library. The probabilities that he can do this successfully, however, are attended by considerable risk unless several precautions are taken. He should be recruited young enough to make new adjustments easily. It should be demonstrated that his energy, tact, scholarship, and imagination will concern themselves with the major considerations of librarianship rather than with the narrow aspects of his former specialization. And, before he begins to make important decisions concerning the

[^128]administration of the library, he should acquire an understanding of the principles upon which successful functional administration is based. Thus equipped, he may be able to conceive of the library as a major functional unit of the university. Provided he bring his entire abilities to bear upon his work as librarian, instead of continuing' his major interest in his teaching or writing in his field of specialization, his accomplishments in the field of administration and his professional writings may contribute significantly to the advancement of librarianship and scholarship.

## ASSISTANT LIBRARIANS AND DEPARTMENTAL HEADS

Like their superior officer, assistant librarians and departmental heads are required to undergo a rigorous period of training-undergraduate, professional, and scholarly-if they are to qualify themselves for the complex administrative duties of operating a library. The emphasis placed upon the professional training of the chief librarian has somewhat drawn attention away from the training of the secondary administrative officers. As Mitchell has pointed out, many university libraries have seemingly indulged in a sort of professional race suicide by "not even raising enough professional children to provide for their own succession headships, let alone helping out other librarians naturally less favorably fitted for their educational service." ${ }^{15}$ This point of view has also been emphasized by Williamson ${ }^{16}$ and McDiarmid. ${ }^{17}$ The latter writer suggests six methods whereby librarians with adequate experience may be produced. These are: (I) delegating more administrative responsibility and authority, (2) bringing more members of the staff into the determination of library policies, (3) developing more levels of administrative responsibility, (4) making wider use of an assistant or associate librarian as a general manager of the library, (5) drawing a careful distinction between professional and clerical service, and (6) increasing the use of such administrative devices as assistants to the librarian. He significantly points out that experience is of little importance unless it is closely bound up with other important factors of personnel management, namely, recruitment and education. ${ }^{18}$

[^129]If a criterion of a profession is its ability to prepare individuals who can carry on and develop the field, then it seems that a function of the university library is the training of potential administrators. The chief librarian, therefore, has the obligation of selecting individuals for his staff who are capable of filling important vacancies as they appear. This includes the head librarianship. The need for in-service training programs is evident. Obviously, the training of the principal members of the staff should prepare them for the duties which they may logically be expected to perform.

SPECIAL AND DEPARTMENTAL LIBRARIANS
The demand for librarians trained in special subject fields has grown greatly in recent years. Many large universities maintain engineering, medical, dental, pharmacy, law, and music schools which require special library services.

It is important, therefore, to determine what sort of training is best for the librarians of special collections or of departmental libraries. Is subject knowledge more important than a firm grasp of technical librarianship? Is the first-year professional curriculum sufficient to make it possible that any graduate can carry out the objectives and guide the technical operations of a special or a departmental library?

Experience has demonstrated that there are at least five answers to these questions. First, an individual with competence in a special subject may, in some instances, be better able to acquire an understanding of the technical processes essential in administering a special library than one with library training who does not have a sufficient understanding of the subject to be helpful to research workers. Individuals with subject backgrounds have frequently been selected for special library positions, but it should be pointed out that this practice existed in the past because library schools had not learned how to handle the situation.

Second, at the present time people with library training can combine subject specialization with librarianship. Individuals who have attained Bachelor's and library-school degrees can and do widen their backgrounds by taking selected subject courses. There has been a definite tendency in this direction.

Third, the subject specialist can attend library school. Subject specialists in the past have not cared to attend library schools because of the lack of courses designed for advanced students. As a result of recent modifications in curriculums, it may be expected that
in the future such students will be able to pursue courses better suited to their specific needs.

Fourth, the Hurt method of developing staff specialists, which was discussed at some length in chapter vi, may be successful in preparing individuals for administering subject collections. It is a method which library administrators might develop more systematically than they have in the past.
And, fifth, courses in special librarianship, as developed at Columbia University and elsewhere, are designed to aid the subject specialist in acquiring a background necessary for effective service to graduate students and faculty members working in restricted fields. Thus, courses have been organized to introduce librarians to the special problems of medical, law, business, and archival collections. There seems to be no question but that such courses may materially reduce the learning periods of librarians who serve clienteles with special demands.

## OTHER MEMBERS Of the Professional Staff

Although job analysis has not been extensively developed, some effort has been made in university libraries to distinguish between professional and clerical duties. ${ }^{19}$ The distinctions between the two types of activity are being increasingly recognized and should eventually result in both educational and administrative benefits. Strict adherence to a personnel classification in libraries should relieve the professionally trained staff members from tasks which do not involve the exercise of judgments dependent upon the mastery of the principles and practices of library science but which are definitely routine in nature and can be satisfactorily performed by intelligent clerical assistants.

Professional members of the staff usually are better equipped for their work if they take the special courses in university library administration offered in several library schools. These courses are usually supplementary to the other courses on general library administration which are required of students. For those professional assistants who have outlined careers which involve administration, it is clear that acquaintance with such matters as the organization and administration of colleges and universities-particularly such

[^130]aspects as curriculums, research programs, personnel administration, financial methods, and business techniques-is prerequisite to an effective program of training.

## SUBPROFESSIONAL ASSISTANTS

Directly aiding the professional staff in carrying on library operations are subprofessional assistants, who, while not performing work on an administrative or theoretical level, are responsible for the "higher routine processes which are peculiar to library work and which require some knowledge of library procedure." ${ }^{20}$ In some libraries, such workers are classified as clerical personnel. Trainingclass instruction or a brief elementary course in library work is generally considered to be sufficient technical background for the subprofessional assistants. Since a basic college education is required usually of subprofessional assistants, these individuals may, by taking part-time or summer courses in library schools, eventually qualify for professional posts.

The tasks which are allotted to the subprofessional assistants vary from library to library; but they adhere rather consistently to a pattern. Typical tasks include bibliographical checking and searching in the order and reference departments, preliminary cataloging and filing in the catalog department, periodical checking in the periodical department, and checking faculty reserves in the circulation department.

The importance of subprofessional assistants has only recently been appreciated by administrators. Similarly, little attention has been given to the clerical staff. It is not surprising to find, therefore, that the surveyors of the libraries at the universities of Florida, Georgia, Indiana, and Mississippi discovered professional workers performing a considerable number of tasks which are generally accepted as being clerical.

## CLERICAL STAFF

In practically every American university library some clerical workers are employed. They may include the subprofessional personnel discussed in the preceding section. The American Library Association defines a "clerical assistant" as "a person such as a typist, etc., who performs, under immediate supervision, processes which may require experience, speed, accuracy, and clerical ability of a

[^131]high order but do not require knowledge of the theoretical or scientific aspects of library work." ${ }^{2 x}$ A high-school education is generally required of the clerical assistant, as well as a course in a business college.

The use of clerical helpers in university libraries varies considerably but is definitely increasing. They are used for routine searching and checking tasks, typing, filing, charging and discharging books, and similar activities. The recognition of the fact that a large proportion of the activities of the university library consists of routines that can be performed by instructed clerical workers should eventually lead to the concentration of professional effort upon major problems of reading, scholarship, and research. Within the limits of the individual library's definition of "clerical worker," the situation seems to indicate that many libraries are using professionally trained personnel to perform clerical or subprofessional tasks. Only 16 of the libraries listed in Table 4 have 60 per cent or less professional staff. The accepted ratio for public library work is i clerical (or subprofessional) worker to I professional worker. ${ }^{22}$ While it is conceivable that a university library may require a larger professional staff, a ratio of 20 professional workers to 1 clerical assistant is undoubtedly out of proportion, costly, and wasteful of human resources. Even where a library school is attached to the university and professional workers are available for part-time assistance, sound administration does not permit the use of professional help on tasks that are definitely clerical in nature.

## STUDENT-ASSISTANTS

The use of students in performing tasks of varying importance is a general practice in university libraries. The policy of helping students to carry on their educational programs by giving them work on the campus usually applies to the library as well as to other units of the institution. Indeed, students are more likely to benefit from their working experience in the library than from many other tasks at which they may be employed. Routine tasks in the order, catalog, circulation, periodical, binding, microphotography, serials, and, to a lesser extent, reference departments are frequently performed by student-assistants with satisfactory results. Close supervision of

[^132]such assistants by professional or subprofessional members of the staff is generally necessary, as is true in the case of other clerical workers.

Although a considerable portion of the budget for salaries may be expended on student-assistants, ${ }^{23}$ it is not unusual to find administrative laxity in the selection, training, and supervision of this grade of workers. Student-assistants, no less than other members of the staff, should be subject to administrative demands for efficient procedure.

If an effective group of student-assistants is to be assembled, it is essential that selection be made solely on the basis of merit rather than upon the pecuniary needs of students or the intervention of personal friends among administrative officials or faculty members. A number of libraries have used tests in selecting student-assistants, and it is likely that this practice will grow.

Since a high turnover exists among student-assistants, it is important that their training be carefully organized so as to limit the instructional period. Staff manuals have been employed successfully for this purpose. Greater efficiency has been found to result from the practice of employing few persons for longer periods than from that of giving a large number of students only a few hours of work each week. To recruit from Freshman and Sophomore classes when vacancies occur has also been found to be an effective way of building up a strong corps of student-assistants for service over a reasonably long period of time.

Several principles of supervision of student and other clerical assistants may be noted. These are: (I) to require close co-operation between supervisors and the students assigned to them, (2) to urge supervisors to interpret to students the importance of their work in a larger enterprise, (3) to impress upon the students that a high standard of work is expected, and (4) to require the supervisor to formulate clearly what the specific objectives of his department are, in order that students may be properly guided.

The responsibility for encouraging promising young student-assistants to consider university librarianship as a career frequently has been assumed by some administrators. Recruitment from among student-assistants should be a profitable procedure for the profession. In those institutions in which library schools exist, student-assistants may be selected from the enrolees, and permanent appoint-

[^133]ments of capable persons to the staff may follow upon their graduation from the library school.

## OTHER TYPES OF WORKERS

Up until February, 1943, the library, like other units of the university, used to advantage governmentally aided workersC.W.A., F.E.R.A., N.Y.A., and W.P.A.-to expand and increase its services. In some institutions the largest expenditure of government funds for any single department was for the development of the university library. Not only did the general library benefit from this type of assistance, but various departmental and professional school libraries were able to use governmentally aided students and citizen workers to good advantage. The availability of these workers made it possible to carry out projects which, in many cases, could not have been financed through the regular budgets of the library.

These types of workers generally were placed on "special projects." But they were used for other kinds of tasks which are evidently routine in nature, particularly for shelving books and filing cards. ${ }^{24}$ The following activities may also be noted: repairing books, dusting, taking inventory, listing duplicates, reading shelves, serving as secretaries and typists, compiling bibliographies, binding slides, caring for bulletin boards, checking and stamping mail, checking lists, working at circulation and other desks, clipping for files, collecting discarded magazines from dormitories and student unions, caring for exhibit cases, searching L.C. card numbers, lettering, binding magazines, making photographs and films, mimeographing, mounting photographs, moving into new library quarters, sending overdue notices, caring for phonograph records and picture files, preparing books for the shelves, proctoring seminar rooms, reading proof, making scrapbooks, packing and shipping theses, compiling statistics, and working in the demonstration library. ${ }^{25}$

The presence of seventy-five or a hundred student workers, whether governmentally aided or regular employees, placed certain responsibilities upon the library administration to use their services profitably. The organization of the projects, the allotment of tasks, the selection of workers, the provision of work-space, supplies, and equipment, and the assignment of supervisory assistance from the

[^134]regular staff required considerable effort on the part of the library administration to insure efficiency and discipline.

A few librarians were unwilling to use governmental aid because of its impermanent nature. Indeed, the regular budgets of some university libraries did not keep pace with increased needs because of the use of governmentally aided workers. The termination of governmental aid in February, 1943, left many university libraries short of student-assistants.

## SELECTION OF STAFF MEMBERS

CHIEF LIBRARIAN
The appointment of the chief librarian is, without doubt, one of the most important administrative decisions the president of a university has to make. Russell has listed several criteria which should be taken into account when a faculty member is appointed in an institution of higher education. These criteria may be applied equally to the selection of a chief librarian. They include: (I) amount and quality of training; (2) amount and quality of experience; (3) personality; (4) age; (5) philosophy of life; (6) recommendations with respect to competence; (7) amount, kind, and quality of scholarly publications; and (8) connections with learned societies in his own field. ${ }^{26}$ To these might be added general education; specific training for library work, including subject-field specialties; connection with learned societies outside the field of librarianship; and managerial and organizational ability.

The administrative steps in selecting a chief librarian generally follow a well-defined pattern, particularly if the president is libraryminded. If the librarian is retiring, the president will probably begin making inquiries regarding his successor a considerable time before the actual retirement of the incumbent occurs. In some instances the associate or assistant librarian, who has been trained for the chief librarianship, will be promoted. ${ }^{27}$ In situations of this kind the problem will be solved comparatively simply. Usually, however, the president must carefully examine the field and gather information regarding possible candidates. Suggestions from the incumbent librarian, the library committee, the various deans, and faculty members may serve as starting-points. The president or his representative some-

[^135]times attends library conferences or makes visits to institutions for the purpose of meeting prospects. The American Library Association, library schools, and prominent librarians are generally consulted for information regarding individuals.

Once the candidate is selected on the basis of the criteria mentioned above, he should be invited to the institution for an interview, at the expense of the university. If the impression of the president, the deans, the library committee, and other interested members of the university is favorable, negotiations are instituted regarding terms suitable to both the prospect and the university. If the terms are acceptable, the president sends the name of the candidate to the governing board or other authorizing body of the university for approval.

## OTHER MEMBERS OF STAFF

Institutions with library schools.-In an institution that has a library school, there seems to be a tendency to select staff members for the library from those who have been trained in its library school. This is especially true in those cases in which the director of the library school is also director of the library. Under this condition the process of selection is simplified, for the librarian has the previous educational and experience record of those under consideration, the observations and opinions of the teachers in the library school, and personal information without resorting to the artificial conditions imposed by the employment interview.

There are certain advantages in being able to select personnel who have been trained in the library school on the campus. The student has had an opportunity to acquire knowledge of the library during his work as a student. This knowledge can be applied without any loss if the student is placed in the library after graduation. The librarian also has an opportunity to select the best members of the graduating class because of firsthand information he has about them. On the other hand, there is the danger of inbreeding. The library, in accepting too many graduates of a library school of a particular institution, loses the stimulation which may be obtained by recruiting staff members from different schools.

Institutions without library schools.-For institutions without library schools the problem of selecting staff members is different. In such instances it is necessary to make selection by means of correspondence. In this situation the role of departmental heads and other administrative officers in assisting the librarian becomes more im-
portant than it is in the institution having a library school. Various procedures may be followed. In a large university library the responsibility for selecting staff members for a given unit may be delegated to the departmental head concerned. In a smaller institution the librarian may retain full responsibility for appointing professional staff members, and the assistant librarian may be given the responsibility for selecting subprofessional and clerical workers. Student workers are usually selected by department heads.

Personal knowledge of individuals who might fill certain positions acceptably is frequently possessed by the librarian and the department heads. Such information is important, provided it is recorded in a systematic file showing the qualifications of the individuals concerned. Information of this character should be kept up to date.

Closely related to this type of record is the central file of applications that have been received in the past. This file should be of use in those cases in which the information of the officers of the library is incomplete and does not cover the particular position in question. Information furnished by this file is probably of less value than that mentioned above, but it should be reviewed to avoid missing any promising applicants.

The American Library Association Personnel Division and library schools can be used effectively in establishing contacts with suitable candidates. Placement offices, including university placement offices, are less commonly used. When administrators use these sources, it is desirable for them to specify the kind of person wanted, the kind of training and experience preferred, and a thorough description of the position to be filled. Information concerning salary and living costs is particularly important.

The records of the individuals about whom information is received should be examined to determine which are the best prospects for the vacancy. Direct contact with the individuals who have survived this elimination process should then be made. Such contact is necessarily carried on by correspondence unless the individuals under consideration are in the vicinity or unless interviews can be arranged on the campus, at library conferences, or elsewhere. If negotiations are carried on by mail, the statement to the candidate should include a general description of the duties of the position, salary, tenure, status, vacation, pension, sabbatical leave, hours of work, and opportunities for advancement and further study. If a full statement is sent at the beginning of negotiations, the necessity for considerable corre-
spondence may be obviated. The individual is immediately given the opportunity of intelligently comparing the proffered position with his present one.

Interviews are preferable for all appointments. For positions in which personality plays an important part-the higher administrative positions, from departmental first assistant upward-they are essential. Interviews may take several forms. The use of oral tests is infrequent in university libraries, although they have been used with some success in public libraries and in industry. A simple procedure usually followed is an informal talk between the librarian and the prospect. It may be more formalized if the librarian has a list of specific items on which he desires information. ${ }^{28}$ To make the rating more objective by increasing the number of subjective opinions, the number of interviewers should be increased to three or four individuals. If the interview is not formalized to this extent, it is usually desirable to secure the opinion of at least one other person, since the person employed must work with others in the library. The prospect should be interviewed at least by the departmental head under whom he will work, in addition to the librarian: If possible, he should also meet some of the other departmental heads. If it is a departmental head who is being selected, other departmental heads in the library should be permitted to take part in the interviewing. ${ }^{29}$

Institutions with civil service.-Selection of personnel in institutions under civil service is quite different from that in institutions that are not required to conform to civil service laws and rules. At present there are only a few university libraries affected by state civil service. Merit systems exist in other institutions, but they are regulated by the universities themselves. Such a system exists at the University of Minnesota. ${ }^{30}$

McDiarmid ${ }^{3 x}$ has outlined four trends in civil service that affect

[^136]libraries: ( 1 ) the merit system is being extended upward, outward, and downward in public personnel administration; (2) "civil service management is becoming positive personnel management'; (3) "there is increasing co-operation among jurisdictions under civil service to enlarge their programs'; and (4) personnel and financial management are being placed under one administrative agency.

Although many library administrators have not looked with favor upon civil service, well-organized merit systems undoubtedly possess certain definitely advantageous characteristics. Under best conditions, scientific testing and examining are provided, outside pressure is removed, positions are expertly classified, and precise promotional and retirement programs are stated. Moreover, residence restrictions should be flexible, and the employer should be given some leeway in the selection of appointees from the candidates. Finally, it is necessary that civil service officials comprehend library problems in order that positions may be accurately classified and that examinations may be given which are fair and relate to the position involved.

Probationary period.-The probationary period is a generally accepted device used in personnel administration. No system of selecting personnel yet devised is perfect. An error in selection may be made by the administrator, or personal or other factors that were not evident in the selective process may make themselves evident under actual working conditions. The probationary period gives the library an opportunity to correct mistakes made in selection and to rid itself of persons who have demonstrated that they cannot become satisfactory employees.

The probationary period lasts from six months to two years, one year being the usual period. In many libraries the administration of probation is perfunctory. The new employee goes through his probationary period without being carefully checked by his superiors, and at the end of the time he is automatically added to the permanent staff. A great deal of trouble due to undesirable and incompetent staff members could be avoided if the probationary period were put to the use for which it is intended. An interesting device to direct more attention to the work of employees during the probationary period has been developed in government service. The administrator is required to submit positive statements for retaining the new employee who is satisfactory, as well as to give reasons for dismissing an employee who is unsatisfactory. A device of this sort centers attention on new workers and makes the administrator seriously consider
their qualifications. Another procedure is to require the administrator to submit efficiency ratings as frequently as every month, while ratings for regular employees are required only once a year. These ratings are considered in the next section.

## MEASUREMENT OF STAFF EFFECTIVENESS

Concern for the quality of the staff does not stop with selection. Although the greatest care may be taken in the selection of administrative assistants, departmental heads, and other members of the staff, their value to the library organization is made evident only by their performance under actual work conditions. In order to obtain the greatest quantity of work and highest quality of service, university librarians have been increasingly interested in the application of business and public administration efficiency-measuring methods to their work. The devices employed for measuring personnel effectiveness in other fields are: (1) production records, (2) periodic tests, and (3) rating devices.

## PRODUCTION RECORDS

The production record consists of a tabulation of the amount of work accomplished by an individual staff member. When used to measure the effectiveness of library workers, production records have certain definite limitations. Obviously, this sort of measurement applies primarily to library work in which tangible items may be recorded, such as items cataloged. Even in this instance, the relative difficulty of the work must be taken into account before any attempt is made to compare the effectiveness of one worker with that of another. Production records are most valuable as a means of measuring the work of employees when they are restricted to routine, repetitive types of work, such as filing, typing, mimeographing, and stenciling. It must be borne in mind that, even in applying the production record as a means of measurement to routine tasks, the quality of work is as important a factor as the quantity of production. Moreover, personality factors which cannot be measured in routine activities should be taken into consideration. ${ }^{32}$

## PERIODIC TESTS

Tests of efficiency, which are also used as a part of a service-rating scheme for the measuring of routine and repetitive tasks performed

[^137]by clerical workers, are subject to similar limitations. Such a test measures the productiveness of the employee only at given intervals, while the production record is based on an average covering a long period of time. Of the two, the production record is more accurate because it is employed under ordinary, rather than artificial, test conditions.

## RATING SYSTEMS

Rating schemes have come to be considered the most accurate means for measuring the effectiveness of employees, whether in the library or elsewhere. Rating plans vary greatly in the degree of their informality and complexity. Whether formalized or not, some kind of procedure rating for employees is found in all libraries.

Informal rating systems.-The simplest and most informal kind of rating procedure found in libraries is that which is based on the personal opinion of the administrator. A more advanced type is that in which the administrator consults frequently with the employee's immediate supervisor in order to gain an adequate knowledge of the character of the work of the individual. A third informal form of rating involves the holding of occasional meetings of several administrative officers, at which the work and abilities of various members of the staff are discussed and informally appraised. ${ }^{33}$

Informal rating plans are less effective than they should be because they lack definiteness of form, terminology, and time of application. In fact, it is possible that ratings may take place only when promotions or dismissals are under consideration and the formulation of quick opinions is required.

Formal rating systems.-The library personnel questionnaire is a somewhat more formalized rating device. It suggests the characteristics or qualities to be observed, but it does not give a final rating of the individual. A variant of the questionnaire form provides adjectives or phrases pertaining to each question asked and the adjective or phrase applicable to the individual is to be checked. ${ }^{34}$

There is little evidence that the graphic or linear rating scale, used extensively in other fields, has been used in librarianship. It is one of

[^138]the more formalized schemes and is used for interview purposes as well as for rating. The scale consists of traits or activities to be rated which are factors deemed necessary for success in the position; also descriptive adjectives or phrases indicating varying degrees of the activity or trait, ranging from low to high. Although the graphic scale is popular in private and public administration, it is open to criticism for use in university libraries on the ground that the traits and qualities on which rating is based are too complex to permit of standardization; so the scoring device which is intended to translate qualitative judgments into a quantitative rating is arbitrarily set up. ${ }^{35}$
There are other rating systems which may be applied to personnel administration in the university library. These include those of the California State Personnel Board, ${ }^{36}$ the federal government, ${ }^{37}$ the New York City Civil Service, ${ }^{38}$ the Beyle-Kingsley Evaluation Scale, ${ }^{39}$ and the J. B. Probst Service Report. ${ }^{43}$

Important difficulties exist in the application of rating schemes. These should be briefly noted as follows: raters too frequently judge from a personal, rather than from a library, point of view; rating sometimes becomes a mechanical, rather than a skilful, procedure; the terminology used in rating forms is interpreted differently by different raters; and raters are not aware of the several tendencies which color their judgments, such as placing too great emphasis upon a single personality trait. ${ }^{47}$ These difficulties may be removed to a certain degree, although not entirely, by giving careful explanations to supervisors and by training them in the use of the rating system. Used cautiously, ratings may serve as an important administrative tool. It should be realized that they are not conclusive in themselves but are useful in presenting evidence concerning personnel:

[^139]
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## CHAPTERVIII

## PERSONNEL: SALARIES AND STAFF RELATIONS

## STAFF SALARIES

BEFORE considering in detail the salaries for different groups or members of the university library staff, three observations may be made concerning the subject in general. These are: (1) pertinent data from a comparatively large number of representative institutions are not available; (2) the importance of salaries in relation to excellence of library staff and service has not been generally recognized; and (3) the whole subject of the classification or status of the chief librarian and other members of the staff has not received the careful study and clarification it merits. At present the subject represents a kind of no man's land in the general area of university administration.

The lack of available data may be attributed to several causes. First of all, it is due to the general paucity of comparable data in the field of university library administration. In the second place, a number of universities consider information concerning salaries confidential and do not permit its publication. In other instances, university librarians have been reluctant to furnish such information because it is frequently difficult to indicate, without extensive explanation, what the salaries of the chief librarian and other members of the staff are because they may also serve as director of a library school or as teacher, or may perform some other service, for all of which single salaries are paid.

The importance of adequate financial rewards in university library administration cannot be overestimated. Although university librarianship may prove attractive to many individuals on account of its special characteristics, most individuals with ability will appraise the financial rewards of university library work in comparison with those of other professions. If salaries are relatively low, it may be expected that able young men and women who otherwise would become librarians will find their way into other types of work.

In order to attract individuals who, by native ability, background,
and training, are able to develop into effective chief librarians, assistant librarians, and professional assistants, it must be shown that university librarianship is many-sided and affords an opportunity for challenging, creative work; that it presents many opportunities for administrative and scholarly activity; and that ability is rewarded with promotion, extension of responsibility, and ample financial compensation. Librarianship must be recognized as a responsible calling which requires a highly competent staff if effective results are to be achieved. University administrators who recognize the importance of the work involved in effective librarianship know that adequate remuneration must be provided not only for the head librarian but for the staff as well. Too often, only the librarian is relatively well paid, when training and responsibilities of other staff members are compared with those of other professional members of the university personnel.

That the subject of the classification or status of the librarian and staff has not received the careful consideration and clarification it merits may be more difficult to demonstrate, but it is none the less true. A survey of the different practices of universities will quickly reveal evidence in support of this point. In the case of the president of the university, of deans, and of members of the instructional staff, the responsibilities of the various positions, the certainty of tenure and financial reward, and the opportunities which service in the positions affords for study, for research, for teaching in the same institution during the summer or in other institutions for additional compensation, or for rest and travel are usually definitely specified through institutional statutes or other regulations. Furthermore, they apply impersonally to all members of the group.

In the case of the librarian and the library staff, classification and such specification are usually lacking and have to be determined on an individual basis or on the basis of a clerical or noninstructional or professional classification, which may fail completely to match the training, professional skill, and educational efficiency of those to whom it is applied.

The successful administration of a university library presupposes the possession by the librarian of extensive general and professional education, understanding of the nature and purposes of teaching and research, and experienice in integrating the services of the library in the educational program of the university. It involves the direction of a comparatively large staff and the expenditure of an appreciable
portion of the university's total budget. The development of wellconceived policies of acquisition and service and the selection and direction of a staff competent to operate the library effectively in accord with those policies make extensive demands upon the ability, energy, and time of the librarian. The services of the library have to be maintained throughout the entire year rather than through the two academic semesters or three quarters.

In these respects the responsibilities of the librarian are comparable to those of deans or heads of major departments. In fact, they may be even more exacting because of their variety and complexity. Consequently, they should be taken into consideration when salaries, conditions of status and tenure, and opportunities for study, for the development of policies, and for other activity or rest are determined. Recognition of the abilities, training, experience, and responsibilities of the staff should likewise be carefully considered, and a classification corresponding to its professional and educational competence established. Clarification of these matters would eliminate the uncertainty which generally prevails concerning what constitutes the proper rewards and status of university librarians and would contribute to the improvement of university administration in general. In this connection, the examples of the Oregon State System of Higher Education ${ }^{1}$ and the establishment by the federal government of a "professional and scientific" classification for many highly trained members in government service ${ }^{2}$ might be studied with profit.

Chief librarian.-The salaries received by chief university librarians in 29 institutions included in the statistics of the American Library Association for 1940 ranged from $\$ 2,050$ to $\$ 10,000$. The median salary for the group was $\$ 4,807$ (Table 18). Although Randall ${ }^{3}$ found that there was no relation between the size of the college and the salary of the librarian, there appears to be a connection between the two factors in the university. This may be due to the fact that universities which have large student enrolments, large annual expenditures, large faculties, etc., are also likely to pay higher salaries for librarians. There is a definite relation between the size of the li-

[^140]brary in volumes and the salaries of librarians. There is likewise a relation between the general cost of living in different areas and prevailing salary ranges. Salaries in large urban centers are likely to be higher than in smaller cities or rural areas. A comparison of the salaries of librarians with those of professors is given in Table 19.

TABLE $18{ }^{*}$
Salaries of Chief Librarians and Assistant
Librarians in 29 University Libraries

| Libraries | Chief <br> Librarian | Assistant Librarian |
| :---: | :---: | :---: |
| Arizona. | \$ 3,990 | \$2,206 |
| California | 6,000 | 4,000 |
| Chicago. | 8,750 |  |
| Cincinnati | 4,807 | 2,760 |
| Colorado State. | 3,600 | 2,400 |
| Georgia. | 4,000 | 3,650 |
| Howard. | 3,700 |  |
| Illinois. | 7,000 |  |
| Iowa |  | 3,250 |
| Iowa State. | 5,700 | 3,750 |
| Joint University Librar | 6,000 | 2,400 |
| Kansas. | 4,000 |  |
| Louisiana | 6,000 |  |
| Michigan. | 10,000 | 5,500 |
| Michigan State. | 4,500 |  |
| Missouri.. | 4,500 |  |
| North Carolina. | 4,909 |  |
| North Dakota. | 2,050 |  |
| Northwestern. | 7,200 | 2,970 |
| Oklahoma. | 3,804 | 2,700 |
| Oregon. | 4,122 |  |
| Oregon State | 4,683 | 2,700 |
| Pennsylvania. | 5,000 | ....... |
| Pennsylvania State. | 4,700 | 2,500 |
| South Dakota. | 2,292 |  |
| Southern Methodist | 2,700 | 1,836 |
| Syracuse. | 5,700 | 2,160 |
| Texas. | 5,500 | 3,200 |
| Washington (Seattle). | 4,740 | 3,540 |

[^141]Assistant librarians.-Data from 15 university libraries show a range of from $\$ 1,836$ to $\$ 5,500$ in the salaries of assistant librarians. The median salary is $\$ 2,700$ (Table 20).4 An equitable range between the salary of the librarian and the assistant librarian may be best determined by considering the responsibilities of each officer. The median ratio of the salary of the assistant librarian to that of
${ }^{4}$ This sample is comparatively small and includes medium-sized institutions located in relatively small cities.

TABLE 19*
Salaries of Chief Librarians Compared with Those of FULL Professors in 13 Universities

| University Libzaries | Salaries |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chief <br> Librarians | Full Professors |  |  | Difference between Chief Librarian and Maximum of <br> - Professor |
|  |  | Minimum | Median | Maximum |  |
| Colorado State. | \$3,600 | \$2,650 | \$3,600 | \$4,102 | +\$500 |
| Iowa State. | 5,700 | 2,750 | 4,750 | 7,000 | +1,300 |
| Kansas. | 4,000 | 2,600 | 3,300 | 6,500 | + 2,500 |
| Louisiana. | 6,000 | 4,000 | 4,250 | 4,500 | -1,500 |
| Michigan State. | 4,500 | 2,000 | 3,500 | 5,000 | + 500 |
| North Carolina. | 4,909 | 3,506 | 5,503 | 7,500 | +2,591 |
| North Dakota. | 2,050 | 2,000 | 2,400 | 2,700 | + 650 |
| Oklahoma. | 3,804 | 2,664 | 3,276 | 3,807 | + 3 |
| Oregon. | 4,122 | 2,800 | 3,675 | 5,255 | +1,133 |
| Oregon State...... | 4,683 | 2,700 | 3,700 | 4,800 | + 117 |
| Southern Methodist. | 2,700 | 3,000 | 3.7 | 4,000 | +1,300 |
| Texas............... | 5,500 | 3,400 | 4,100 | 6,500 | + 1,000 |
| Washington (Seattle) | 4,740 | 3,500 | 4,200 | 6,000 | + 1,260 |

[^142]TABLE 20*
Comparison of Salaries of Chief Librarians with Those of Assistant Librarians in 5 University Libraries

| Institution | Salaries |  | Ratio of Assistant to Chief |
| :---: | :---: | :---: | :---: |
|  | Chief Librarian | Associate or Assistant Librarian |  |
| Arizona. | \$ 3,990 | \$2,206 | 55 |
| California | 6,000 | 4,000 | 67 |
| Cincinnati. | 4,807 | 2,760 | 56 |
| Colorado State | 3,600 | 2,400 | 67 |
| Georgia. . . . | 4,000 | 3,650. | 91 |
| Iowa State. . . . . . ${ }^{\text {a }}$ | 5,700 | 3,750 | 66 |
| Joint University Libra | 6,000 | 2,400 | 40 |
| Michigan..... | 10,000 | 5,500 | 55 |
| Northwestern | - 7,200 | 2,970 | 41 |
| Oklahoma... | 3,804 | 2,700 | 71 |
| Oregon State. . . . . | 4,683 | 2,700 | 58 |
| Pennsylvania State. | 4,700 | 2,500 | 54 |
| Southern Methodist | 2,700 | 1,836 | 68 |
| Syracuse. | 5,700 | 2,160 | 38 |
| Texas............... | 5,500 | 3,200 | 58 |
| Washington (Seattle) | 4,750 | 3,540 | 75 |

[^143]the chief librarian was 58 per cent in the 15 libraries. It should be apparent that if the difference between the salaries is too great it is likely that mediocre individuals will be placed in the assistant librarianships. Further, the lower the salary of the assistant librarian, the lower ordinarily will be the salaries of departmental heads and professional assistants.

Administrative office assistant.-An individual of considerable importance in some university libraries is the administrative office assistant, also known as the executive secretary, the secretary to the librarian, or the assistant to the librarian. The work of this person may involve the handling of minor personnel problems, checking budget expenditures, referring building or equipment needs to the proper authorities, and acting as an intermediary in certain matters between the librarian and members of the staff. The salary for the administrative office assistant will vary with the importance of his activities and responsibilities. It may well equal that of a departmental head.

Departmental heads.-The importance of the departmental head in the university library organization has been pointed out. In large systems, departmental headships constitute key positions and, as such, should be filled by individuals who have both administrative and technical backgrounds. Since these positions require relatively extensive academic training and experience, it is necessary, if qualified persons are to be secured, to pay salaries commensurate with the training and responsibility involved. The minimum and maximum ranges of salaries for departmental heads in $3^{8}$ large college and university libraries in 1940 were as follows: ${ }^{5}$

|  | Minimum | Maximum |
| :---: | :---: | :---: |
| High. | \$3,000 | \$4,000 |
| Median | 1,725 | 2,400 |
| Low. | 1,100 | 1,560 |

The tentative salary range for departmental heads, as established by the American Library Association Board on Salaries, Staff and Tenure, is from $\$ 1,860$ to $\$ 3,000$.

Professional assistants.-The professional assistants form the backbone of the university library. They handle the bulk of the pro-

[^144]fessional work under the direction of superior administrative officers. Salaries of professional assistants vary with educational background, experience, type of work performed, and ability. Because of the wide variations in the amounts paid by university libraries to professional assistants doing different kinds of work, it is not possible to generalize concerning salary. The American Library Association has tentatively adopted a range of $\$ 1,500-\$ 1,800$ for junior professional librarians, and $\$ 1,620-\$ 2340$ for senior professional librarians. Two points regarding salaries for professional assistants may be made. First, they should be high enough to attract able, well-trained librarians. Second, they should, whenever possible, be organized into a classification scheme. Several state university libraries, such as those of Illinois and Minnesota, have set up workable classification and pay plans.

Subprofessional and clerical assistants.-The salaries paid to subprofessional and clerical assistants also vary greatly because of the same factors that affect the salaries of professional workers and because the various types of work are done by different individuals. For example, a clerical worker doing routine typing would receive a lower salary than the secretary to the librarian. Prevailing local rates for clerical work often determine what the university library will pay for such services, because the clerical worker, as contrasted with the professional worker, is usually drawn from the university community rather than from the nation at large. The rates are also definitely affected by the prevailing rates for such services in other departments of the university.

Student service.-Since student service is ordinarily part-time work, it is paid for on an hourly basis. The American Library Association statistics for 1941 show a range of from $\$ 0.25$ to $\$ 0.60$ per hour. Again the rate depends upon the kind of work performed and the skill and experience of the students.

## HOURS OF SERVICE

It is a far cry from the early days of university libraries, when the libraries were open to students only at a certain specified hour during the day (or even on a certain day of the week), to the present situation in most universities. In 1870 the librarian of Princeton University or his deputy was required to be in regular attendance twice each week for one hour for delivering books to students, who were allowed to borrow one book at a time. In 1942 the Princeton Uni-
versity Library was open from 8:00 A.m. to midnight on weekdays, from 2:00 P.M. to midnight on Sundàys, and from 9:00 A.M. to 5:00 p.m. during vacation periods. Such a long day requires a large staff if a uniform high standard of service is to be rendered. Some librarians have assumed that assistance to readers after 5:00 P.M. is not so important as service during the day, and as a result the general and departmental libraries are staffed by student assistants during the evenings. Some departmental libraries are not open at all after 5:00 P.M. Budget restrictions and insufficient use are given as the reasons for not maintaining professional staffs on duty at all the hours the library is open. In small isolated colleges and universities the additional reason is given that no difficulty will be faced by a homogeneous group of students in their use of books and tools in the library during the evening. In large university libraries which offer diverse services to graduate and undergraduate students, however, the need for trained assistance at all hours seems imperative. While information is lacking which shows the extent to which unanswered questions appear during periods when only student assistants are available, it seems that the opportunity for effective educational service is not offered when capable persons are not present to help users with their special problems. Students and faculty members are quick to sense this situation and often are forced to restrict their hours of work accordingly. Through the use of staggered schedules for professional workers a number of institutions have provided a high type of service at all desks during hours of opening. Schedules have also provided for at least one departmental head to be available during service hours, in order that any administrative, technical, or service questions which arise may be satisfactorily answered.

Hours of service.-In his study of 16 college and university libraries in 1925 Works $^{6}$ found that the hours of service for central libraries ranged from 69 at Tulane to 92 at California. The median number of hours of service was 84.5 . A study of the hours of service in 34 university libraries, as revealed by the 1939 or 1940 catalogs of the institutions, indicates that the median has not changed appreciably, now being 84.75 hours. In the larger university libraries the hours of service in the departmental libraries are similar to those in the central libraries. Many departmental libraries, however, are not open for either evening or Sunday service.

[^145]Hours of work.-The median number of hours required of fulltime professional members of library staffs in 42 universities in 1940 was approximately 40 hours weekly. A similar working week has been required of subprofessional and clerical workers. The range of both classes of workers is from 36 to 44 hours (Table 21). The evidence indicates that the 39 -hour week, or the 7 -hour day, is general in libraries which, from the point of view of size, have fairly satis-

TABLE 21*
Number of Hours Required of Staff Mem-
bers in 42 University Libraries

| $\begin{aligned} & \text { Hours } \\ & \text { (WeEkLY) } \end{aligned}$ | Libmaries |  |
| :---: | :---: | :---: |
|  | Professional Workers | Subprofessional and Workers |
| 44. | 1 | 1 |
| 43. | 1 | 1 |
| 42. | 4 | 7 |
| 41. | 4 | 4 |
| 40. | 12 | 11 |
| 39. | 12 | 8 |
| 38. | 9 | 3 |
| 37. | - | 0 |
|  | 1 | 1 |
| Total. | 42 | $36 \dagger$ |

*Data from Bulletin of the American Library Association, XXXV (1941), 108. Attention is called to the fact that the war has had some effect in oome libraries on the number of hours of service offered to the clientele and the number of hours required of ataff members.
$\dagger$ Data for only 36 libraries for this classification of workera.
factory staffs. Understaffed libraries which attempt to offer high standards of service are usually required to demand longer working weeks of their members. It should be clear that, in addition to making the work more exacting by longer hours, the staff members are deprived of the opportunity of study or of developing themselves in other ways.

Sunday hours.-Many of the large university libraries are open for at least a few hours on Sunday afternoons and evenings. Generally, the opening of libraries on Sundays has been the result of pressure from students living on the campus. In order to keep operating expenditures at a minimum, a few institutions open only a part of the
building on Sundays. Partial opening usually involves the reserve reading room and the reference room. Unless a building is planned so that portions may be satisfactorily closed to users, however, partial opening may not be practicable. The problems of heating and janitorial service must also be considered.

Summer and holiday hours.-During the summer sessions, hours of opening are reduced in some institutions. This results from shorter working hours for the staff. The University of Pennsylvania Library, for example, which operates on a $39 \frac{3}{4}$-hour schedule during the regular sessions, has a $33 \frac{3}{4}$-hour summer schedule. The Wayne University Library drops from a 36 -hour week to a 30 -hour week. The University of Nebraska Library reduces its 44-hour week of the regular session to a 39 -hour week during the summer, while Harvard requires a 35 -hour summer week instead of the regular 39 -hour week. Shorter evening hours and Sunday closings during the summer make it possible to curtail the hours of work.

University libraries are generally closed on the important national holidays. Considerable variation, however, occurs in regard to holidays, the variations depending upon the religious affiliation, location, and other characteristics of the institutions. In libraries which remain open on general holidays, staff members who are required to work are usually granted equivalent time off at a later date.

Time for meetings and conferences.-It is obviously impossible for all members of a library staff to attend a library meeting or conference unless the building is entirely closed. The privilege of attending a meeting or conference, therefore, is an important one, since the absence of certain staff members will generally place an extra burden upon those who remain on duty. If attendance at meetings is a desirable practice, provisions should be made for different staff members to take advantage of it in different years.

## PROFESSIONAL DEVELOPMENT OF THE STAFF

It is a generally accepted assumption that the members of the university library staff should continue to develop themselves professionally. One of the acknowledged criteria of a profession is the existence of a group consciousness which centers about homogeneous purposes and activities. This consciousness is made tangible by professional organization. Within the library itself there is the need for the development of attitudes which will contribute to professional homogeneity.

Primarily it is the responsibility of the librarian to encourage the professional development of staff members. If the librarian has a professional outlook himself, it is likely that his assistants and subordinates will also present a similar outlook toward librarianship. The whole tenor of the library must be conducive to this attitude or staff members are likely to relax their interests in professional responsibility. The head librarian should clarify and reveal to his staff the fundamental criteria of excellence in university library service. Moreover, he should, as the superior officer, provide an organization which basically is regarded as a professional unit by faculty and students. This requires him to be concerned with such factors as ethics, morale, fair remuneration, and internal administrative relationships. Professional activity is hindered when friction arising from unethical practices, low morale, and an unfair salary schedule is permitted to exist among the personnel. No greater obstacle to the development and maintenance of a professional attitude exists than the burdening of professional workers with clerical activities and of clerical workers with responsibilities which they cannot effectively perform.

One of the best methods of fostering professional attitudes is the participation of staff members in professional associations. It may generally be observed that those university libraries in which a large proportion of staff members are officers or active participants in library and other associations, write papers for journals, and participate in scholarly projects are ranked high as professional organizations by librarians and educators alike.

Since the staff is an essential part of the university library, it falls upon the university and library administrations to provide a plan for orienting new personnel and for improving the efficiency of the whole staff. By providing a program of in-service training, by permitting attendance at meetings of library and other scholarly groups, by granting the opportunity of staff members to take courses, by promoting individuals when their work and advanced training indicate that such recognition should be made, by allowing leaves of absence for special study or travel, by selecting staff members for participation in the teaching program for extra pay, and by establishing fellowships for persons who have displayed exceptional ability the university builds a program that should result in an efficient and scholarly library personnel. Such matters as retirement and insurance must also be carefully considered if an effective staff is to be assembled and maintained.

## IN-SERVICE TRAINING

Few university libraries have established in-service training programs for either their professional or their nonprofessional personnel, although some public libraries have provided such training. ${ }^{7}$ Inservice training may be defined as
management's process of aiding employees to gain effectiveness in their present and future work assignments by providing, planning, and organizing a program of systematic instruction and practice on the job in order (1) to point out to the employee the way to apply the body of knowledge gained in pre-entry education and training to the concrete duties of a specific job, and (2) to develop appropriate habits of thought and action, skills, and knowledge essential to effective performance. ${ }^{8}$

In-service training thus becomes a deliberate function of management rather than one reserved to the individual. The program may be designed for orienting the new staff member, for increasing the efficiency of present staff members, and for preparing certain members of the staff for promotion.

Training new personnel,-Although professional members of the staff are assumed to have a basic knowledge of library objectives and techniques, each library has its individual aims and peculiar processes. In order that new members of the staff may be inducted with a minimum loss of time, certain devices have been successfully employed. These include the distribution of manuals, handbooks, and similar materials, the holding of personal conferences between new staff members and their superior officers, providing introductory lectures and inspection tours, offering induction courses, and giving preliminary full-time instruction to new members before they begin work.

Training to increase efficiency.-All training, of course, is intended to increase efficiency of staff members. Yet there are certain procedures which, if followed, would systematically develop the personnel. These include providing professional literature, instituting planned reading courses, encouraging meetings of special groups, sponsoring group discussions and conferences, urging the attendance of staff members at institutes, setting up an experience program whereby members of one department are given a chance to work in or to visit extensively in other departments, assigning special studies of library problems to staff members, offering intermittent or occa-

[^146]sional courses, participating in co-operative programs with educational organizations and learned societies, and requiring attendance at educational institutions.

Training for promotion.- Most university libraries have used haphazard methods in promoting individuals, by giving them either salary increases or higher rank. While it may be assumed that certain members of the staff will acquire experience in various tasks, unless a systematic program is established, promotions will continue to be made on a trial-and-error basis. Among the devices which have been used in libraries for developing staff members for higher positions are: training of understudies, planning job experiences for promotion prospects, requiring the completion of special studies or the passing of examinations, and keeping a special file of prospective administrators. A procedure for training for promotion is the "threeposition" plan, whereby a staff member trains a subordinate and in turn is trained by his superior. Individuals who are selected for promotion may also be required to take a training course in the library, in a library school, or in other educational institutions.

The advantages of a systematic program of in-service training are clear-cut. Not only will it insure continuity of the objectives, policies, and services of a particular library, but it will help substantially in stimulating morale and reducing turnover among the more capable members of the staff. Detailed consideration may now be given to some of the more important points raised in this section.

## attendance at library meetings

Some university libraries provide in their budgets funds for travel expenses of individual members of the staffs. Too often these funds are of insufficient size to allow more than two or three members of the staff to take advantage of attendance at meetings. Too often the funds are distributed to the same individuals. If attendance at $\mathrm{li}_{-}$ brary meetings is beneficial to the staff, it seems that the funds for travel should be allocated so that subordinate, as well as administrative officers, should benefit from time to time. In a few institutions provision is made for the rotation of funds, so that all professional members of the staffs participate at some time. In other cases the funds are distributed in the form of token grants in order to encourage large attendance at meetings.

Generally, time to attend meetings is granted to university librarians of administrative rank, even though funds may not be available.

When members of the library staff participate in the programs of conferences, it is not unusual for the library to pay all or part of the travel expenses. In a few institutions in which travel expenses are granted, the individuals are called upon to report at staff meetings upon the sessions which they have attended.

## OPPORTUNITIES FOR ADVANCED STUDY

It is not unusual to find alert members of university library staffs who wish to increase their academic and professional knowledge by taking advanced courses either at the institutions with which they are associated or elsewhere. Many universities have recognized the value of such training and have made it possible for staff members to take courses frequently at reduced fees. A recent survey by members of the University of Washington (Seattle) Library Staff Association ${ }^{9}$ shows the extent to which professional library staff members in 26 institutions of higher learning are given opportunity to continue their studies. It will be observed that opportunity for advanced study for credit (that is, toward a degree) is possible in each of the institutions (Table 22). When courses are not taken for credit, no charge is made of the librarians in 16 institutions. Only the University of Wyoming exempts library staff members from payment of all fees. Special rates for librarians, which vary according to prescribed conditions, are granted to librarians in 15 institutions. Since librarians of the Oregon State System of Higher Education are ranked as faculty members, they are entitled to take courses on the payment of minimum fees.

Generally, according to the sampling of libraries in the table, librarians are permitted to pursue any courses which they feel might benefit them. In six instances, however, some restrictions are imposed. For the most part, the restrictions imposed are intended to insure that the librarians select courses which are related to their work.

## PROMOTIONS

It has been pointed out that one of the problems faced by university administrators is that of raising the assistant or associate librarian to the chief librarianship. An analysis of library appointments in recent years indicates rather clearly that only in exceptional cases does either the assistant librarian or another member of the staff

[^147]TĀBLE 22＊
OPPORTUNITIES FOR ADVANCED STUDY

| Libraries | ． | 易 |  | 魚 | 品 | 发 | $\begin{aligned} & \underset{~}{\mathbf{y}} \\ & \text { 心 } \\ & \text { 第 } \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \text { "E } \\ & \text { 劬 } \\ & \text { 总 } \end{aligned}$ |  | $\begin{aligned} & \text { 믕 } \\ & \text { 2 } \\ & \text { 曹 } \end{aligned}$ | 品 |  | $\begin{aligned} & \text { y } \\ & \text { N } \\ & 0 \\ & 0.3 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & \text { 응 } \\ & \text { 80 } \\ & 0 \end{aligned}$ |  | 器 | 雩 | 品 | 宕 | ce 晨 0 3 |
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| Librarians are given oppor－ tunity to take courses on campus if they do not interfere with working schedules． | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes： | Yes | Yes | Yes | Yes | Yes | Yes | Yes ${ }^{\text {a }}$ | Yes |
| Regular student fee rates apply to librarian | No： | Nos | Yes | No4 | Yes | Yes | Yes | Nos | Yes | Yes ${ }^{6}$ | No | Yes ${ }^{47}$ | Yes | Yes | Nor | No | Yes | Yes＇ | No＂ | Nore | No：1 | Yes | Yes | No：${ }^{18}$ | Yes | $\mathrm{No}^{23}$ |
| Fees are required for courses audited without credit． | No | No | No | No | No | Yes ${ }^{4}$ | No | Yests | No | No | Yes | Yes | No | Yes |  | Yes | No | Yes ${ }^{16}$ | No | No | No | Yes | Yes＇： | No | No | No |
| Choice of courses is restrict－ ed | No | Yes ${ }^{14}$ | Yes＊ | No | No | $\mathrm{No}^{\mathbf{2 0}}$ | No | No | No | Nor ${ }^{18}$ | No | No | No | No | No | Yes＊ | No | Yes＇s | Yes ${ }^{3,}$ | No | No | No | No | No | Nore＇ | No |
| Full－time cierical and sub－ professional employees subject to same provi－ sions as full－time profes－ sional staff members | No | No | No | Yes 4 | Yes | Yes | Yes | Yes | Yes | Yes | $\ldots . . .$. | Yes | No | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | No | Yes |
| Fees are reduced for part－ time professional em－ ployees． | Yes ${ }^{14}$ | No | No | Yes4 | No | No | No | Yes | No | No | Yes | No | No | No | No | Yes | No | No | Nor | No | No | No | No | No | No | $\ldots$ |
| Fees are reduced for part－ time clerical employees． | No | No | No |  | No | No | No | Yes | No | No | Yes | No | No36 | No | No | Yes | No | No | No | No | No | No | No | No | No |  |

－Uned with permistion of the editort of the Pacific Northuess Library Association Quatherly． －Privilege limited to one or two pertons per quarter．＇Fees for all members of library staff reduced，regardless of salary，from 815 to 85.00 hor maximum of 5 units．＇＂Incidental fee re－ duced from $\$ 27.50$ to $\$ 15$ for a maximum of 4 units，but the lowered fee excludes staff members from hospitalization service．＂＂All peroona registered in the graduate school for graduate cred－ it exempted from all fees if they are on university appointment at a salary of $\$ 1,600$ or less． Other staff members in graduate courses pay $\$ 10.00$ per unit，and those in undergraduate courtes pay $\$ 2.50$ per crecit－hour． Nembers of he hibrary tran may carry 12 credi－hour recently been adopted for reduced programs，＂based upon a credit－hour fee for courtes amount－ ing to eight houra or less in the two academic semesters．＂In certain schools only＂half the regular tuition fee per point is charged up to a maximum of 8 points ．．．．to be eligible，an employee must be a full－time assistant on an annual basis．＂＇A member of the library staff is required to pay full fees if salary is above $\$ 1,000$ per year．ofees for all members of the li－
brary ataff reduced to a flat rate of $\$ 1.00$ per term hour in courcea taken for credit．to Fees brary ataff reduced to a flat rate of $\$ 1.00$ per term hour in cournet taken for credit． $\mathbf{v o}$ Fees for all members of the library staff reduced to $\$ 1.00$ per term hour up to $6 ;$ a $\$ 5.00$＂building fec＂is added for more than 6 hours except in the oummer sespion．＂Flat reduction made of ＂one half of the regular fees for any course．＂．＂E＂When credit is to be given，staff members are
required to pay tuition fees for the coursea tary fees are waived．＂＂د All feea exempted for both full－time and part－time members of the library ataff．＂＂＂There is a courtesy extended to the library whereby itt itaff members who hold the baccalaureate degree may after upecial permistion is granted by the registrar audit
classer in Foreign Languages only on condition that no credit it granted for this work．Like－ wise no fee is aseessed．＂${ }_{i s} 81.00$ per hour．${ }^{0}$ No fees required for courseat audited if atudent is also enrolled in other courtes for credit．$\times \$ 5.00$ for any number of courtes．Laboratory courtes may not be audited．＂Members of the library taff may take＂courtes which tend to increate the individua＂qualifications for his position；this hab been interpreted rather iberal staff member． 19 Courses munt bear some relation to work of the staff member，and approval of librarian is aloo necessary．Eo Choice of courses unreatricted only when full tuition is paid． －Library employees are allowed to elect courtet only by permission．They munt submit a ＂chedule which muast be approved．＂Some laboratory coursea restricted．＂In＂In general full time staff members ehall not carry work involving more than three term hours of credit；five term hours eliall be the maximum and coursel and schedules must be submitted for approval．＂ ＂S Same privileges regarding fees given to part－time professional employees as to full－time pro－ fessional employees．${ }^{5} 5$ No，unless registered as graduate assistants，scholara，or fellowa－ so＂The working schedule of clerical employees is reduced by the number of hours spent in class and the salary reduced by 1 times the number of hours lost；for inteance a clerical employee spending 10 hours a month in class has her working schedule reduced by to hours．． 1 she earns
50 cents an hour，her salary for the month is reduced $\$ 7.50$ instead of $\$ 5.00$ ．＂＂＂very olight
 proval of the librarian up to 3 hours per week of library time is granted to librarians for class work．
succeed the retiring incumbent. ${ }^{10}$ Although the assistant librarian or a divisional head may be intrusted with the administration of a library during prolonged absences of the librarian, when the time comes for actual appointment to the chief office he is usually passed over in favor of an outside individual. Generally, the reason for this action on the part of the university lies in the desire to secure a new viewpoint in the library. In other cases, assistant librarians with ability to operate the library for an occasional period are not competent to take over complete control. A third reason, and one which has become increasingly important, is the desirability of securing a librarian with advanced training in modern university librarianship.

The university librarian himself is faced with a similar problem when he needs to fill the assistant librarianship or a departmental headship. Is a departmental head the logical person to be selected for an assistant librarianship? If so, which departmental head? Unless an actual library situation is considered, such questions are merely academic. It is not unusual to find that a new librarian will bring with him a new assistant librarian. In many libraries, however, there are individuals who by experience and training are capable of filling the assistantship. When one of these individuals is as fully equipped as any outside candidate, a sound principle of personnel management would be complied with if he were promoted to the position of assistant librarian.

In the selection of a departmental head for the assistant librarianship every endeavor should be made to consider all employees in the organization who may possess the qualifications necessary for the position. Such factors as age, past and present educational achievements, previous experience, connection with the library, professional activities, and the opinion of the librarian enter into the choice of an assistant. Unless an objective viewpoint is maintained, individuals who lack necessary qualities for administrative work may be placed in positions they cannot handle effectively. But librarians are as greatly interested in advancement in their profession as are other workers, and they are entitled to consideration before outsiders are brought in to fill important positions.

Are senior assistants to be considered in selecting a departmental head? In this case, as in the selection of a librarian or an assistant librarian, professional policy calls for a careful consideration of the

[^148]members of the department. Seniority should not be the principal criterion employed in determining fitness for promotion. Obviously, a person who is not capable of running a department efficiently should not be placed at its head. If no individual in the department is capable of filling the position as effectively as the retiring individual, then the proper procedure is to select a candidate from the outside. Although nonadministrative staff members are to be encouraged to look forward to advancement, the librarian will make promotional adjustments only in so far as they will aid him to administer the library efficiently. In the long run, such a promotional policy should encourage the younger members of the staff to develop their talents for administrative positions. The librarian himself can, by judiciously selecting junior members of the staff, create an organization which will provide capable individuals when the occasion requires it.

Demotion and dismissals.-The question of demotions in library service is relatively unimportant. Ineffective individuals are generally not promoted either in rank or salary. Occasionally, however, it is necessary for the librarian to remove an assistant librarian or a departmental head because of inefficiency. Such individuals should be eliminated from the organization, but circumstances may prevent such action. There seems to be no question that librarians as a group have been unwilling to dismiss outright individuals who have been found inefficient or incompetent. When the presence of an ineffective individual in an administrative post affects the smooth functioning of the library and it is impossible to dismiss him, a procedure sometimes employed has been to bring in an outside officer and place him in a superior relation to the offending person. Another procedure, but of doubtful value, is to shift the individual to an inferior position in another department. A final procedure is to combine two departments, reducing in rank the inefficient head. Any such situation is a delicate one and should be handled diplomatically by the librarian if later co-operation is to be expected. If the employee's record is carefully scrutinized during the period of probation and acted upon in the case of unpromising employees, this difficulty may be minimized.

## VACATIONS

In most university libraries, professional staff members are granted 26 days of vacation, exclusive of Sundays. The median period given
to subprofessional and clerical workers in $3^{8}$ university libraries in 1940 was 20 days. ${ }^{11}$

The utilization of vacations as a means of developing the staffs of university libraries has received little systematic attention. The management and particularly the planning of a large, complicated library calls for the same kind of opportunity for observation, study, and reflection as provided for heads of academic departments and schools. Three months may well be allotted at times if the librarian is to fill the role of an effective participator in the formulation of important administrative and educational policies of the university and if he is to help advance librarianship generally. Similarly, when professional members of the staff have made plans for using the vacation period as a means of further equipping themselves for the newer teaching aspects of librarianship, some consideration should be given to the possibility of lengthening the normal vacation period if no inconvenience is caused other members of the staff or if the service of the library is not impaired. Most university libraries must be prepared to render full service in all departments during the summer months, as summer sessions are the rule rather than the exception.

As an administrative officer, the chief librarian may well consider carefully the ways in which staff members spend their vacation periods. He should be able to decide whether or not an individual is physically strong enough to spend his vacation studying formal courses rather than using the time to recuperate from the nervous strain that may result from a year's work. The duties and responsibilities of administrative officers, as well as the pressure of work upon subordinate members of the staff, generally require periods of rest as aids to health and efficiency.

Most vacation periods are scheduled for summer months. In large libraries with staffs of forty or more individuals, it is necessary to begin vacation periods early in the year if the program of work is to be maintained at an even pace. Careful attention should be paid to the extent of service demanded by summer-school faculties and students, the amount of materials acquired during the summer months, and other demands upon the library. Rotation of vacation periods among staff members has been followed in some libraries. This procedure makes it possible for each staff member to be on duty during peak loads at least in alternative years.

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## PARTICIPATION IN THE TEACHINO PROGRAM

Generally, the participation of library staff members in the teaching program is associated with either library-school courses or instruction in library use. In a few institutions, however, librarians and other members of the staff participate in the teaching program in fields related to librarianship or in purely subject fields. Law librarians in several of the large universities have given courses in legal literature or other legal subjects. The reference librarian at Columbia has given courses in the English department. Former librarians of Fisk, Johns Hopkins, Princeton, Michigan, and Yale have taught courses in either subject fields or bibliography.
If it is part of the librarian's duty to conduct courses on the basis of his subject background, arrangements should be made for the continuous operation of the library when he is engaged with his class work. The policy of the university in regard to the librarianship should determine whether or not teaching is considered an activity beyond the essential requirements of the librarian. Since modern university librarianship requires full-time application, it is clear that any additional teaching duties which the librarian or other staff members perform should be done at extra remuneration or that the time for preparation and for meeting classes be properly adjusted. Close collaboration of the librarian with the deans should result in the use of staff members who are qualified by background and training to teach in the regular courses, evening courses, or summer and extension courses. The values to be derived from the use of the library staff for teaching should help considerably in integrating the library with the instructional and research programs of the university. Librarians engaged in teaching are usually given professorial rank and enjoy the privileges associated with academic status.

## ACADEMIC STATUS

No group of librarians has been more concerned with professional recognition than those attached to universities. They have assumed that their close association with students and faculty members in furthering the educational program is sufficient basis for them to be included in the ranks of the teaching staff or other professional or scientific classification and to be assured of rewards and benefits in keeping with their services. Probably more important is the librarian's contention that his academic training is generally comparable to that of members of the instructional staff to whom faculty
ranking, sabbatical leave, permanent tenure, long vacations, retirement and annuity benefits, and inclusion in general academic activities and ceremonials are automatically given. They naturally object to a classification which differentiates them adversely in these very important particulars.

University trustees and presidents, however, have been slow to understand the point of view of this body of professional workers or to recognize the educational functions of librarians, except in the case of the chief librarian. In a number of instances, faculty members have been unwilling to admit that even chief librarians are educa-

TABLE 23*
Faculty Status of Librarians in 35 Large College and University Libraries

| Rank of Librarians | Full professor | Associate professor | Assistant professor | In-structor | Lecturer | Ad-ministrative Officer | Cleri- <br> cal <br> Offi- <br> cer | Inde-terminate Rank | No <br> Definite <br> Ranking | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chief librarian... | $26 \dagger$ | 0 | 2 | 0 | - | 3 | $\bigcirc$ | $\bigcirc$ | 4 | 35 |
| Assistant librarian | $2 \ddagger$ | 4 | $2 \ddagger$ | 4 | 0 | $4 \ddagger$ | $\bigcirc$ | 0 | 6 | 22 |
| Department heads | I | 1 | 77 | 3 | 1 | $4 \ddagger$ | 0 | 1 | 5 | 23 |
| Professional assistants. | I | 0 | 1 | $5 \ddagger$ | 0 | $\bigcirc$ | 4 | I | 6 | 19 |

[^150]tional officers. In some institutions only those members of the library staff who actually teach courses are entitled to placement on the list of instructional officers.

Two recent studies of the practices in large college and university libraries reveal that faculty status is now ordinarily granted to the head librarian and the chief assistants but not to the subordinate members of the staff. Table 23 is compiled from data furnished by Maloy. In a similar study of large universities McMillen ${ }^{12}$ concluded that few institutions have formulated definite regulations on the subject of status of librarians or of other library staff members.

The interests of the university librarian in aiding scholarship and research give him important bases for claiming academic status. So far as the chief librarian is concerned, this has generally been recog-

[^151]nized. However, it has not been extended to the staff as a whole. Perhaps another classification, such as civil service or the classification of professional or scientific assistants provided for by the federal government, would meet the situation rather than academic status. According to these classifications, there are various series of professional service, such as law, engineering, medicine, and librarianship; but within the grades of the classifications each position in the series is the equivalent of the similar position in any other series. By this method the principle of equal pay or privilege for equal work is adhered to. In the university the teaching staff has received benefits of this type, but, in general, members of the library staff have not. Such classifications would need to be established on the basis of educational requirements, difficulty of work, degree of supervision, and similar factors. Consideration has not been given to the fact that members of the library staff usually work two months per year more than the average member of the instructional staff. The vacations of the former, as shown earlier in this chapter, average 26 days, whereas those of the latter, including winter, spring, and summer vacations, generally amount to 12 or more weeks.

Leaves of absence for study. - In most libraries the decision as to whether or not staff members may be permitted to spend a semester or a year in study is made by the librarian. As a professional procedure, the granting of such permission to capable individuals is a desirable one. In all cases, however, it is necessary to arrange for a capable substitute so that the service of the library will not suffer. The experience of many librarians who have had leaves of absence for study, particularly of those who have received scholarships, fellowships, or grants-in-aid, has been that more responsible positions in other libraries have been opened to them upon the completion of their studies. This, it seems, is a commendable result of the procedure, as the profession as a whole is benefited by the development of leaders with extensive training. In those instances in which the members return to their positions, the libraries benefit by the extra training the individuals have received and the institutions have been provided with stronger staffs. However, matters pertaining to leaves of absence are sometimes complicated by obligations on the part of both the staff member and the institution. If the staff member has been absent on sabbatical leave with pay, he is usually required to return to his position or to refund the money he has received while away. If the individual is absent at his own expense, the institution
may well feel some obligation to promote him or increase his salary on the basis of his additional training and ability to assume greater responsibility.

Sabbatical leaves.-The university administration that is cognizant of the responsibilities of the librarian in education and research will provide the opportunity for him to spend a year in study, travel, observation, or work on a special project. Librarianship is a rapidly changing profession. If the librarian is to keep apace with the advance in education and research, he should have time to extend his knowledge of his own or related fields.

In a total of 41 university libraries which supplied data for the 194I American Library Association statistical summary, ${ }^{13} 31$ granted no sabbatical leaves to libraifans. Five granted leaves to the head librarian; 4 to the entire professional staff or to the entire staff; I to any member with the rank of assistant professor or above; 1 to the director, assistant chief librarian, and departmental heads; and I to the chief librarian and assistant chief librarian. No definition of "sabbatical leave" is provided; so it is difficult to say what sort of income those on leave receive.

Fellowships. ${ }^{44}$-Talented members of the library staff in a few institutions have been given grants-in-aid or fellowships to attend library schools or graduate schools for additional training. Unfortunately, this has been done on a relatively minor scale. The benefits which are derived from such a procedure are similar to those derived from the policy of granting leaves of absence. The recipients of the awards, however, are generally required to return to their positions for a stipulated period.

Retirement.-Pension plans and retirement systems are of special interest to university librarians, just as they are to employees in education, business, or government. In some state universities, where retirement and pension systems apply to all employees, librarians are included in the plans. ${ }^{15}$ The passage of the Social Security Act has contributed to the extension of this movement. The situation, however, is not the same in private universities. In many endowed

[^152]institutions where faculty members are provided for in retirement systems, librarians are either wholly unprovided for or are granted only partial privileges. While the chief librarian, in view of his designation as a faculty member, may be granted the full privilege of entering the retirement system, other members of the staff, regarded as clerical workers rather than as members of the instructional staff or of a special professional and scientific group, are not generally provided for. As a result, the average staff member attempts to provide for the period of life when he is no longer able to work, through savings, insurance, and annuities with companies which serve teachers and librarians.

There can be no question but that the lack of provision for retirement of university library workers, particularly in older and larger institutions, has a direct effect upon the type of service rendered. Trustees of universities generally have not recognized this fact. The economic objectives of a retirement system-elimination of ineffective individuals, attraction of a high type of personnel, and maintenance of a consistent staff morale-should result in advantage to the institution which provides the system. The social objective-provision against insecurity because of old age or disability-seems to be as necessary in the case of librarians as it does in that of any other class of workers.

Probably the soundest system of retirement would require contributions from both the employees and the university. The noncontributory plan, under which the university pays all the costs, is objected to because it has the characteristics of a charity and because, in times of financial difficulties, the university is likely to discontinue or reduce the benefits. Yale University ${ }^{16}$ established such a system in 1940 for administrative and service employees; the amounts of retirement are small, and the university reserves the right to modify or discontinue the provisions.

In several university libraries in which staff associations have been formed, some attempt has been made to approach the administration with plans to include the librarians in pension and retirement systems. No significant progress, however, has been made.

Personal insurance.-In those institutions in which pension and retirement plans are in effect, the employees are generally protected for disability and their dependents receive benefits in case of death.

[^153]A large number of universities which may or may not have retirement plans for employees having academic rank provide plans of group insurance for both academic and nonacademic workers. Such plans usually terminate upon the withdrawal of the individual from the university service. Librarians of administrative rank who do not have academic rank are generally permitted to take out group insurance up to $\$ 5,000$ if their salaries are $\$ 3,000$ or more annually. Other library employees may participate in the plan in proportion to the salary received, the length of service rendered, and age.

Summary.-It should be evident from the material presented in this section on academic status that it is an aspect of university administration that needs serious consideration. The head librarian and professional members of the library staff, by virtue of their training and the character of work which they perform, should be accorded academic or scientific or professional status which would be commensurate with the importance of the service which they render. Both university administrators and librarians should give this matter the attention it rightfully merits.

## STAFF RELATIONS

Success in staff co-ordination and co-operation is often influenced by the personal attitudes of individual staff members. Studies of employees of the Western Electric Company ${ }^{17}$ in regard to working conditions and employee efficiency, manager-employee relations, employee dissatisfaction, and the social organization of employees not only illuminate these problems in an industrial field but suggest the desirability of a similar study of the employer-employee relations of library staff members as both workers and individuals. Librarians, like other workers, have strengths and failings-ambitions, prejudices, and special interests-and are subject to the emotional, mental, and physical disturbances which beset all mankind. The chief librarian and other administrative officers should consciously strive to adjust personnel difficulties whenever these have a direct bearing upon the work of the library. This calls for a keen understanding of human relationships.

The following means and methods of developing inter-employee relationships are not offered as panaceas to insure smooth interac-

[^154]tion of library services, but they have been employed successfully in developing morale in a number of institutions. They will be of considerable value if the basic personnel organization of the library is not well developed. On the other hand, if a policy of co-operation and co-ordination is firmly established and each member of the staff is encouraged to regard himself and his work as vital to the whole organization, much will have been done to insure efficient interaction as well as personal happiness. In this section attention will be given to (1) staff ethics, (2) staff rooms, (3) staff recreation, (4) health of the staff, (5) staff unions and associations, (6) staff meetings, (7) committees, (8) staff publications, (9) staff manuals, and (Io) democracy in staff organization.

## STAFF ETHICS ${ }^{88}$

The development of a professional consciousness is generally accompanied by a codification of ideal practices and relationships which, if followed, should improve the standards of the group and act as a deterrent upon those who may be guided by selfish motives. Despite weaknesses stemming from human frailty, ethical codes have had some influence in furthering such aims in medicine, law, and education. The possible applications to librarianship are clear.

Not only do individuals who enter librarianship assume an obligation to support ethical standards of behavior in relation to society and the governing body under whose authority they work, but they are also obligated to maintain such standards in relation to the library constituency (faculty and students in the case of university libraries), to their fellow-workers, and to the library profession generally. These ethical relationships may be divided more simply into those which are external, involving society and the governing authority, and those which are internal, involving interactions within the library.

Ethical relations to society and the governing authority.-Since the state university library is part of a governmental unit, its employees are subject to state laws. To demonstrate how the state laws affect the library and its workers, even though indirectly, the relevant sections of the North Carolina Code ${ }^{\text {r9 }}$ may be cited.

[^155]While specific references in the Code to personal manipulations in office for private profit on the part of trustees of public institutions are few, enough is included to make it clear that these officers are liable to penalties for using their positions for personal aggrandizement.

The portion of the Code dealing with "Misconduct in Public Office," for example, provides: (1) that a director of a public trust who contracts for his own benefit or makes a contract with another is guilty of a misdemeanor; ${ }^{2 \bullet}$ (2) that a board member, director, manager, trustee, or employee of any educational, charitable, eleemosynary, or penal institution who receives any pecuniary benefit or gift for furnishing the institution any kind of supplies is subject to removal, guilty of a misdemeanor, and liable to fine and imprisonment at the direction of the court; ${ }^{2 x}$ and (3) that "if any county board of education or school committee shall buy school supplies in which any member has a pecuniary interest, or if any school officers or teachers shall receive any gift, emolument, reward or promise of reward for influence in recommending or procuring the use of any school supplies for the schools with which they are connected, such person shall be removed from his position in the public service and shall, upon conviction, be deemed guilty of a misdemeanor." ${ }^{2 z}$ The part concerned with "Officers of State Institutions" states that "the directors, stewards, and superintendents of the state institutions shall not trade directly or indirectly with or among themselves, or with any concern in which they are interested, for any supplies needed by any such institutions." ${ }^{23}$

In the awarding of offices, restrictions are also imposed. Any person bargaining, buying, or selling an office is guilty of a misdemeanor and is subject to removal and to imprisonment and fine at the discretion of the court. ${ }^{24}$ The portion devoted to "Offices and Public Officers" provides that "all bargains, bonds and assurances made or given for the purchase or sale of any office whatsoever, the sale of which is contrary to law, shall be void" 25 and that any official or employee exacting a part of the salary of a subordinate is guilty of a misdemeanor and subject to removal.th Evidence of efforts to prevent any improper influence of board members also appears in the provi-

[^156]sions that no board member of a state institution may be elected to any office under his board within six months after the expiration of his membership in the board ${ }^{27}$ and that "no person shall be appointed to any place or position in any of the state institutions under the supervision of the state board who is related by blood or marriage to any member of the state board or to any of the principal officers, superintendents, or wardens of state institutions." ${ }^{28}$

Although the last citation is strictly applicable only to institutions under the North Carolina State Board of Charities and Public Welfare, it raises the question of nepotism, which is equally important to libraries and schools. While favoritism to relatives is not so strong a force in a democratic society as it might be in a less impersonal one, it does exist and has been recognized by specific measures. A directapplication to the university library is found in the statement of the University of California "Staff Manual," which is as follows:
Near relatives shall not be employed in the same department or division unless authorized by the President of the University. This includes: parents and children; husbands and wives; brothers and sisters; brothers-in-law and sisters-in-law; uncles; aunts; nieces and nephews. ${ }^{29}$

The establishment of laws against bargaining in materials or offices has as its objective the protection of public funds and institutions from exploitation by individuals and from the intrusion of considerations other than usefulness and economy in supplies and equipment and merit in personnel. Provisions against nepotism, in libraries as well as in other institutions, are designed to secure the individual independence of staff members and to prevent the development of conditions in which personal or family loyalties can interfere with the unhampered use of professional judgment. The legal or regulatory provisions made to this end are simply means by which action can be taken against officers violating these rules. Institutional rulings are usually present in private universities to maintain ethical standards in relation to purchasing and employment.

Ethical relations within the library.-The university library is not an entity in itself but a part of the institution with which it is associated. As such, the book collections and the organization and administration of the library should be based upon the objective of providing the most efficient and fullest service to students and fac-

[^157]ulty. This obligation places a responsibility of loyalty upon each member of the staff, from the chief librarian to the student assistant.

The attitudes which comprise loyalty in librarianship are not different from those demanded in other professions. Placement of the interest of the institution before that of one's self is essential. Constructive criticism of library policies and services, or of superior officers or other members of the staff, should be made through channels established by the library and available to all staff members. The provision of such channels is essential to the maintenance of effective organization.

The administrator can do much to eliminate personal friction by furnishing information regarding the library to staff members. Facts concerning the vital interests of the library should be made known to the staff. In some libraries the practice of not divulging information which concerns the staffs as groups has resulted in creating misunderstanding and lowering confidence and morale in general.

Since the members of the staff are the representatives and interpreters of the library to students and faculty members, individual contacts are important. All persons entitled to use the library, therefore, should be given impartial and courteous treatment. Those staff members who are in direct contact with the constituency of the library are in a strategic position to create a cordial relationship between patron and library.

Each department bears a definite relation to the whole service of the library. This fact requires each departmental head to review the work of his unit in relation to that of every other department and not to attempt to impress upon others the indispensability of his own activities. Only in this way can understanding and mutual responsibility for the library's service be developed.

The relations between the subordinates of a department and its head should be on a level of harmony. Opportunity for suggestions on the part of assistants should not only be granted but should definitely be provided for by the head. New ideas are rare, and stifling the imagination of the yourg assistant may result in creating attitudes and behavior patterns which will limit the service of the library. Adjustment of differences between members of the department should be made by the head of the department. Assistants who feel that they have been unfairly treated should discuss their grievances with the departmental head before appealing to the assistant librarian or librarian. The assistants themselves should be
willing to accept criticisms by the head without personal resentment and without the need of heated discussions with their fellow-workers.

An impersonal relationship between student, clerical, or nonprofessional workers and the professional staff should be maintained. Assistants should be promoted on the basis of merit rather than because of personal friendships. Granting of personal favors which affect the service of the library or morale should be avoided. Adherence to the administrative principle "unity of command," which requires that a subordinate shall be responsible to one officer only, is essential to the maintenance of harmonious relations. Although such practices as these are not new and are common to business, industry, and the professions, they have not been given the consideration they deserve in many library systems.

The development of a profession requires the participation of its members in those activities which generate a consciousness of service. As Flexner ${ }^{30}$ has pointed out, a profession is a brotherhood. The activities of a profession are so definite and absorbing in interest, so rich in duties and responsibilities, that they completely engage their adherents. Thus, group consciousness, expressed in an organization of the professional group for its mutual improvement and the improvement of the public service, develops from common interests and problems.

The university librarian can help materially in the furtherance of the ideals of librarianship by encouraging only those individuals who through ability and personality can contribute to the development of the profession. This requires honesty in the librarian's recommendations of persons who wish to enter library school or who apply for positions. Within the library the librarian should be concerned with the maintenance of adequate salary schedules, proper working conditions, and inter-employee relations. Criticism of other librarians or of practices of other libraries should be avoided unless they are made to fulfil a professional end. To acquire the group consciousness that is characteristic of professions, membership in library, educational, and other cultural organizations and active participation in conferences, meetings, and on committees are necessary. The place that librarianship will take among other professions that are interested in improving and developing social life and culture will

[^158]depend largely upon the efforts of librarians to integrate their work with that of other humanistic and scientific agencies.

STAFF ROOMS
The presence of staff rooms in the library building contributes greatly to the satisfaction of the library staff. Care taken in providing for the welfare of the staff through a staff room is profitable not only in conserving the strength of the personnel but also in building morale. The fact that discomfort of library workers affects adversely the amount or quality of their work is generally recognized. Consequently, most new buildings include quarters for the staff. Limited quarters have also been provided in most of the older buildings.

Used for personal needs and group occasions, the staff room can serve as a center for staff development. To the individual, it is a place to relax during the lunch hour or between working hours. To the staff as a whole, it may serve as a meeting place for teas, parties, and discussions of common problems.

STAFF RECREATION
One of the practices that is characteristic of many American university libraries in improving staff relationships is the afternoon tea. Practically all librarians permit such attendance, provided there is no disruption of the work of service departments. The use of working time for teas has been considered justifiable because of the beneficial effects of a brief rest period. It is important, however, that departmental heads do not permit the teas to develop into uncontrolled social gatherings. Staff rooms are usually equipped with kitchens and supplies for such activities. Staff members are generally allowed ten to fifteen minutes of free time for this purpose.

Another method for developing social relationships between staff members is the occasional party or picnic. Like the tea, the party can serve to break down artificial personal barriers and promote a group consciousness that may be effective in building up a high level of service.

## HEALTH QF THE STAFF

Mental health and personal poise of members of the library staff are essential if satisfactory service is to be given to students and faculty members. Staff members who are handicapped by ill health or physical disability constantly require medical attention and special leaves of absence. Their requests for irregular dispensations often work to the disadvantage of the more capable and responsible staff
members. Frequently it is difficult to dismiss such individuals, and they are shifted from department to department in order ta find a place in which they can work with the least inconvenience to patrons or fellow-workers.

In some of the larger libraries considerable attention has been given to this problem. New appointees to the staff are examined with reference to their state of health and physical fitness. Plans for the conservation of the health of employees during their working periods are instituted as a method of reducing loss of time from illness and of lessening the library's liability for benefits to employees provided for under insurance or retirement programs. The establishment of rest rooms in the library building and the provision of medical service through the university hospital afford concrete evidence of the university's interest in this problem.

## STAFF UNIONS AND ASSOCIATIONS

To keep in step with the progress of organization of workers in all fields, university librarians have given some consideration to the question of unions and staff associations. Actual organization of professional university librarians into a group affiliated with national or local unions does not exist in any institution at present. In some universities, such as the University of Washington at Seattle and New York University, members of the university library staffs join local units of teachers unions which are affiliated with the American Teachers Union. The motives of librarians in associating themselves with unions were pointed out by Berelson ${ }^{3 x}$ in his study of library unionization. These are as follows: (1) to improve the economic status of both the library and the library worker, (2) to extend democracy in education, and (3) to affiliate with a progressive movement.

As was noted in the section on the professional status of the librarian, little recognition is usually accorded subordinate members of the library staff. While the chief librarian may be admitted to membership in the Association of American University Professors, by virtue of his appointment as an assistant, associate, or full professor of bibliography or some other subject, this privilege is less frequently extended to other members of the staff. Moreover, the difference between the librarian's salary and the next ranking individual is often so great as to cause discontent in the minds of the subordinates. It goes without saying that the necessity for economic well-being is just

[^159]as important for librarians as for individuals in other pursuits. And the quest for economic sufficiency is further emphasized by a situation which requires extensive training and experience, as well as continued study on the job by subordinate and administrative members of the library staff.

The movement toward organization, however, instead of following the strict line of unionization, has taken the form of staff associations. Such associations exist in several of the larger university libraries. Usually they have been started by members of the staff as a social or professional group, and theoretically they seem to be useful devices for carrying out group action. In some cases the librarian has suggested the organization of the staff members. The associations generally have developed in those institutions in which the staffs are of such size that personal communication between members is limited.

Staff associations in university libraries are relatively few in number. The Staff Organizations Round Table Bulletin in 1940 listed 69 staff organizations, of which 7 were in colleges and universities. Ardis Lodge's report ${ }^{32}$ on staff associations in university libraries was based on organizations in 9 institutions.

Although the chief administrative officers of the library may not be members of the association, they are usually consulted in any action which concerns problems of internal library administration. The association as a group (or representatives of the group as such) is not permitted to communicate with the trustees, president, or faculty library committee concerning questions which should be proposed by the chief administrative officers of the library.

Social activity.-As social organizations, staff associations apparently have been largely successful in their purposes of orienting new staff members and providing social entertainment for a group of individuals who, in the main, have homogeneous interests. Whether they do more than can be informally accomplished by afternoon teas, monthly luncheons, or irregular group meetings is open to question. If occaṣional meetings combine social activities and interesting papers and addresses, they may serve a desirable intellectual purpose as well.

Professional activity.-A formal association may have a good deal to recommend it if its purpose is the promotion of professional inter-

[^160]est and activity of professional members of the university library staff. A consideration of some of the professional activities of staff associations substantiates this statement. These activities may be conveniently grouped under three headings: (1) activities relating to staff status, (2) activities relating to staff morale, and (3) activities relating to library projects and problems.

Mention has already been made of the effort librarians have made to obtain what they have termed "status." In general, "status" has meant privileges which are accorded to faculty members-faculty rank, permanent tenure, periodic salary increases; sabbatical leave, retiring allowances, attendance at. conferences and meetings, leave of absence for study, sick leave, participation in academic functions, and similar recognitions. Few staff associations have assumed the responsibility of attempting to obtain such recognition from the university administration. They have generally considered the obtaining of such privileges to be the responsibility of administrative officials of the library.

In improving staff morale, staff associations have been somewhat more successful. As a result of their efforts, members of library staffs have been given the privilege of attending faculty functions, of using the faculty club, and of participating in academic functions. Within the staff itself, more evidence of co-ordinated activity has been achieved through the association. Grievances among the staff members have been eliminated, staff schedules have been worked out to the satisfaction of workers, and interdepartmental co-operation has been strengthened.

The potentialities of a harmonious staff association are illustrated by the projects undertaken by such groups in several institutions. The staff manual of the University of California Library was the result of the effort of the staff association to codify the practices of the library. The same staff association also carried on a detailed study of fatigue among staff members. Through a careful investigation of ventilation, lighting, seating, and other factors which contribute to the well-being and efficiency of staff members, it directed the attention of the library administration to the desirability of improving staff working conditions. Some of the factors which could be modified were adjusted, with resultant benefits to the library through increased efficiency.

Several noteworthy projects have been carried on by the staff association of the University of Washington Library. It was respon-
sible for the establishment of the rental library, which has created a bond of good will between students and faculty and the library. The association has also studied the opportunities enjoyed by staff members in various libraries throughout the country for advanced study. Through the data collected, it was able to promote a satisfactory policy for the University of Washington.

In several institutions staff associations have taken up such tasks as acquainting new faculty members and students with the various services of the libraries, considering ways and means of improving departmental relations, suggesting new devices for improving service, publicizing the libraries, and advising the librarian on building and personnel matters. Obviously, these activities should help to integrate the library in the instructional program of the university.

Since it is interested in the total service of the library, the staff association can promote departmental co-ordination. Interdepartmental relations may be clarified when they are considered at open staff meetings. Staff associations have also been instrumental in improving service by arranging for the interchange of staff members and by sponsoring trips of staff members to other libraries. Many of their activities have been directed toward stimulating growth and development of the personnel.

Funds collected by staff association, either as dues or for other purposes, have been used for a variety of purposes-to provide for maintenance of staff quarters, to purchase books and periodicals for staff use, and to promote social gatherings. In one instance a reserve fund has been used for staff loans, for travel expenses to library meetings, and for honorariums for speakers. The use of funds for public charitable purposes has also been suggested. Most staff associations, however, charge only nominal dues to defray expenses for conducting meetings.

In those libraries in which no staff associations exist, group action occurs through informal luncheons, monthly or annual meetings, committees for various activities, teas and parties, professional discussion groups, library clubs, and staff news sheets. Each of these activities has been profitably used to foster co-ordination and cooperation among the staff members and to maintain or develop a professional'spirit.

## STAFF MEETINGS

To clarify situations which involve interdepartmental relations, staff meetings are sometimes called by the librarian. These meetings
may involve: (1) the entire staff, (2) the professional staff, (3) divisional and/or departmental heads, and (4) departmental and/or professional school librarians. In addition, meetings of members within a particular department may occasionally be held when special problems arise.

Meetings of the entire staff in large libraries present difficulties in matters of attendance and are seldom held. In some libraries with small staffs, general meetings are held monthly or at some other regular period. It is obvious that when the whole staff is involved, 100 per cent attendance at meetings during library hours is out of the question. Consequently, general staff meetings are held before or after library hours. The former seems to be the better time. When the staff is relatively large-thirty or more members-it may be best to schedule general staff meetings infrequently, perhaps once or twice a year-the week before the university opens in the fall or during intervals between quarters or semesters. When such meetings are held infrequently, the librarian may insist that every member of the staff be present. In a few libraries, general meetings of only the professional staff are held, on the assumption that clerical workers, desk and stack attendants, typists, binders, and others in the nonprofessional group are either not concerned with the problems discussed or are not likely to benefit by attendance. The soundness of this point of view is open to question, since the work of the clerical staff is closely related to that of the professional staff and since there may be occasions when the discussion of certain problems would be helpful to all.

## COMMITTEES

In chapter ii attention was called to the four types of committees of librarians which exist in university libraries: (I) the library council of a unified system of libraries, (2) the committee of librarians of departmental and school librarians, (3) the librarians' committee within an individual library, and (4) the committee of committees of the library staff. The activities of these committees, which differ from one another in a relative sense, may now be described.

The term "library council" is sometimes used in the same sense as "library committee" within an individual library. By "library council" in this instance is meant a group of librarians who represent their individual libraries. Such a council exists in the Oregon Syistem of Libraries of Institutions of Higher Education. In this system it was found necessary to establish some sort of co-ordinating agency to ex-
amine the reports of the interinstitutional committees which had been appointed to study designated fields of library service. The council, which is composed of the chancellor of the state system of education, the director of libraries, and the librarians of the six institutions within the system, meets quarterly, the sessions often lasting two days. Its purposes are to plan for all the libraries as a unit, to formulate constructive policies, and to stimulate professional growth. In the past the activities of the council have included the establishment of a uniform plan for gathering information concerning faculty publications; the solution of problems relating to postal charges for interlibrary loans, gift records, and fines and rentals; the support of studies of library use in each institution; the co-ordination of the library resources of Oregon and regional centers; and the consideration of library budgets and staff qualifications. The various interlibrary committees, which report to the library council, have dealt with such matters as co-operative bibliography, correlation of continuations and periodicals, co-ordination of cataloging practices and procedures, reading interests, and uniformity in order procedure. There seems little doubt but that through such a system of centralized activities a more efficient library service may be rendered.

A second type of committee of librarians includes librarians representing the various departmental and school libraries of a single university. The librarians of the units meet with the director of libraries at stated times-usually about twice a month-to discuss such matters of library policy as are common to the whole system. The importance of the meetings increases as the independence of the units in such matters as budgets, selection of personnel, and internal administration decreases. University library systems with a number of departmental and professional school libraries may well consider the possibilities of a committee of this type, since its meetings should promote effective co-operation. Co-ordinated ordering, cataloging, classification, and binding and standard administrative forms and procedures are not only more efficient and less expensive than uncoordinated activities and practices, but they tend to increase the respect for library service of faculty members and students who use the several units by eliminating differences in service.

The third type of librarians' committee is composed of the departmental and divisional heads of a library. Although the university librarian retains full control of the administration of the library, important powers are delegated to this committee. In one university
library, for example, the appointment of a new departmental head is delegated to the committee of departmental heads. In other libraries the committees discuss such problems as the distribution of clerical help, disciplinary cases, rules and regulations of the libraries, staff activities, and methods for the expansion or improvement of service.

The fourth type of committee of librarians has arisen out of the development of staff associations or of the director's decision to place some of the responsibilities of running the library in the hands of a few individuals. In the first case the staff association may appoint various committees (social, departmental relations, personnel, etc.), which may confer with the librarian regarding their sphere of operation. In at least two universities, administrative committees have been appointed by the librarian. It is particularly important that the activities of organizations which are carried out by committees should be integrated with the library program by the chief librarian.

## STAFF PUBLICATIONS

The staff publication has enjoyed a good deal of popularity in recent years and may be extremely useful in library personnel management. Its purposes are: ( I ) to express common interests and to supplement personal contacts; (2) to inform staff members of the professional and personal activities of various members of the staff; (3) to relate the activities of departments or of departmental and professional school libraries to those of the system as a whole; (4) to record happenings in the scholarly world which are relevant to university librarianship. Like other methods of increasing co-operation and co-ordination in a complex organization, the bulletin should be used to focus the activities of the staff on integrated policies. Staff meetings, memorandums, and notices on bulletin boards may make the publication of a bulletin unnecessary.

In a number of libraries the news sheet is the organ of the staff association. The Call Number, issued by the staff association of the University of Oregon, is an example of this type. The contents of the publication are not restricted to activities of the association but concern other library groups and libraries in Oregon and the Pacific Northwest, books in general, personnel items, outstanding book and periodical acquisitions of the library, and news of the activities and contributions of the friends group. The Library Staff News of the New York University Libraries, edited by members of the staff, is not regarded as a publication of the university administration. Like
the Oregon publication, it contains materials on the various libraries of the system, the Society for the Libraries, library developments, introduction of new procedures and techniques, professional and personal activities of staff members, and statements concerning possibilities for the improvement of librarianship as a profession. The quarterly mimeographed "University of North Carolina Library News Sheet," first issued in 1936, was started on the initiative of several staff members without the official sanction of the staff association. Social, personal, and professional items regarding members of the staff, activities of the staff association, suggestions for the improvement of library service, and developments in the various departments of the library are included in the publication.

Notes of general interest to all staff members, as well as to faculty members and students, are included on the front page of the monthly bulletin of the Temple University Library. Entitled "On the Shelf," it is primarily a list of accessions. Because it is generally distributed to students and faculty members, it does not contain the intimate, personal notices that might be placed in a publication designed for staff members exclusively. "Library Columns," edited by staff members of the Columbia University Libraries, includes descriptions of collections, outlines of new procedures, statements of professional activities of staff members, and notes on exhibitions.

## STAFF MANUALS

Librarians have come to realize that certain administrative tools or devices are useful in transforming theory into practice. One such device is the staff manual, which, according to White, ${ }^{33}$ if carefully made, may provide a description of an organization in action, serve as a statement of details of policies and procedures, assign responsibilities, present a clear interpretation of the functions of the organization to employees scattered in various departments, and promote uniform understanding and practice.

Since it possesses such potentialities for improving the quality of staff activities and relationships, with resultant benefits to the clientele, it is not surprising to find librarians who have compiled staff manuals. Moreover, they have been discussed in library literature ${ }^{34}$

[^161]and carefully studied by students of administration. ${ }^{35}$ The general conclusions of the various writers indicate that staff manuals are useful devices for facilitating library management. ${ }^{36}$

A recent survey of 289 college and university libraries ${ }^{37}$ revealed that the majority of librarians likewise have come to regard staff manuals as instruments of great utility in charting the library organization and in interpreting service to the staff, the library administration, the president, and the faculty. In so far as staff cooperation and co-ordination are concerned, staff manuals, by describing the organization, limiting spheres of activity, and fixing responsibility, can contribute much.

## DEMOCRACY IN STAFF ORGANIZATION

In the preceding sections of this chapter attention has been directed to a series of means by which the librarian may develop among his staff an understanding of common problems and instil in them a feeling of being a vital part of the library organization. The evidence suggests that unco-operative and disunited organization may well result from faulty leadership. Such leadership is characterized by a disinterest in developing co-operative enterprises that flow from joint responsibility and control and by failure in instituting democratic relationships.

Although adherence to the administrative principle of centralized control in the hands of the chief is recognized as a necessity for effective management, it has become increasingly clear that the participation of as many members of the staff as possible in organizational activities leads to an esprit de corps that should be reflected in a high grade of service. ${ }^{38}$ Not only through participation in book-selection activities and the preparation of annual or special reports, but through such means as co-operating in surveys, consulting on new appointments to the staff, making suggestions for improvements in service, and working on responsible committees, the whole library staff may establish an effective, democratic organization.

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## CHAPTERIX

## BOOK COLLECTIONS: ACQUISITION POLICIES AND PROCEDURES

UNIVERSITY librarians in the United States have long recognized their responsibility for gathering and making available to scholars materials for study and their research. ${ }^{1}$ In recent years they have also given increasing attention to questions concerning the size of university libraries, the number of volumes essential to support individual courses, and the number and character of journals and special types of materials required for research by the various departments and schools.

As stated in the Introduction, the rapidity of the growth of university libraries since 1900 has been one of their most notable characteristics. In 1940 there were 9 university libraries with over a million volumes, with 2 others closely approaching that total. Table 24 shows the number of volumes in a group of university libraries in 1900 and their increase from that date to 1940.

Book collections, however, are measured not only in terms of numbers. Despite the fact that qualified personnel and adequate buildings are essential for efficient library service, their values are limited if books and other materials are not carefully selected. Consequently, book selection and book collecting have become major activities of the librarian and his staff and of the administration and the faculties of the institution as well, ${ }^{2}$ and their integration with the instructional and research programs of the university has become one of the librarian's greatest responsibilities. In this chapter, therefore, the general characteristics of a planned, systematic policy of acquisition and procedures for building up certain kinds of collections will be considered. In the following two chapters, which are

[^163]also concerned with book collections, different types of materials will be considered. Chapter $\mathbf{x}$ will be devoted to the consideration of the more general types of materials, such as books, periodicals, documents, and newspapers; chapter xi, to the more specialized, such as dissertations, manuscripts, maps, music, and audio-visual and other materials.

TABLE 24
Growth of University Libraries, 1900-1940

| Institution | No. of Volumes |  |  |
| :---: | :---: | :---: | :---: |
|  | 1900* | 1920† | 1940\% |
| Brown | 115,000 | 269,150 | 577,027 |
| California. | 88,000 | 413,824 | I,081,151 |
| Chicago. | 331,068 | 623,423 | 1,300,785 |
| Columbia | 311,000 | 797,106 | 1,715,263 |
| Cornell | 249,634 | 655,086 | 1,063,203 |
| Harvard. | 575,000 | 2,101,200 | 4,159,606 |
| Illinois. . | 55,000 | 456,503 | I, 209,977 |
| Indiana | 35,000 | 141,658 | 349,765 |
| Iowa State. | 58,000 | 200,583 | 473,238 |
| Johns Hopkins. | 100,000 | 234,857 | 568,064 |
| Kansas. . . . . . | 35,237 | 144,239 | 320,082 |
| Leland Stanford. | 52,000 | 336,181 | 773,626 |
| Michigan.. | 145,460 | 457,847 | 1,098,197 |
| Minnesota | 75,000 | 367,250 | 1,120,075 |
| Missouri. | 36,000 | 177,320 | 395,780 |
| Nebraska | 52,000 | 153,925 | 353,780 |
| North Carolina. | 35,000 |  | 386,390 |
| Northwestern. | 45,764 | 201,734 | 637,795 |
| Ohio State. | 36,000 | 223,063 | 564,344 |
| Pennsylvania. | 200,000 | 509,796 | 934,150 |
| Princeton. | 150,256 | 469,506 | 959,645 |
| Texas. | 35,000 | 205,097 | 639,732 |
| Virginia.......... | 50,775 | 205,97 | 338,535 |
| Washington (Seatt | 12,520 | 104,776 | 458,082 |
| Wisconsin. | 70,000 | 287,800 | 485,004 |
| Yale. | 310,000 | 1,471,026 | 2,955,539 |

[^164]
## ELEMENTS OF A LIBRARY ACQUISITION PROGRAM

The development of a library acquisition program that will insure the building-up of a collection of materials adequate to meet the demands which the university makes upon it depends basically upon the objectives of the university. Specific functions of the university, described in chapter $i$, include conservation of knowledge, instruction, research, interpretation, publication, and extension and service. Of these functions, the three which most concern the university
library are conservation, instruction, and research. These, in large measure, are basic in determining what kind of policy a given university library will follow in building up its collections. The size and nature of present holdings, the nature of the curriculum, the methods of teaching, the nature and extent of the research program, the number and kinds of students, the size of the faculty, and the physical organization of the library (centralized or decentralized) are matters that inevitably enter into consideration in the formulation of an acquisition policy. In general, they will determine the uses to which books and other materials will be put, and the kinds and amounts of materials acquired for instruction and research will depend largely upon the relative emphasis which the university places upon these and other aspects of its educational program.

The policy will also be influenced by the amount of money the university can make available for library purposes. In the majority of universities the library budget is usually definitely limited, and it is likely to be immediately affected by any diminution of the university's income. Consequently, since library funds are generally so insufficient and since the amount of printed materials to be acquired has become so extensive, most university libraries find it necessary to follow a fairly definite book-collecting policy. Even in the cases of the few fortunate libraries which have sufficient funds to meet the usual requests of all members of the university faculty and library staff, a policy has to be followed to insure the most satisfactory results.

Since a unified, definite program of book buying is so essential to the effective development of the library, there are certain matters which the program should make clear. It should show: (1) who has the responsibility for seeing that a policy is set up and regularly carried out; (2) who should have final authority for directing and controlling the distribution and expenditure of book funds, (3) what materials should be acquired, and (4) who should participate in their selection. It should leave no doubt in the minds of any members of the university concerning these particulars.

## RESPONSIBILITY FOR ACQUISITION POLICY

In the public library, tradition has centered the responsibility for book selection in the hands of the librarian, since it has been assumed that he is better acquainted than his trustees and his public with books, the book trade, acquisitional techniques and relative values,
and the library's aims in terms of the reading needs of his community. In the large public library the librarian commonly divides the responsibility for selecting books in specific fields of publication among the staff members having academic backgrounds in special subjects. In the very large public library, such as the New York Public Library, specialists in the literature of specific subjects may be added to the acquisitions department staff as professional book selectors, in order to insure the systematic development of particular divisions of the library's collections.

In the university library a different procedure is usually followed. The librarian is held responsible for seeing that a well-co-ordinated, systematic plan of selection is established and maintained; but responsibility for the actual selection of materials is generally divided between him and the library staff, on the one hand, and the faculty, on the other. The library committee, if there is one, may also share part of the responsibility. This is concerned primarily with the participation of the committee in determining the general policies of acquisition and in allocating funds for the acquisition of books, periodicals, and other materials. As indicated in chapter ii, the librarian is usually charged with the responsibility of preparing the budget; and, in the event that the library committee shares in the responsibility for allocating the book funds, its responsibility is usually of an advisory, rather than an administrative, nature. Members of the faculty are usually charged with the responsibility of selecting materials in support of courses and programs of research, whereas the librarian and library staff are held responsible for selecting general reference books and bibliographical apparatus, noncurricular books, periodicals, and other material intended for general and recreational reading.

This constitutes the first step in setting up a program. The next steps include: ( 1 ) the appointment by each department or other university unit of a committee to stimulate and supervise the selection of materials required by the department; (2) the periodic notification of the departmental committee concerning the annual allotment of funds and the status of the departmental fund from month to month; (3) the routing of information to the departmental committees and members of the faculty concerning materials which may be of interest to them; and (4) the designation of some member of the library staff (preferably of the acquisitions department) from whom information can be secured at any time concerning the status
of funds and orders outstanding. The departmental committees are appointed by the departments. The member of the acquisition department is designated by the librarian. A mimeographed list of accessions issued regularly may also be found useful in keeping the instructional staff informed concerning new acquisitions. This list may also be supplemented, in the case of rush orders, by special notices sent direct to the faculty member for whom the material is intended.

These constitute the major, indispensable features of the library acquisition program usually authorized by the university. Orice they have been determined, the policy can be put into operation by the librarian and should be steadily maintained. Certain observations, however, may well be made concerning such a policy.

In the first place, it is obvious that this formula will not fit every university and that the policy may vary in some particulars from institution to institution.

In the second place, a satisfactory formula for allocating book funds has not, as was pointed out in chapter iii, been developed. In fact, in some instances where funds are large enough to meet the usual needs of all departments or individuals, there may be no specific allocation whatever. In these instances the funds may be left largely under the control of the librarian. However, where funds are limited, as they usually are, a definite allotment affords the department or unit a specific basis upon which to plan for its acquisitions. A division of the departmental allocation for books, periodicals, documents, films, and other types of material can be made which will insure a well-planned, long-term scheme of acquisition. The resources of the departments may be further increased if the librarian sets up an item in the general budget of the library which may be drawn upon, through special application, by a department for unusual and expensive materials.

In the third place-and more important-the validity of the assumption upon which the division of responsibility between the library staff and the faculty for the selection of general and special materials rests may well be examined. This assumption is that the faculty is more competent than the library staff to select materials for the support of instruction and research. Granting that faculty members are more familiar with subject fields than are library staff members, it does not follow that the faculty can or will devote sufficient time to this activity to insure the systematic building-up of a
collection that will be adequate to meet the demands made upon it. It is altogether possible that a library staff which includes members who are expert librarians as well as experts in special subject fields, whose task it is to review current publications and secondhand catalogs as a part of their regular duties, will be more successful than the faculty members, whose time, with few exceptions, is occupied in other ways. Interesting evidence is furnished on this point by Waples and Lasswell, ${ }^{3}$ who, in comparing the holdings of 33 American and European scholarly libraries, including public and national libraries, on a selected list of over five hundred books and periodicals in the fields of economics, government, law, and sociology, which had been adjudged of marked importance by experts in those fields, found that the New York Public Library held more of the titles than did any of the other libraries: it held 90 per cent. The corresponding percentages held by American university libraries were: Harvard, 68; Chicago, 57; California, 45; and Michigan, 36. Inasmuch as these university libraries have ample funds to purchase essential materials in all four fields, it may be assumed, if the list actually represented basic materials of importance, that the New York Public Library, through its systematic program of selection through expert staff members, has been more successful in building up its collections in the subjects indicated than the university libraries which depended largely upon members of the teaching staffs. European university libraries afford other supporting evidence in that they place the responsibility for selecting materials upon the expert members of their staffs rather than upon the faculties. As American university libraries increasingly add members to their staffs who are experienced subject specialists as well as librarians, a similar shift of responsibility may become desirable.

The major observation, however, to be made concerning the program as outlined above is not that responsibility is to be borne entirely by either the library or the faculty but that the program is to be well conceived and well co-ordinated and that all members of the university who are essential to its successful functioning participate in carrying it out. ${ }^{4}$ Even in the selection of materials which fall into

[^165]the category of cultural or recreational reading, for which librarians have usually assumed responsibility, the collaboration of the instructional staff may prove very valuable. The development of good habits of reading and study by students is a matter in which faculty members are as much interested as are members of the library staff, even though materials acquired for these purposes are not required for the support of any specific course.

The book-selection program of the university library, it should be noted, is not confined to the librarian, the faculty, members of the library staff, and departmental and professional school librarians. Friends-of-the-library groups, various other societies and organizations, and the student body also participate in an effectively planned program.

## FRIENDS OF THE UNIVERSITY LIBRARY

University libraries, no less than other types of libraries, have always had benefactors. A reading of Louis Shores's Origins of the American College Library, 1638-1800, ${ }^{5}$ reveals how donations made by individuals were largely responsible for the creation and development of the libraries of Harvard College and of other early institutions. Indeed, "the greatest number as well as the best books" in colonial libraries were acquired through private sources.

In addition to this history of aid through individual philanthropy, the last two decades have witnessed a movement among university librarians to organize formally groups of "friends," "associates," and "book-club members." For the most part, these organizations represent a consolidation of the efforts of past donors and other individuals interested in building up the collections or equipment of specific academic libraries. The assumption underlying this movement has been that a formal organization not only channelizes the stream of gifts to the library but also enables the stream to widen to the extent of embracing others of a philanthropic bent. Whether or not this assumption is true, university librarians have accelerated the movement started in the Ig20's by Yale, Harvard, and Columbia to organize groups of friends. Princeton, Wesleyan, New York University, Chicago, North Carolina, Johns Hopkins, Duke, Toledo, Bucknell, Massachusetts Institute of Technology, Rutgers, Brown, Fordham, University of California at Los Angeles, Colorado, Denver, Washington (Seattle), Oregon, Stanford, and Arizona are among the institutions which now have groups of library friends organized into

[^166]various types of associations, most of which were formed within the last fifteen years, when budgets were being cut and librarians were seeking means to replenish diminishing book funds.

The organizations of these groups have been both formal and informal. ${ }^{6}$ Whatever their nature, however, their purposes have been similar: to get individuals to donate books from private libraries, to solicit duplicate copies or unused books of alumni and other individuals, to interest collectors and others who may be willing to leave their libraries as memorials, and to stimulate alumni and friends to aid the library through gifts of money. Despite these obvious purposes of the friends groups, librarians like to believe that the organizations are more than mere devices to secure financial benefits for the libraries. They have assumed that the existence of such groups is a definite recognition, on the part of scholars and the general public, of the functions of the library in the field of higher education and as an enterprise for the cultural enrichment of the community. Programs held at the meetings of the groups are usually planned with the end in view of emphasizing the scholarly and cultural functions of the university library.

The success of these groups in carrying out the purposes has varied. A recent survey of groups in 26 university libraries revealed that as sources of books and money they have generally proved somewhat disappointing. In 1935-36 Yale Library Associates, ${ }^{7}$ one of the most successful of the groups, contributed over $\$ 9,000$ for various purposes; and in 1938-39, 371 individuals and 13 organizations connected with the group made contributions of books or money. In the two years 1938-39, 10,000 items were received from the Friends of the Library of Brown University, another of the more successful organizations. Many librarians, however, believe that the indirect results of such organizations are invaluable.

## SOCIETIES AND ORGANIZATIONS

In addition to friends groups, various other societies and organizations, either independent of the university or affliated with it, may assist in developing the library collections. For example, the

[^167]Public Administration Clearing House, located near the University of Chicago, turns over to the latter much of its materials. Generally these materials are cataloged and made available to members of the Public Administration Clearing House, but at the same time they are accessible to students and faculty members of the University of Chicago. Similarly, institutes carried on by universities, sometimes through subsidies of philanthropic organizations, usually accumulate books and other materials which are housed in the university libraries.

## SPUDENT BODY

Suggestions, by individual students, of materials to be purchased by the library are generally given consideration by the librarian. Student book clubs, however, are likely to purchase materials of their own choosing for the library unless the librarian has carefully outlined the needs of the book collection. If the librarian wishes to foster student-library relationships, he may encourage the participation of students in suggesting titles for purchase and in developing student and fraternity book clubs.

## TECHNICAL PROCEDURES IN BOOK COLLECTING

## OLDER MATERIALS

Only in very rare instances is the administrator of a university library called upon to start from the beginning in building up a book collection as a whole. However, in libraries in which the total collections are comparatively small or in libraries in which a collection must be built up upon a subject not previously developed by the library, such a situation is approximated. If such a situation does arise, the extent to which the librarian carefully analyzes the problem will determine the quality of the materials he assembles and the satisfaction with which they meet the demands of instruction and reseärch.

In order to make the procedure concrete, it may be well to indicate the steps to be taken in developing a fundamental collection in a particular subject field, such as the Romance languages. If collections have to be developed in more than one field, the same procedure may be followed. In fact, such procedures are now being followed in a number of institutions which formerly limited their work to the Master's degree but are now offering work in certain departments leading to the doctorate.

Before the details of a plan for developing such a collection are
considered, several assumptions should be made. For this particular problem, the term "book selector" is used to mean the equivalent of the subject specialist, who is either a member of the faculty or of the library staff and who has been described earlier. It may be assumed that the book selector has made a general survey of the region where the collection is to be assembled and understands that such co-operative services as interlibrary lending and microphotography are available. He has even included them in his planning. It may also be assumed that the book selector has made a careful survey of the institution for which he is planning; that is, he has a detailed comprehension of all phases of the institution's activities which are related to the collection he is to assemble. This implies a sound knowledge of the institutional aims in general and of the departmental aims in particular. For the department, he has investigated the nature of the course offerings, the types of research performed, the number and kinds of students, and the number and kinds of faculty members. Moreover, he has obtained a detailed estimate of the kinds and quantities of funds available for building the collection. Only when he has reviewed these various facts can he intelligently proceed to select the books for the special collection.
The primary element in building up any collection is a preliminary survey of the materials which the library already possesses. This initial step must be taken regardless of the size of the collection. First of all, the book selector must discover what basic books and other materials are already held by the library. Basic books are those which are cited as primary sources in contemporary general works. In this category are included the best-known editions of works of authors and the best sources of criticism of their texts and works. ${ }^{8}$ Experience has indicated that the first step may be accomplished by checking the collection against the bibliographies of good standard histories of the particular literature being considered. In French, for example, the collections might be checked against a list selected from such works as Nitze and Dargan's $A$ History of French Literature and Wright's $A$ History of French Literature. In Spanish a combined list may be made up from Fitzmaurice-Kelly's $A$ New History of Spanish Literature, Merimee and Morley's History of Spanish

[^168]Literature, and Hurtado's Historia de la literatura española. In Italian such a work as Momigliano's Storia della letteratura italiana may be used to check the holdings of the library. In every case the librarian should be able to observe the strong and weak points of the library's collections. He should see at once where the work is to begin and should have the beginnings of a list of desiderata.

The next step involves a broader view of the problem. In checking holdings against the lists, basic texts and primary books of criticism are indicated. For a number of libraries, items selected in this manner may be sufficient. In the large university library, in which there is considerable instruction and research in the Romance languages, they may serve merely as a starting-point. In that case the list of desirable items must be enlarged. It should also be apparent, for reasons of cost and availability, that the building of a large collection must be a long-term project. Its growth must be co-ordinated with the program of instruction and research within the institution, so far as this is feasible. As courses are announced or anticipated, plans should be made for securing the materials essential to support them. This may involve further searching in subject bibliographies, check lists, and other sources of information concerning appropriate materials. The task becomes more difficult as the depth of specialization increases, and it is here that the subject specialist in the field can be most helpful. Collaboration with faculty subject specialists should be included in this procedure.9

Extensive bibliographies in each literature may be examined. In French, Lanson's. Manuel bibliographique de la littérature franfaise moderne and Thieme's Bibliographie de la littérature franfaise de 1800 a 1930 cover the field from early beginnings to 1930. D'Ancona's Manuale della letteratura italiana and Prezzolini's Repertorio bibliografico della storia e della critica della letteratura italiana dal igoz al 1932 cover a similar period for Italian literature. Fitzmaurice-Kelly's Spanish Bibliography and various important bibliographies for cur- , rent materials by Grismer provide excellent coverage of the Spanish materials. It should be remembered that, while these sources which

[^169]have been mentioned are satisfactory for checking purposes, they are of little or no value as buying guides, for they are neither selective nor annotated. The background and ingenuity of the book selector are now thoroughly tested. Working from every source of critical information possible, he should prepare a careful bibliography of the author or topic he is considering. Period histories, annotated bibliographies in critical works, and references in critical editions of the author's works will need to be checked. Bibliographies concerning the author as given in journals, encyclopedias, biographies, and elsewhere will need to be compared. When the book selector has checked every available source of critical bibliography that he can isolate, he is then in a position to discriminate in order to prepare a list of desiderata of all items published up to that particular point in his work. In addition, it is necessary for the selector to include the apparatus necessary for the study of the literatures. Periodicals, society publications, manuscripts, and other materials, of course, are needed, as well as books. ${ }^{10}$

At this stage a word of caution should be introduced. Since the courses and research problems of the moment tend to assume disproportionate importance in the book-selection program of the university library, it is likely that pressure may be exerted to spend excessively on a single subject. If a plan of book selection is carried out in detail, however, excesses of this sort can be checked immediately. Ideally, perhaps, every item needed for course work or research should be available, but a logical book-selection plan will not permit the needs of a few to interfere with a long-term policy to serve a large number. Fortified with a knowledge of regional resources, the book selector should be able to compromise with the faculty on the matter of the purchase of expensive materials. When academic groups are shown that other libraries in the area possess materials which can be made available through interlibrary lending or reproduction, they may be less insistent upon certain expensive purchases. Other informal or formal co-operative agreements, discussed in greater detail in chapter xiii, may frequently be more effective than the outright purchase of every item required for an instructional or research program. ${ }^{\text {II }}$

[^170]" Raney, op. cit., pp. 6-7.

Once it has been decided which materials are wanted, the various processes of acquisition-purchase, exchange, and gift-require attention. These processes are discussed in chapter v. It may be pointed out here that considerable ingenuity is necessary in actually acquiring older materials. Desiderata lists should be specific. Agents in the United States and in foreign countries should be carefully selected. Faculty members, especially when they visit foreign countries, should be recruited for collecting purposes whenever practicable. Exchange relations should be established with educational institutions, societies, libraries, and other agencies.

## CURRENT MATERIALS

Thus far the discussion of the problem of assembling a fundamental book collection seems to indicate that all the books on Romance literatures have been written and that selection can be made without considering the possibility of change. A planned policy of book selection, however, requires considerable attention to current publications. This involves the constant scrutiny of American and foreign reviewing periodicals. Books Abroad, bibliographies in the Publications of the Modern Language Association supplement, and the Year's Work in Modern Language Studies-publications printed in the United States-are fertile sources of current book titles. L'Italia che scrive, a periodical of the Saturday Review of Literature type, is an example of a foreign publication which may be examined for current materials. Similar periodicals exist in French and Spanish. The book selector has the responsibility of providing all the periodicals needed for the collection and should pay special attention to those publications which contain the better book reviews. Preferences of faculty members may simplify the choice somewhat, and within a small field the working list of titles is limited enough to know well. Ulrich's Periodical Directory is a useful tool for subject lists of periodicals.

In addition to the book-reviewing periodicals, the book selector should maintain contact with publishers and book dealers in the particular fields in order to receive their announcements of new publications and special sales. This source may be troublesome to keep up with, but it may also be extremely productive. The examining of catalogs calls for a methodical approach, which involves the use of faculty co-operation at every point where it is available. The librarian or the book selector, however, should be the final authority if the general plan in building up the collections is to be adhered to.

## RELATION TO OTHER FIELDS

Any plan for building up a collection in the literature of a country should include supplementary materials in closely related fields. Depending upon the work of the institution, the place of language books in the plan is large, moderate, or very small. In an institution where linguistics form an important part of the curriculum, the collection of grammars, dictionaries, encyclopedias, and histories of the language may be very large. While the emphasis may differ among various institutions, the method of acquisition remains the same. The important element in the selection of materials is that the field be related, in its proper proportion, to the whole collecting plan. This is equally true of the volumes of history which may be essential. While it may not be the responsibility of the book selector in Romance languages to choose books for the history department, he should consider it his duty to encourage the buying of whatever volumes of history he discovers to be most useful to students in his field. While practice will vary somewhat in different institutions, the book selector will frequently find that many of the titles recommended by him are already in the library or are receiving consideration for purchase. Generally, a few books are sufficient, and co-operation of this character from either subject specialists or faculty members is not difficult to obtain.

## PURCHASE OF MATERIALS en bloc

A further device which has long been employed in building up collections of the character considered above is that of purchasing collections en bloc which have been built up over a period of years by a scholar or book collector. Such collections were frequently available for purchase after World War I, and many of them found their way into libraries in the United States. They account, in part, for the rapid growth of some university libraries, to which reference has been made. Such collections in the field of the Romance languages, for example, would include many of the types of materials described above. They would also probably duplicate some of the materials already secured by the library, but the disadvantages of duplication may be far outweighed by the positive advantages of securing a body of materials at one time which may have taken the lifetime of a specialist to assemble. The Furness Memorial Library of Shakespeariana at the University of Pennsylvania, described in A Faculty Survey of the University of Pennsylvania Libraries, affords an idea of the
richness and value which may be added to a library through the acquisition of such collections.

## SUMMARY

This chapter serves as an introduction to a sequence of three chapters devoted to the problems of book collecting. In view of the great importance of maintaining a sound program of book acquisition, it makes clear the responsibility of the various members of the university community for setting up the program, providing for the selection of different types of materials, and seeing that the objectives of the university, especially those relating to the conservation of knowledge, instruction, and research, are furthered through the materials which are secured. The program that will prove best will involve all members of the university community, including faculty, library staff, students, and special organizations of alumni and friends.

The chapter also suggests procedures to be followed in building up materials in a specific field, such as that of the Romance languages. Five steps are suggested which may be summarized as follows: (i) a survey of the field, including the region, the university, the department, and the collection; (2) a basic selection, including texts, and majon critical works; (3) an expanded selection, according to a definite plan based upon authors, periods, or subjects and co-ordinated with the immediate needs of the institution; (4) a selection of periodicals, publications of learned societies, biographies, and other supplementary and related materials, depending largely upon the use made of them in the institution and the place they have in relation to the plan of book selection; and (5) purchase en bloc of collections built up by scholars or book collectors which contain various types of materials relating to the subject. Whether the field to be built up is Romance languages or sociology, ancient history or geology, the steps which have been outlined are applicable. Resourcefulness on the part of the book selector appears to be the key to the situation. While the responsibility for an effective book-collecting program may rest upon his shoulders, he can, through various ways and means, secure the co-operation of those individuals on the campus who are, by background and experience, able to contribute immeasurably to the program.

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## CHAPTER X

## BOOK COLLECTIONS: GENERAL MATERIALS

THE research function of the university has frequently been emphasized in earlier chapters of this study. It assumes special importance in its application to the book collections of the university library. Like the college library, the university library is generally concerned with acquiring the standard books of general reference, standard reference books useful in specific fields covered by the curriculum, important books not specific to any one curricular field, adequate collections for each curricular field, essential books concerning fields not covered by the curriculum, a stock of books appropriate for recreational or leisure reading, and subscriptions to a selected number of general and specific periodicals. But the program of the university library goes beyond these requirements, both quantitatively and qualitatively. While the college library may be concerned with the immediate use of a particular item, the university library, implementing the research function of the institution, takes a much longer view in considering a title for acquisition. Moreover, the university library is not concerned with the problem of restricting the total collections to the same extent that the college library is. Finally, the university library must satisfy demands for materials which are neither books in the generally accepted sense nor periodicals-materials such as serials, documents, dissertations, newspapers, manuscripts, maps, fugitive materials of many kinds, music, archives, films, and museum objects. In this chapter consideration will be given to the collection of general materials, including books, periodicals, serials, government publications, and newspapers.

## BOOKS

Books form one of the major items in university library holdings. Beginning with incunabula and coming down to the most recently published titles, the book collections of large university libraries usually include from several hundred thousand to a million or more items, many of which fall into special categories, in accord with the acquisition policy of the library.

Reference collection.-The kinds of works which constitute the reference collection of the university library have been discussed at length in library literature. ${ }^{\text {x }}$ These books-encyclopedias, dictionaries, bibliographies, atlases, concordances, indexes, etc.-are generally consulted for specific information and fill an important place in university library book collections. Standard treatises and important outlines of subject fields which generally are not read through for recreation or course work are likewise considered for inclusion in the reference collection. It is true that reference books contain materials which are useful for other purposes than supplying bits of information and that any book in the collection may serve a reference purpose. Some libraries have recognized this fact, and books which are physically located in the reference room are frequently permitted to circulate outside the library.

The departmentalized systems of university libraries usually require considerable duplication of reference books, not only in the catalog, periodical, and other functional departments within the central library but also in the branch, departmental, and professional school libraries. In a large library system reference works may be duplicated excessively unless care is taken by the librarian or by members of the acquisition and catalog departments.

Curricular collections.-Despite the emphasis upon research, the university library is confronted with the problem of providing materials which are used in connection with undergraduate and graduate courses offered in the institution. The type of material which is included in this category may best be illustrated by examining the titles which appear in such lists as those prepared by Shaw, Mohrhardt, and others. ${ }^{2}$ Universities, like colleges, differ in the acquisition of such materials in relation to their curriculums. In a recent study of college library accessions, Krehbiel ${ }^{3}$ found wide discrepancies in the number and kind of contemporary titles acquired. Randall, ${ }^{4}$ in

[^171]an earlier study of college library holdings, found a similar condition in regard to the titles in the Shaw list. Both writers concluded that book selection in college libraries has not been organized so systematically as it might be. Since the book needs of the college portion of the university are similar to those of the liberal arts colleges, it is not unlikely that the same situation exists in the university library so far as curricular demands are concerned. The librarian should be observant of the effectiveness of the library in providing a sufficient number of titles to keep students and faculty members abreast of their subjects. Limited funds make it necessary for faculty members who request books for required, optional, or collateral reading to consider each purchase in relation to the specific course, the curriculum, and the book collection as a whole. This is particularly true of duplicates which are purchased for required readings. ${ }^{5}$
General book collection.-Apart from the reference and curricular materials which are needed in the university library, modern library practice, particularly as it relates to undergraduates, requires the provision of materials which satisfy the general reading function of the library. Many university libraries, in common with college libraries, have failed to formulate careful book-selection policies for meeting this requirement. Since this function, as Randall and Goodrich ${ }^{6}$ point out, is a relatively new one, it is neither universally accepted nor completely understood. In large university libraries with adequate book budgets, much of the material which would be classed as general reading matter is probably regularly obtained in the normal processes of acquisition. If it is not secured in this way, proper provision should be made for its acquisition.
At Columbia, such publications as the New York Times Book Review, the Herald-Tribune Weekly Book Review, the Saturday Review of Literature, Publishers' Weekly, and the Times (London) Literary Supplement are regularly checked by an assistant in the acquisition department. All items, except for medicine, law, and several other professional schools, are checked. The checked items are searched in the outstanding orders file, and canceled if an order exists. If there is noorder, a card is made and sent to the respective departmental librarian for decision. All titles dealing with subjects concentrated in the general library are sent to the assistant director (readers' services), who makes decisions

[^172]as to whether the items (1) are to be ordered at once or (2) are to be kept for a brief period to await orders from faculty members. The Library of Congress proofsheets of items currently cataloged are also examined regularly by faculty members, departmental librarians, and the assistant director (readers' services).

Research collections.-While the college library emphasizes in its acquisition program the selection of materials which fulfil reference and curricular functions, the university library centers its attention upon the provision of research materials. Books, periodicals, documents, serials, manuscripts, films, and other types of materials form the resources for investigation of scientific and humanistic problems. It has been charged that the university library, in emphasizing research, has neglected the requirements of undergraduate students and the college functions of the library. Obviously, the charge may be substantiated in certain instances. But, if the university is to be a center for recruiting undergraduates for research work, for serving as a focal point in preliminary training in research, and for originating research problems and distributing research findings, its library should be equipped to implement the program. Insufficient resources of a graphic nature, dealing with the more specific aspects of the physical sciences, the biological sciences, the humanities, and the social sciences, can seriously hinder an effective research program. Indeed, one could hardly call it a "program" if no plans have been made for the systematic collection and preservation of research materials. Just how extensive and exhaustive the collections in the several subject fields should be depends entirely upon the university's research program and its intentions for the future.

Rare books.-What is the responsibility of the librarian in collecting and housing rare books? Some writers, such as Adams ${ }^{7}$ of the Clements Library of the University of Michigan, are of the opinion that academic libraries, rather than other types of libraries, should be the depositories for rare items. Although many university librarians are prevented from maintaining a program of acquisition of rare materials because of budgetary limitations, a large number of institutions collect some incunabula, first editions of American authors, first editions in various subject fields, local history, manuscripts, letters, examples of local printing presses, old newspapers and periodicals, broadsides, notices, programs, old maps, gift books, annuals, association copies, examples of fine binding, illumination, and typog-

[^173]raphy, and copies of private press items. Frequently a university library becomes a collector of rare items because it has been made the beneficiary of a private collection. Thus, it is obligated to set aside a certain portion of its income, if the collection is not endowed, for the maintenance and development of the collection.

Opinion concerning responsibility of the university library as a collector of rare books, however, is divided. According to one point of view, rare books may be conceived of as instruments for instructing the student how to differentiate the real from the counterfeit. By handling such books the student can learn to distinguish between a first edition, a first revised edition, the last edition published during the author's lifetime, the first effort at a critical edition, a modern popular edition, and the latest critical edition. ${ }^{b}$ Such investigation, it is suggested, engenders a discriminatory perspective in the average or exceptional student and is of value to those individuals who are interested in becoming bibliographers and librarians or students of literary development. It has also been claimed that, "because of their historical significance, their intrinsic value, their beauty, and sentimental associations, rare books, when intelligently grouped, have power to excite the imagination and stimulate the intellectual curiosity of the student." 9 It has also been held that, as a means of publicizing the library, of brightening it with exhibitions, and of developing the interest of students, alumni, and friends, rare books may also be highly useful.

According to another point of view, ${ }^{10}$ much of the collecting of rare material is not associated with the teaching, public service, and research programs of the university. When that is the case or when the activities of the library in this field approximate those of the professional book collector or the bibliophile and are devoted to assembling curiosa, first editions, autographs, and association copies, or to bidding for items solely because of their market value, or to acquiring manuscripts merely for the sake of possessing unique materials, it is claimed that such activities may well be open to question. Only when such items are useful in the educational and research programs, it is argued, are they legitimate objects for acquisition.

[^174]Despite these implied criticisms, such collections are in existence and funds are constantly being spent in expanding them. The record of use made of the materials in the Harvard Treasure Room for one day in $193^{8^{11}}$ indicates clearly the appropriateness of the materials for the support of the serious work of scholarship. Among the individuals who used the materials were three Harvard professors, five professors from other schools, four graduate students, three undergraduate students, and a film actress, as well as "assorted professors" secretaries and library staff members on various errands." Shakespeare quartos, incunabula, sixteenth-century French books, Quaker material, the Gay Collection of British Commonwealth period tracts, Harvard holdings in the Short-Title Catalogue, and early American newspapers were among the items consulted by individuals for the purposes of writing books, articles, dissertations, or papers or for information for a specific enterprise.

Most libraries are not so fortunate as Columbia and Harvard in being able to provide separate buildings for the housing of their rare-book collections. Generally, a small room or a grilled section of the stack is set aside for the housing of these materials. ${ }^{\text {a }}$ Special attention, however, has been given to the preservation of the Wrenn Collection at Texas, the MacGregor Collection at Virginia, and the rare-book collections at Chicago, Brown, Yale, Pennsylvania, and other institutions.

## PERIODICALS

A "periodical" is a publication, with a distinctive title, intended to appear in successive (usually unbound) numbers or parts at stated or regular intervals and, as a rule, for an indefinite time. Since "periodical" refers to a form of material, it is found that reference collections, curricular and general reading collections, research collections, and rare-book collections, as well as some of the collections which will be discussed later, usually contain periodical items. The importance of periodical collections of a library associated with a university that stresses research has generally been recognized. In his study of college and university libraries, Works ${ }^{13}$ found that periodical subscrip-

[^175]tions in the large institutions had increased greatly during the period from 1900 until 1925. For example, California was receiving 11,179 titles in 1925; Cornell, 2,288; Illinois, 9,943; Michigan, 3,361; and Yale, $11,548 .{ }^{14}$ One has only to examine the Union List of Serials to observe the extensiveness of periodical materials. Harvard was reported, in 1934, to be receiving some 13,000 serials, including periodicals. ${ }^{15}$ In 1940 Illinois reported that it was receiving 12,350 periodicals; Columbia, 6,502; and Chicago, 6,000. ${ }^{16}$

Periodicals may be divided into two classes-general and special. The general periodicals, such as Harper's, Atlantic Monthly, Scribner's, Time, Forum, and scores of similar titles are usually subscribed to by university libraries. Such periodicals are not only useful for current information, but they serve to fulfil the general cultural reading function of the library. In numerous instances they afford materials which may be used by students for brief reports, term papers, and special problems.

The special periodicals, however, form the backbone of the university library collection. Such titles as the Fournal of Geology, the Fournal of Entomology and Zoölogy, Protoplasma, the Fournal of Parasitology, Laryngoscope, and Ecology are examples of the specialized periodicals which are useful in scientific research. Similar periodicals appear in the humanities, social sciences, and fine arts. ${ }^{17}$

To which of the many specialized periodicals a library should subscribe depends largely upon the instructional and research program of the university. When the program is fully understood, selection of necessary periodicals should follow a pattern similar to that for the selection of books. Generally, the selection of periodicals in restricted subject fields is left largely to the faculty members. The decision to subscribe to a periodical requires careful consideration, for it usually involves a continuing budgetary item, as well as inevitable annual binding costs. Because of the importance of this decision, it is not unusual to find that, although libraries maintain separate budgets for periodicals, the initial expense of a periodical, often for a three-year period, is borne by the department ordering the title.

[^176]At the end of the period the item is placed on the regular university library periodical budget. This is the practice at the University of Washington and several other institutions. For those periodicals which fall into no specific field, the charges are carried by the general fund of the library.

Since periodicals are so essential in the support of research, special care has been taken to determine objectively the comparative usefulness of individual titles in a number of subject fields. Various attempts have been made to evaluate them from the point of view of research. Gross and Gross ${ }^{18}$ developed a technique for evaluating chemical periodicals in 1927. By checking a volume of the fournal of the American Chemical Society it was found that 3,633 references were made to 247 journals. It was apparent that the majority of the citations were concentrated in 28 journals. Similar studies have been made for mathematics, ${ }^{19}$ electrical engineering, ${ }^{20}$ geology, ${ }^{21}$ medicine, ${ }^{22}$ endocrinology of sex, ${ }^{23}$ physics and radio, ${ }^{24}$ dentistry, ${ }^{25}$ biochemistry, ${ }^{26}$ child guidance, ${ }^{27}$ and education. ${ }^{28}$

The idea behind this method of evaluation is that the periodicals

[^177][^178]most often referred to are the most important. The actual use of articles by scholars, it has been claimed, makes it possible to single out the most significant journals. It is obvious that numerous exceptions might affect the validity of the method. Moreover, it should also be recognized that the results depend upon the choice of the periodical or periodicals checked. Brodman's conclusions concerning the Gross and Gross method, based upon a study of journals of physiology chosen by faculty members of the College of Physicians and Surgeons, Columbia University, are summarized as follows:

The Gross and Gross method has been extremely valuable in helping administrators to build up periodical collections in many diverse fields about which they could not themselves have expert subject knowledge. For this reason it has probably been accepted more or less uncritically, with the feeling that any method was better than no method. Yet it appears to be a somewhat unscientific and unscholarly method, as well as one which gives untrustworthy results. In spite of these extremely grave drawbacks, the method will probably continue to be employed by librarians until the library profession is presented with a better one. Individuals using the method, however, should be aware of the small dependence which can scientifically be placed on its results. ${ }^{28 n}$

Reference counting is not the only method by which attempts have been made to evaluate periodicals. Individual scholars and subject specialists have examined carefully sample copies of periodicals for the purpose of deciding upon their merits for inclusion in the library. It has been pointed out, however, that this procedure takes too much time, requires copies of all periodicals to be on hand, offers the possibility of overlooking unknown periodicals, places too much reliability upon the contents of one or several issues of a journal, and results in a list of periodicals which may represent merely personal opinion. ${ }^{19}$

These two methods represent the scholar's approach to selecting periodicals. Librarians have attempted to select them on the basis of (1) index checking, ${ }^{30}$ (2) the holdings of a group of libraries, ${ }^{35}$ (3) the pooled judgments of experts, ${ }^{32}$ (4) a combination of opinions and

[^179]use of lists, ${ }^{33}$ and (5) use. ${ }^{34}$ In the first case, selection is made of the periodicals which have the most articles listed in periodical indexes and abstract journals, without too much regard for the merit of the articles. In the second, third, and fourth instances, selection is based primarily upon personal judgment and must be considered in that light. In the case of a newly published periodical, statistical methods have no place. Choice is necessarily based upon expert opinion. Pooled judgments of both experts and librarians are probably superior to judgments made by each group singly. In the case of the fifth method, the principal consideration is current demand, which may be misleading in the case of specialized journals.

These approaches to the problem of selecting periodicals indicate the live interest in the problem. The extent to which each method is defective should be recognized. Studies on an objective basis, however, are necessary if the librarian is to be in a position to substitute fact for guesswork. He should be constantly aware of the fact that periodicals change and require reappraisals. Moreover, he should seek the advice of experts on the faculty when questions of selection arise.

## SERIALS

Periodicals, discussed in the preceding section, form one division of serial literature. A "serial" is generally defined as a publication which is issued at regular or irregular intervals, with some scheme of consecutive numbering, and is intended to be continued indefinitely. ${ }^{35}$ Thus, both periodicals and continuations come under this definition. Continuations include annuals, reports, yearbooks, memoirs, journals, transactions, proceedings, college and university catalogs, and similar publications. The extensiveness of publication in these classes of material is made evident by reference to the Union List of Serials. An estimate shows that the revised Union List of Serials includes between 115,000 and 120,000 titles, aggregating more

[^180]than two million volumes. ${ }^{36}$ If both periodicals and documents are included as serials, as is done by the New York University Library, then the problems of acquiring, handling, and servicing the collection are magnified.

Librarians are faced with a difficult problem in distributing the funds for serials, which are relatively expensive, so that the educational and research functions of the university will be most effectively served. Few libraries "have had in the past or have at present well thought-out, defensible acquisition programs" for serial publications. ${ }^{37}$ Surveyors of university libraries have found that the serial programs were chaotic, and little attention has been given to an organized policy of carefully selecting materials. A basically sound acquisition program for serials requires a systematic linking of the materials with the course work and research policy of the institution.
The reasons for the disorganized systems of serial acquisition apparently include: (I) the sheer number of publications, (2) the recency of issuance of bibliographies and union lists which have opened up the whole field for analysis, and (3) the relative newness of research which utilizes serial materials. As a result of this situation, it is obvious that no library can expect to acquire all serials published, that serials are of unequal value, and that the value of the materials is determined by their relative unity and subject coverage to meet the needs of research workers. ${ }^{38}$

These facts emphasize the importance of selection. The serial holdings of a library should be definitely related to the institution's needs, and an attempt should be made by the library to eliminate unnecessary duplication of runs of expensive materials through cooperation with other libraries in a given region. Co-operation in the forms of specialization in collecting, interlibrary lending, and photographic reproduction may play an especially significant role in this area of library resources.

The policy for acquiring serials differs slightly from that for acquiring books. Checking such works as the Union List of Serials, Union List of Serial Publications of Foreign Governments, and the Skaggs, ${ }^{39}$

[^181]Litchfield, ${ }^{40}$ and Ohio ${ }^{48}$ lists provides a basis for selection, particularly when such checking is done by experts who are acquainted with the needs of the university and with the holdings of near-by libraries. Attention to new serials is also necessary. This often requires searching in out-of-the-way places, since serials, with the exception of new periodicals and some annuals, receive little publicity in the regular trade publications.

Procedures for selecting serial publications are similar to those for selecting other materials. Comparison of basic and standard lists with the holdings of the library is a primary procedure. Little has been done, however, in preparing selective lists of serials besides those for periodicals. The aid of faculty members as subject specialists is also a procedure which fortifies the selective process.

Organization and administration.-Recently it has been suggested that the existence of large serial collections in university libraries calls for the need of specialization-that serials and all work connected with them should be handled in an independent department. Such a department would combine the functions of acquisition, classification and cataloging, binding and preservation, shelving, circulation, supervision of special reading rooms, and reference service and would become a library in itself. Undoubtedly, serials present many serious problems of administration; and, since they are frequently more necessary than books, it is important that they should be consistently acquired and prepared for use. While most of the university libraries maintain periodical departments, with special reading rooms and special stack facilities, few serial departments have been organized which would include everything that falls under the broad definition of the term as defined by several writers. ${ }^{42}$

## GOVERNMENT PUBLICATIONS

The increased use of objective data and primary sources by students and research workers, the enlarged printing programs of for-

[^182]eign and domestic governments, and the changing functions of governmental bodies during the last decade are the principal factors which have contributed to the increased interest of university libraries in collecting and preserving government publications. The fact that government documents have been enriched in content because governments have extended their programs of research into the physical, biological, and social sciences and have included in their publication policy the issuance of monographic studies of practical importance has further increased the dependence of students and research workers upon these primary sources of information. The changing concept of the functions of state and federal governments and the new interests of governments in modern social, economic, and industrial life have contributed to the same end. County and municipal documents and archives have also become more important because their content has been similarly enriched. The increased complexity of international relations brought about by both commerce and war has made it essential for students and research workers to have access to official foreign documents. Public administration itself has emerged as a significant field of study, and government documents offer primary sources for investigations in this field.
In order to meet the new demands for such publications, university librarians have attempted to build up their collections of back materials and to make provision for acquiring future publications. In the past, available foreign and domestic bibliographies of documents have been checked, guides to other documents have been compiled, and library representatives have been sent to capitals and other cities in this country and abroad to assemble as many documents as possible for their libraries. Such procedures not only result in a quick exhaustion of materials but give evidence of the unsystematic way in which libraries have organized their document acquisitional programs. Drawing on his experience with the document situation at the University of Chicago Libraries, Kuhlman suggested six guiding principles or essentials for a sound program of document acquisition: (1) formulation of a public-document policy based upon a careful plan which emerges from the instructional and research program of the institution; (2) examination of the possibilities of regional co-operation in the acquisition and use of documents; (3) careful selection of materials; (4) appropriation of funds to provide for immediate subscription to titles; (5) appointment of a competent staff to handle the materials; and (6) preservation, involving such
matters as prompt binding, supervision, and restricted circulation. ${ }^{43}$ These principles, of course, are similar to those which have been evolved for the collecting and handling of nearly any type of library material. Yet, they apply particularly to documents, owing to the small amount of planning which individual libraries or groups of libraries have devoted to them. In the following paragraphs, special problems of acquiring federal, state, county, municipal, and foreign documents are discussed.

## FEDERAL DOCUMENTS

Most libraries, both university and non-university, possess some documents issued by the United States government. ${ }^{44}$ Of the 123 libraries in the United States which receive all federal documents available for distribution, 47 are university libraries or libraries of a university system (Fig. 18). These libraries, which form part of the depository library system of the government, receive valuable materials if they fulfil the requirement of making them available to the general public. ${ }^{45}$ Much criticism, however, has been directed at the depository system as it now exists. ${ }^{46}$ Based upon a law of 1895 which set up a series of depository libraries arising out of political and population considerations, it now fails to provide satisfactory coverage. As Wilcox has pointed out, "the framers of the law could not foresee fully the development in libraries throughout the United States which has nullified their original intent." ${ }^{47}$

Only 123 of the 544 libraries which are depositories receive all of the publications of the government except those considered confidential or of merely administrative concern. This selective aspect became possible in 1922.48 Since 1939, depositories have also been receiving maps, documents published in the field, processed publications, and congressional bills, hearings, and journals. ${ }^{49}$ However, as Merritt ${ }^{50}$ points out, in 1939 "all" depository libraries received
${ }^{\text {as }}$ M. L. Raney, The University of Chicago Suroey, Vol. VII: The University Libraries (Chicago: University of Chicago Press, 1933), pp. 191-92.

[^183]

Fig. 18.-Federal depository libraries. Data from U.S. Superintendent of Documents Ofice, 1944. Map includes only those libraries designated to receive all government documents. Total number of libraries, 123.
only 4,917 document titles out of the 32,529 it was estimated were listed in the Monthly Catalog for that year. Even if the processed documents, which are not distributed under the depository systems, are eliminated, only 22 per cent of the 22,071 printed documents were sent to depository libraries. Although some adjustments have been made, a further examination of the depository system is needed in order to determine ( $a$ ) which libraries should be given or allowed to retain the status of an "all depository" and (b) which libraries should be designated to receive a larger proportion of the government's publications.

Those libraries which are not depositories are frequently able to obtain copies of noncurrent publications free from the Superintendent of Documents. Separate government divisions, such as the Office of Education, also place libraries on their mailing lists for the distribution of free copies of their publications. In some instances, publications may be obtained through individual congressmen or senators. If none of these methods is successful, libraries may purchase documents directly from the Superintendent of Documents. Nondepository libraries generally maintain money deposits upon which they draw, or purchase items on a cash basis with coupons previously obtained from the Documents Office.

Organization for use.-Special attention has been given to the problem of organizing documents so that they may easily be accessible to users. Regular printed documents, particularly those which appear in series, are generally analyzed in governmentally issued indexes and hence are not usually cataloged as fully as ordinary books and periodicals. The inadequate indexing of much near-print material, however, has made it necessary to catalog them more extensively than ordinary documents. ${ }^{5 x}$ The use of the classification of the Superintendent of Documents Office ${ }^{52}$ has been adopted in a few institutions, although the more common practice of libraries is to arrange documents by subject. There seems to be no question but that

[^184]entirely too much duplication of effort is now going on in research libraries in cataloging and classifying documents. Centralized indexing, co-operatively supported, appears to be a logical solution.

STATE DOCUMENTS
The publications of the American Library Association Committee on Public Documents ${ }^{53}$ and the recent manual issued under the editorship of Wilcox ${ }^{54}$ present the subject of the importance, character, use, comprehensiveness, and printing and distribution of state publications so clearly and fully that extended discussion of it here is unnecessary.

Up until about 1930 the state library or historical society of each state served almost exclusively as the agency for the distribution and exchange of state documents. Between 1889, when it was organized, and 1933 the National Association of State Libraries tried to build up systems for the exchange and distribution of American state publications. The Association sought: (1) "to secure legislation in the various states designating a responsible central agencyusually the state library-for the exchange and distribution of state documents"; (2) "to define the principles that should govern the various states in this work"; and (3) "to build up within the Association as well as among public officials an appreciation of the importance of adequate distribution of these publications." ${ }^{\text {ss }}$ An examination in 1933 of the distributing and exchange practices of documents by the various states revealed an irregular pattern. ${ }^{56} \mathrm{On}$ the basis of the findings it was suggested that perhaps the state university library, rather than the state library or the state historical society, should be designated by the state to distribute official publications and to receive and preserve those of other states. The suggestion grew out of the obvious fact that research in the social sciences had greatly increased in universities, and consequently university libraries would have to take a more important part in collecting and preserving state documents for research purposes.

It has been suggested that one solution of the state document ques-

[^185]tion would be to designate ten or twelve large research libraries as regional document centers and to turn over to them the function of exchanging duplicate documents. ${ }^{57}$ These regional centers would assume the task of receiving the documents from any libraries in the region, in order to build up a large reserve of duplicates. Items wanted by member-libraries would be filled from the reserve. Such a plan would not interfere with the already established state document centers (Fig. 19) but would supplement them. State centers would preserve the documents of the state; regional centers would collect documents of the area they represent.

Some progress has been made in this direction. ${ }^{58}$ Examples are the agreement between North Carolina and Duke universities; the joint program of the University of Missouri and the Missouri State Historical Society; the co-ordination of document collections of Ohio State University, the Ohio State Historical and Archaeological Society Library, and the Ohio State Library; the division of collecting by the University of Wisconsin and the Wisconsin State Historical Society; and the designation by the libraries in the Pacific Northwest of the University of Washington Library as a regional document depository. The University of Colorado has taken steps to build up its documents for the Rocky Mountain states and plans to be the document center for that region. ${ }^{59}$

Although most state libraries have been designated as state document centers, some of these libraries have placed so much emphasis on extension work in recent years that they have lost sight of the responsibility of building up complete collections of state documents. ${ }^{60}$ The failure of some state libraries to perform this important function suggested the shifting of the task of collecting state documents to the state university libraries. The real basis, however, for shifting from the state library to the university library is that the latter needs the publications for research. The state libraries may need them for legislative reference. In North Carolina and elsewhere the legislation is supplementary. A certain number of state docu-

[^186]

Fig. 19.-State document depository libraries. Source: ALA Committee on Resources, "State Document Centers," Bulletin of the American Library Association, XXVI (1932), 554-55. Data verified for 1938 when Wilcox, in Proceedings of Public Documents, referred to above as the list of document centers. The University of Idaho, Moscow; University of North Dakota, Grand Forks; University of Nevada, Reno; Indiana State Library, Indianapolis, were invited to be state document centers after the above list was compiled. These are included on the map, since they were needed to make the 65 libraries to which Wilcox referred in 1938 .
ments have been allocated by the legislature to the University of North Carolina and to Duke University for the purposes of exchange. Similar arrangements have been made for the Louisiana State University Library and the University of Missouri Library to use the documents of their respective states for exchange purposes. ${ }^{6 r}$ Lawschool libraries of universities frequently have excellent provisions for the exchange of state session laws and court reports. The University of Minnesota Library receives from the state one hundred copies of all reports and session laws which are used for exchange by the law library. ${ }^{62}$ The Indiana University School of Law has a similar arrangement. ${ }^{63}$ The University of Florida Library is the designated document depository library for all documents of that state. ${ }^{64}$

Since the university librarian is the person most concerned with the accumulation of state documents and must make his budget stretch to meet instructional and research needs, it would seem that he is the logical person to work toward securing adequate legislation to obtain state documents for exchange purposes. Since the final results of any bill passed in regard to the distribution of publications will affect the library of the state university, the librarian should be sure that it contains such provisions as are essential to an adequate program. ${ }^{65}$

## COUNTY DOCUMENTS

Few university libraries, including those of state institutions, have planned acquisition programs for county official publications. With the development of research interests in rural activities, regionalism, and the relation of county governments to local and state governments, it becomes increasingly necessary for academic libraries to acquire county documents. Reports by county auditors, assessors, recorders of deeds, courts, sheriffs' offices, mine inspectors, county park commissions, lunacy commissions, welfare relief commissioners, boards of education, finance, and health, and superintendents of the poor, as well as many manuals, directories, proceedings, courses of study, and tax lists, are examples of county publications which have considerable value to students and research workers concerned es-

[^187]pecially with problems in the fields of political science, history, economics, education, law, and sociology.

County publications, for the most part, are of relatively recent date, and many of them are in mimeographed form. ${ }^{66}$ Moreover, no county publishes complete reports of the activities of all its officers or agencies. Thus, research students generally must use state publications, private publications, and county manuscript records in order to prepare thorough investigations. ${ }^{67}$

Collecting county documents.-Generally, state libraries, libraries of state historical societies, state university libraries, and public libraries are more likely to collect county publications than endowed university libraries. The University of Chicago is a notable example of a private institution having a county document collection of large proportions. The method of building this collection-direct visit-is described in a paper by the field representative. ${ }^{68}$ Many county documents cannot be moved to state libraries, state university libraries, or public libraries, since the materials are used by county officials, as well as being source materials for local county history. This fact, together with the practice of counties of issuing their publications in limited editions, suggests two procedures for the university librarian interested in collecting county documents. In the first place, printed or mimeographed documents should be secured immediately upon issuance. In the second place, various reproductive methods, including photostat and microphotography, should be utilized by libraries which require county documents to meet research demands.

Since many county publications are elusive, such bibliographical tools as the Hodgson list are useful as a check list and as a guide for interlibrary loan service. Over five thousand entries are included in this work, which records the locations of the materials in all types of libraries in thirty-seven states. Means for revising it and keeping it up to date should be provided. So far as county archival materials are concerned, considerable progress in describing and locating collections has been made by the Historical Records Survey. ${ }^{69}$

[^188]${ }^{67}$ Ibid., p. xviii.
${ }^{68}$ J. G. Hodgson, "Field Collecting of Public Documents for the University of Chicago Libraries," Public Documents, 1937, pp. 168-82.

69 E.g., Historical Records Survey, "Inventory of County and Town Archives of Maryland; No. 11, Garrett County (Oakland)" (Baltimore: The Survey, 1938) (mimeographed). Similar works have been produced for county archives in New.Jersey, Pennsylvania, and other states.

Co-operative acquistion and preservation.-Collecting county documents, no less than collecting other types of documents, requires planning and co-operative agreements. Public libraries have not collected county documents systematically, and even county offices have infrequently segregated their own publications for preservation. Co-operation in acquisition will mean that a certain number of libraries will be designated to secure and preserve county documents. A practical plan seems to provide for four types of collections: ${ }^{70}$

1. A document center in each county
2. A document collection in each state located at the state library, state historical society, or state university, containing all documents of the state as well as those of adjoining states
3. Document collections in college and university libraries gathered by the "gridiron" method, which involves (a) collecting for the area to be covered all possible materials for all years for selected counties and (b) securing all publications of all counties in the area for certain years
4. Document collections in four or five research centers

Since the Library of Congress, the New York Public Library, and the libraries of the University of Illinois and the University of Chicago have considerable county document collections, the suggestion has been made that these libraries might continue to specialize in such acquisitions. Organization of the work in specified libraries of the Pacific Coast seems necessary.

## MUNICIPAL DOCUMENTS

Many municipal documents, much like county documents, have been published irregularly in the past. However, in most smaller communities, annual reports, covering the various municipal administrative activities, are generally published. A common practice among the larger cities is to issue a series of reports, each devoted to a separate department. Thus, there will be reports on the courts; the police, fire, education, engineering, and street-cleaning departments; housing, public parks and recreation, public libraries, and airports divisions; or other units of activity. Very often, only a single copy or a few mimeographed copies of departmental reports are made. Consequently, libraries are unable to obtain reports in sequence for students and research workers who wish to examine the work of a department over a continuous period of time. Frequent changes in governmental personnel also affect adversely the contents and the continuity of municipal reports.

[^189]Reports of municipal offices, of course, are not the only sources of information available to the student of urban social conditions, local history, or municipal administration. Publications of civic leagues, better-government associations, and chambers of commerce often include materials useful to the research worker. Bureaus of municipal research issue reports and monographs which frequently contain valuable materials for the sociologist or political scientist. Data unavailable in municipal reports are also sometimes obtainable in the published statistics of the U.S. Bureau of the Census or in uniform reports of municipal operations issued by some states.

Acquisition.-In the past, municipal research libraries or public libraries have taken the initiative in collecting and preserving city documents. To do this effectively requires a close relationship between the libraries and the offices which issue publications. The lack of bibliographies or check lists of municipal documents has made it difficult for libraries to know just what has been published. The inventories of municipal documents prepared by the Historical Records Survey have helped considerably in organizing past records. Such publications as the Bulletin of the Public Affairs Administration Service, which is issued weekly, and special lists of the Special Libraries Association have aided somewhat in the recording of many city publications; but no nearly complete current list is issued.

Libraries of urban universities with programs of research in metropolitan problems require working collections of municipal docu-ments-particularly those of the cities in which the universities are located. The documents of other cities are required for comparative purposes. Co-operation in collecting and reproducing unpublished sources by photographic techniques has been suggested as a means of acquiring documents of this character required for research purposes.

## FOREIGN DOCUMENTS

Foreign documents represent a considerable body of materials in large university libraries. Some 30,000 titles are included in the 1932 Union List of Serial Publications of Foreign Governments. "In the survey of the University of Chicago Libraries eight departments earmarked 7,359 titles in Gregory's list of these publications as essential to the research of the University. This meant about 365,000 volumes. ${ }^{7}{ }^{7}$

[^190]Several difficulties are met with in the acquisition of foreign documents. Few of the documents are available free of charge to private institutions. While a number of federal and state institutions are able to acquire titles through exchange, the volume of material acquired in this manner is limited. Moreover, because of the frequent changes in foreign governments, documents have been extremely difficult to acquire. Finally, the acquisitional policies which university libraries have maintained have generally not been planned and carried out with the care devoted to the acquisition of federal and state documents.

In a paper presented at the 1935 conference of the American Library Association, Cole ${ }^{72}$ summarized the several methods that have been used in acquiring foreign documents as follows: (1) direct relations with governmental printers or administrative bureaus; (2) established booksellers, who may serve either as agents or correspondents; (3) itinerant book dealers, who operate from this country; (4) traveling professors, who may purchase designated items, check for known desiderata, and establish connections; and (5) interested parties located in foreign countries, such as friends of the librarians, alumni, and diplomatic personnel. The real solution to the problem of acquiring a sufficient number of current foreign documents to meet the research needs of American scholars apparently lies in formulating co-operative policies. Some attempt, for example, has been made to follow this idea in the plan of Brown University, Duke University, and the University of North Carolina in the acquisition of documents from Latin-American countries.

It would also be desirable to effect an arrangement through which some agency of the federal government, such as the Library of Congress or the Smithsonian Institution, would obtain from foreign governments, through exchange, a sufficient number of copies to place sets in designated libraries, such as those which maintain regional bibliographical centers. The Library of Congress can, at present, place sets of federal documents in Hispanic-American countries; but no provision is made for obtaining comparable collections to be placed in designated libraries for the use of scholars in the United States.

Effort has been made to makc available back documents of foreign countries through the use of microprint and microphotography. Progress has already been made in the filming of the British House of

[^191]Commons Sessional Papers through the microprint process. ${ }^{73}$ Since these projects are very expensive, it is unlikely that they can be participated in by the smaller libraries. This fact further suggests the need for establishing regional document centers.

## NEWSPAPERS

The newspaper collection forms a basic part of the university library's research materials. Valuable though it is, its administration presents a number of perplexing problems which must be solved if the collection is to fulfil the demands made upon it by scholars. While the value of newspaper collections has been recognized for many years, libraries generally have failed to develop systematic policies of acquiring them or satisfactory methods of handling them. Indeed, so far as the professional literature is concerned, there has been little consideration of the problems involved or of possible solutions for them. This section discusses a few important problems raised by newspaper collections, namely, ( 1 ) the value of newspapers as research materials, (2) the adequacy of newspaper collections, (3) the selection of newspapers, (4) the co-operative efforts among libraries for collecting and preserving newspapers, and (5) the application of microphotography to the newspaper collection.

## NEWSPAPERS AS RESEARCH MATERIALS

Because newspapers have come to be regarded as a valuable type of source material, the university library which supports a program of research, particularly in the social sciences, should develop a careful program of acquiring and preserving them. Before John Bach McMaster wrote the first volume of his History of the People of the United States in 1883, historians had not ventured to use newspapers as a main authority. ${ }^{74} \mathrm{Up}$ to this time, few libraries-public or university-had realized the importance of preserving newspapers. As early as 1857 Lyman C. Draper ${ }^{75}$ complained of the fact that individuals and libraries were neglecting to preserve newspapers for historical purposes.

[^192]Modern use of newspapers as primary sources is well known. Historians have turned to them to explore the field of "social history" and have found them indispensable for reconstructing both the details and the spirit of past society. In 1908 an entire session of the annual meeting of the American Historical Association was devoted to a discussion of the use of newspapers by historians. ${ }^{76}$ Thirty years later Nevins ${ }^{77}$ commented that newspapers, if not actually equal, were second in importance only to official sources for the study of modern history.

Not only historians, but sociologists, political scientists, philologists, journalists, advertisers, economists, educators, and others, have used newspapers for research purposes. Such use, of course, has not gone unquestioned. Newspapers vary greatly in their accuracy and objectivity, and the careful scholar is cautious of any use he makes of press items. Differences among newspapers likewise affect the acquisition policies of libraries, for they must select and preserve from among the great number of newspapers published throughout the world only those which are likely to be valuable as research materials. Newspaper collections should be representative, but they should include at least the best and most important papers from each region or country represented. The question of selection as an important element in a program of newspaper acquisition will be discussed in more detail below. Here it may be said that, unless selection is purposefully and intelligently planned, the newspaper collection cannot be of maximum use to scholars.

## ADEQUACY OF COLLECTIONS

The acquisition and preservation of newspapers involve serious problems. Having worked out a satisfactory program of selection, the library must provide for binding and housing the files, as well as for their use by researchers. In view of the expense and practical difficulties involved in making these provisions, it is understandable why few libraries have brought their collections under effective control. Further explanation of the failure of libraries to deal adequately with newspapers may be found in several facts, cited by Kuhlman, ${ }^{78}$

[^193]which have been largely beyond the control of librarians: (i) the production of newspapers has been on such a large scale in recent years that the sheer bulk of the material at hand has hindered the development of workable programs of acquisition and preservation; (2) the tools for bringing the great mass of materials under control have been developed only recently; ${ }^{79}$ and (3) research councils and organizations of scholars which have lately done much to promote the conservation of research materials have been operating only within the last quarter of a century.

Criteria are lacking for measuring the effectiveness of the university library's newspaper collection. Just what constitutes an "adequate" collection for various sizes and types of institutions and what methods of preserving and administering these files are most satisfactory have never been thoroughly discussed. Moreover, few data have been collected on the size and nature of such collections as now exist or on the various methods of handling newspapers now used by libraries. ${ }^{80}$

Such information as exists, however, indicates clearly that few libraries have either developed a satisfactory program of selection or effective methods for preserving and handling such collections as they have accumulated. With regard to selection of newspapers, a survey made by the University of Chicago in 1931-32 of the policies and experience of 18 large libraries yielded the following data:
(1) The combined subscriptions of eighteen libraries numbered 71 American and 134 foreign. (2) Few of the libraries have a satisfactory newspaper policy. Apart from Illinois and the New York Public, there is no well-rounded program of acquisition and preservation. Michigan has the third best program, receiving 28 American metropolitan newspapers and 16 foreign. Stanford and Northwestern do well by foreign newspapers, but little for American. (3) The combined newspaper program of the five Chicago libraries is especially weak for American newspapers. Of 23 American metropolitan papers received in Chicago libraries, eight emanate from New York City and eight from Chicago. No papers issued west of the Mississippi River or south of the Ohio or north of the Canadian border are being currently received for preservation in Chicago libraries. (4) Foreign newspapers are also not well represented in Chicago libraries. Despite the fact that 36 are received by the combined libraries (of which Northwestern receives 19), no papers are being received in the Chicago area from: Africa, Alaska, Austria, Belgium, Canada, Cuba, Czecho-

[^194]slovakia, Denmark, Hawaiian Islands, Italy, Jugoslavia, Mexico, Netherlands, Norway, Poland, Porto Rico, Roumania, South America, and Sweden. ${ }^{87}$
Assuming that it is desirable for individual libraries, and particularly for libraries as a group within a region, to have a representative collection of newspapers, these findings clearly indicated the need for better selection policies.

Some data on the policies of smaller libraries with regard to selecting and preserving newspapers were given in another survey made in $1937{ }^{82}$ Replies to a questionnaire sent to 50 college and small university libraries showed that 39 of these institutions were attempting to maintain active newspaper collections. Of these, however, only 8 had collections of one thousand volumes or more; and few collections contained titles other than the New York Times, the London Times, the United States News, and the college or local papers. The great majority of the libraries reported that their provisions for preserving, housing, and supervising their files were inadequate. In view of the failure of the largest and wealthiest libraries to develop satisfactory policies for acquiring and preserving newspapers, the shortcomings of the smaller institutions are not surprising. A survey of the newspaper collections of the 5 major libraries in the Chicago metropolitan area revealed that many of the titles were not cataloged, that files were generally broken (runs were frequently confined to single numbers), and that in many instances files were unbound or in defective binding and were housed in damp basements. ${ }^{83}$

## SELECTION OF NEWSPAPERS FOR PRESERVATION

In building up an adequate newspaper collection the problem of selecting titles for preservation is logically the first consideration. Few libraries have given attention to this matter, and collections that have been accumulated are all too frequently lacking in purpose. The need for a well-defined policy of selection is obvious in the light of these facts: ( 1 ) the mass of material available is so great and varied that no single library could possibly acquire and make available more than a limited portion needed by scholars; (2) newspapers vary greatly in character and purpose and, consequently, in their usefulness to different libraries; and (3) collections are valuable only in so far as they have a unified purpose and are relatively complete within their

[^195]field. ${ }^{84}$ An adequate policy of newspaper selection for a university library should take into account: (1) the research interests and needs of the institution, (2) the importance and value of newspapers that are available, (3) the desirability of acquiring a representative collection of papers from various regions and countries, and (4) the policies of other libraries within the region.

At least one systematic attempt to work out a plan for selecting newspapers has been made. Because it suggests procedures of general application, it may be considered in some detail. In an effort to determine which newspapers were most worthy of preservation, the University of Chicago Libraries in 1931-32 undertook to learn which papers were most frequently subscribed to by 18 large university and reference libraries. Subscription by 2 or more libraries was regarded as an indication of a paper's significance. On the basis of the findings of the survey it was concluded that this method of selection was inadequate; too many papers from certain cities and countries would be included, some excellent papers would be entirely omitted, and a number of important cities and countries would not be represented. Incidentally, these conclusions are a commentary on the adequacy of the acquisition programs of some of the country's largest libraries. ${ }^{85}$

To get further data on the question of selection, the University of Chicago Survey Committee solicited the opinions of twenty-five faculty members in the social sciences and humanities. These scholars made the following suggestions with reference to both foreign and American papers: (1) The policy for foreign newspapers should be to bring the best metropolitan newspaper from every important country to some Chicago library for preservation, and all foreign newspapers of world importance should be in the University of Chicago Libraries, even though they duplicate titles in other Chicago libraries. This program called for 100 foreign titles for the Chicago area. (2) All the American metropolitan centers that represent distinct cultural, industrial, and agricultural areas should be represented by their newspapers in Chicago libraries. To determine which areas should be represented, the faculty group drew upon a study by R. D. McKenzie and Charles Newcomb which used newspaper circulation to define metropolitan regions. They decided that an adequate col-

[^196]lection for the Chicago area should include 60 American newspapers. It was estimated that the program calling for 100 foreign and 60 domestic newspapers would cost $\$ 9,600$ annually for subscription and binding. ${ }^{86}$
Just which newspapers should be selected from each area and what criteria should be used in making the selection were not indicated. It was suggested, however, that not too many chain newspapers should be acquired; that, since newspapers change considerably, "it is more important historically to have the best paper for a given region than to have a continuous file of a given title"; and that durability of paper should be considered. These facts and principles derived from the Chicago survey are undoubtedly important. But, while they point in the right direction, they leave unsolved the major problem of establishing acceptable criteria for the selection of newspapers to meet the needs of libraries possessed of varied research interests and needs. Here is a field that is worthy of study, for the results should provide objective data around which criteria may be evolved.

## CO-OPERATIVE AGREEMENTS IN ACQUIRING NEWSPAPERS

Considering the mass of newspaper materials which should be preserved and the difficulties and expense involved in acquiring and administering large collections, it is clear that programs of co-operative acquisition and preservation will have to be worked out among libraries of a region if scholars are to be fully and efficiently served. Little progress has been made in this type of co-operation. ${ }^{87}$ Not only have librarians failed to develop adequate policies for building up representative collections of the most important papers which would be both unified and adapted to the peculiar research needs of their clientele, but they have also failed to correlate their programs with those of other libraries.
Preliminary efforts to work out a co-operative plan of newspaper acquisition and preservation by the 5 major libraries in the Chicago metropolitan area provide evidence of the need for regional co-ordination and suggest some of the problems involved. ${ }^{88}$ The preparation of a union list of holdings was the first step in this program. The union list, which recorded 1,500 titles, revealed extensive holdings in eight major fields. The usefulness of these collections, however, was

[^197]impaired by the following facts: (1) many titles were not cataloged; (2) runs were generally short; (3) many titles were scattered in 2 or more libraries; and (4) files printed on ground wood-pulp paper were rapidly deteriorating, and older papers, frequently unbound and housed in damp basements, were in danger of destuction. These facts suggested the need for definite steps by which the 5 libraries could increase the usefulness of their collections. Much could be accomplished by co-operative efforts in the following directions: (1) allocation and exchange of titles to complete certain files and to bring together papers on the same subjects and (2) acquisition of old papers to build up a complete, well-rounded collection within the region.

That librarians are becoming convinced of the necessity for cooperative action is shown by the recent development of a number of programs for co-ordinating newspaper resources. Two such programs may be briefly described. The first is the plan drawn up by Duke University and the University of North Carolina. ${ }^{89}$ In this instance the newspaper program is but one aspect of a far-reaching program of co-ordination of the total resources of the two institutions. With regard to newspapers, North Carolina has assumed responsibility for North Carolina newspapers. Duke, on the other hand, is receiving and preserving important newspapers from various regions of the United States and also a number of outstanding foreign titles. On the basis of this broad division of responsibility, the two institutions are building up a more extensive collection of local, national, and foreign papers than either of them could provide on its own initiative.

The other co-operative plan is that worked out by the Virginia State Library and the University of Virginia Library for the preservation of current Virginia newspapers. ${ }^{\circ}$ Each institution assumes responsibility for certain papers, and between the two all dailies and many important weeklies published in the state are being preserved. By extending this plan to include newspapers from other states and from foreign countries, even greater benefits would result from the co-operative efforts of the two institutions. The recent survey of the resources of southern libraries indicated the location and the scope of the major newspaper collections in thirteen states. ${ }^{92}$ With this data

[^198]at hand, libraries in the South are in a position to formulate plans for co-operative acquisition and preservation on a regional basis.

## APPLICATION OF MICROPHOTOGRAPHY

The development of microphotography within the past decade has opened up new possibilities in acquiring, storing, and preserving newspapers. Although applicable for copying and preserving all sorts of graphic materials, microphotography has been used with considerable effectiveness in connection with newspapers. Not only has microphotography been a convenient means of eliminating bulky materials from the stacks, but it has been of great value in acquisition and preservation. So far as storage space is concerned, the advantage of film files over bound volumes is apparent. It has been estimated that with the use of films the savings in space are 95 per cent or more.

As a means of preserving newspapers which would otherwise deteriorate, film is undoubtedly the most satisfactory medium yet developed. Stored under proper conditions and used carefully, it promises to last as long as high-grade rag paper. Furthermore, film costs less than the best alternative methods of preserving bound volumes now available. ${ }^{92}$ The necessity for binding back files has long been a serious burden for all libraries attempting to maintain newspaper collections. By obviating this need, films should reduce considerably both the difficulty and the expense of preserving papers.

Microphotography particularly offers an opportunity for libraries coming late into the field to acquire newspaper files which are unobtainable on the market in the original. This removes what was formerly a serious handicap for young institutions. Film also offers an opportunity for libraries to acquire a better final product than is represented by any one file of the originals. For example, a relatively complete composite file may be filmed from several fragmentary files of the original papers. A preliminary check list of newspapers on microfilm, prepared in 1941, indicated that 48 newspapers from 28 foreign countries, and 167 American newspapers, representing 74 communities in 25 states, were available, either wholly or partially, on microfilm. ${ }^{33}$ The list is admittedly incomplete, but it serves to illustrate that the movement to substitute film copies for current and back files of newspapers is progressing rapidly.

[^199]The development of microphotography has stimulated discussion of the possibilities of co-operative acquisition of newspapers on film by libraries on a regional basis. The University of Chicago Libraries took one of the first steps in this direction in 1935, when an inquiry was made among librarians and experts in the field of microphotography as to the feasibility of filming newspapers on a co-operative basis. 94 At this time the uncertainty as to the relative durability of film inclined the majority of the participants in the symposium to say that they would not risk the filming of either current issues or back files of papers on a large scale. Since the question of permanence of film has been answered by the study of the National Bureau of Standards, however, it would seem that the way for the development of co-operative filming projects is now open.

There are two principal benefits which might result from co-operative efforts in the acquisition and preservation of newspapers on film. The first concerns the reduction of costs, and the second the buildingup of strong and relatively complete collections regionally. Co-operation is obviously one of the most promising methods of attacking the problem of high costs. Well-equipped laboratories, located strategically on a regional basis, should be the agencies whereby quantity reproduction at reduced costs may be possible.

In addition to the question of costs, co-operation through microphotography seems to be the only way in which libraries can reduce unnecessary duplication of files and assure the representation of a large number of different titles held within a region. A planned program should make it possible to carry out Kuhlman's suggestion that "all the newspapers of great significance should be on file in all large library research centers." 9 But the acquisition of the less important papers is a field in which co-operation could be made to yield substantial benefits, both in financial savings and in strengthening the regional newspaper collections. Film offers libraries an opportunity to realize this goal.

In addition to solving problems of acquisition, storage, and preservation, films offer other advantages to users of newspapers. Microcopied newspapers are easier to handle than the bulky volumes of the originals. An experiment made in the New York Public Library in 1934 showed not only that readers were willing to use film copies

[^200]in lieu of the originals but that they preferred the former, largely because of the convenience in handling. ${ }^{96}$ However, extended use of films has in many instances been found tiring to the eyes. Librarians at present are interested in the experiments with microprinting, which probably will be a useful technique in reproducing newspapers in the future.

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## CHAPTER XI

## BOOK COLLECTIONS: SPECIAL MATERIALS

## DISSERTATIONS AND THESES

TUHE problem of acquiring and handling dissertations and theses has not been satisfactorily settled in American university libraries. Dissertations, which may be foreign or American, appear as separate publications, reprints, or in manuscript form. The large university, in which considerable research is carried on in a variety of subject fields, will probably find it desirable for the library to acquire a high proportion of dissertations. Since Masters' theses are seldom printed, they present problems only to the libraries of the institutions in which they are produced.
Doctoral dissertations.-So far as American doctoral dissertations are concerned, most universities require the deposit of typescript copies in the university library. About one-half of the institutions granting the doctorate require the immediate or eventual publication of the dissertation, in full or in part or in abstract form. ${ }^{2}$ From the years 1929-30 through 1939-40, doctorates in the United States totaled $28,200 .{ }^{.3}$ The number has been steadily increasing each year, and in 1939-40 it reached 3,088. ${ }^{3}$ In 1929-30 there had been 2,070.4 Dissertations from all doctorates, of course, are not acquired by all university libraries, since not all are published. However, if the trend in graduate enrolments prior to America's entry into the war continues to increase and the requirements for the doctorate continue to stipulate a dissertation, librarians may expect a larger number of dissertations in the future.

The volume of foreign dissertations is even greater than the American. In $193^{8}$ there were more than 9,000 dissertations from German universities. ${ }^{5}$ French, Dutch, Swiss, Belgian, Spanish, Italian, and

[^202]other universities likewise issue a large number of dissertations each - year. While the second World War undoubtedly has affected this program for the time being, it is probable that the large output will be resumed later.

In 1929 it was noted that the large university library could expect to acquire about 5,000 dissertations annually. ${ }^{6}$ The University of North Carolina in 1936 was receiving approximately 7,000 each year. ${ }^{7}$ American universities which have extensive graduate programs and which issue or require printed theses are in position to exchange with other institutions. Acquisition departments have available bibliographies for American, ${ }^{8}$ German, ${ }^{9}$ and French dissertations, ${ }^{10}$ as well as for those of other countries; ${ }^{11}$ and these may be checked for items which are desirable. Many institutions distribute dissertations rather freely and make no effort to claim piece-forpiece exchange.

One experimental plan to solve the problem of acquisition of American dissertations is in operation. Microfilm abstracts at the University of Michigan provide, on film, abstracts of dissertations prepared at Princeton, Stanford, Nebraska, Toronto, and Michigan. ${ }^{12}$ Catalog cards are also made for the dissertations and distributed to the contributing libraries. The original proposal for this service called for all American universities to send to Ann Arbor their dissertations, with a four-hundred-word summary. At intervals, brochures of the abstracts were to be sent to libraries. Research workers wanting specific dissertations could then make request for films.

A suggestion for co-operation in acquiring and cataloging German
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TG. H. Faison, "Care of German Dissertations," Bulletin of the American Library Association, XXX (1936), 572-73. The University of Chicago Libraries were receiving approximately this number annually in 1938.
${ }^{8}$ Henry, op. cit.; also Library of Congress, Catalog Division, $A$ List of American Doctoral Dissertations Printed in [1912-38] (Washington: U.S. Government Printing Office, 1913-40).

[^203]dissertations has also been made. Recognizing that libraries have not solved the dissertation problem, Faison ${ }^{13}$ recommended a co-operative plan whereby each co-operating library would be responsible for collecting, maintaining, cataloging, and classifying a specific German university's dissertations. An arbitrary system of classification would be used, and typed cards of cataloged dissertations would be sent to a central location for printing and distributing to all co-operating libraries. Since the plan involves considerably more co-operation than most librarians are willing to give, nothing has come of the suggestion. In 1941, libraries in the United States began to supply to the Library of Congress cataloging copy for doctoral dissertations published by their individual universities.

Full co-operation on the questions of publicizing and making available theses would probably involve a plan similar to that which operated in pre-war France. ${ }^{.4}$ There, any thesis accepted by any one of the 18 universities was deposited in the library of the University of Paris. Copies of printed dissertations were made available to each of the universities. Foreign libraries co-operating in the exchange plan were provided with copies. A complete set of theses, in addition to copies acquired through legal deposit, was placed in the Bibliothèque nationale. Listing of the theses occurred through the "catalogue of exchanges, which appears in the form of parts of the Bibliographie de la France before it is made up into a complete volume."'s

Masters' theses.-The number of theses, essays, reports, and similar papers required for the Master's degree is mounting rapidly each year. Most institutions require a thesis for the Master's degree. In 1938, 22,631 Master's degrees were awarded. ${ }^{16}$ Except for the few Masters' theses which are published in journals or as separates, there is no problem of acquisition, as copies are generally restricted to the library of the institutions in which the degrees are granted. Thesis collections, however, do present problems of handling and service.

Administration and organization.-The volume of dissertations, the highly technical nature of their content, and the limited use made of them are three factors which suggest that special attention

[^204]might profitably be given to the preparatory processes involved in making them available to research workers. No comprehensive study has been made of the problem, but some information is available regarding specific practices. ${ }^{17}$

These practices vary among libraries and are difficult to summarize, for they range from simple alphabetical arrangement under the issuing institution to full treatment, as for other books. For example, one library assigns no subject headings to German dissertations but files them in broadly classified sections, leaving the approach to them through the annual list of German publications. Another library makes author cards for a large number of selected dissertations. A third library treats English and French dissertations just as other books. One subject card is made for nonscientific dissertations in other languages. Scientific dissertations are sent to the departmental librarians, who are given the privilege of selecting those items which should be cataloged and classified. Not a few institutions arrange foreign theses under the name of university, then by year, and finally alphabetically by author, doing no cataloging at all. In a few instances, separate catalogs of dissertations are kept.

Similar arrangements have been established for the preparation of American dissertations. There is a greater tendency, however, to catalog American dissertations fully, using Library of Congress cards whenever possible. Although Hitchcock's findings do not show just what specific practices libraries follow in regard to both foreign and American dissertations, she gives some interesting data regarding their handling in a large group of university libraries. This is shown in Table 25. It may be pointed out that "it is not the intrinsic nature of the dissertation that causes the different cataloging. ${ }^{18}$ This is best observed in the fact that subject cards are ordinarily made for dissertations published independently in other than thesis editions. "Hence, technicality as represented by the intrinsic nature of dissertations may not be considered a factor in subject card omissions." ${ }^{\prime \prime}$ The reasons for selective subject cataloging of dissertations, then, are the limited use made of them and the availability of indexes.

[^205]Little or nothing has been said of the handling of Masters' theses in university libraries. Here, too, individual libraries should devise practices which suit their particular clientele within the economy of the preparatory department. Not unfrequently it has been found that libraries catalog theses too fully. Separate catalogs of theses are also frequently maintained by libraries, and more and more bibliographies have been prepared. Responsibility for the preparation of bibliographies of theses has been assumed by various agencies. Instructional departments, graduate schools, catalog and reference de-

TABLE 25*
Assignuent of Subject Headings to Dissertations

| Materials | No. or Libraries то Which Applied. | Percentage Frequencies of Librames to Which Applicable $\dagger$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | V | X | Vs |
| Dissertation collections | 63 | 44.4 | 41.3 | 14.3 |
| German dissertations. | 72 | 72.3 | 8.3 | 19.4 |
| Dissertation reprints. | 79 | 73.4 | 8.9 | 17.7 |
| Other foreign dissertations. | 68 | 73.5 | 5.9 | 20.6 |
| French dissertations..... . | 72 | 79.2 | 6.9 | 13.9 |
| American dissertations. | 86 | 88.4 | 4.6 | 7.0 |
| Dissertations published independently other than in thesis edition. | 85 | 96.5 | 0.0 | 3.5 |
| English material in subject classes. . . . . . . . | 85 | 100.0 | 0.0 | 0.0 |

[^206]partments of libraries, research organizations, and individuals have compiled them, frequently including both dissertations and theses. As yet, there is no complete list of Masters' theses available, ${ }^{20}$ and the lists from individual universities are not always consistent and regular. An appropriate function of the university library might well be the compilation and publication of a list of its own institution's theses. If published promptly each year with accurate indexes, it seems that such a list should prove useful to research workers, who usually are in a position to have theses reproduced on film or borrow them through interlibrary loan.

[^207]
## MANUSCRIPTS

The manuscript collections of the university library, systematically acquired and carefully organized for use, may be of inestimable service to research workers. As primary sources, they provide the materials that are so often necessary for basic studies, whether they are dissertations or special reports. In another section of this chapter, manuscripts which are contained in archival collections-governmental, educational, business, etc.-are considered separately. In this section attention will be given to those nonarchival manuscript materials, such as Latin, Greek, and Hebrew manuscripts, which are primarily valuable to researchers in art, biography, history, literature, paleography, philology, and religion. In this same category fall a Dante manuscript, a letter of George Washington, a manuscript poem of Shelly, or a Psalter of the eleventh century, which may have restricted use in an undergraduate class.

That libraries still attract the letters and other papers of authors, military figures, statesmen, and other persons is evident in the reports on the acquisitions of libraries each year. ${ }^{25}$ The wide variety of manuscripts which are likely to be obtained by a library is shown in Raney's listing ${ }^{23}$ of the holdings of the University of Chicago or in the descriptions of holdings in the University of Pennsylvania ${ }^{23}$ and Harvard University. ${ }^{24}$ Statistics available regarding the manuscript holdings of university libraries of the type described here are not definite. ${ }^{25}$ Most librarians apparently do not know the exact extent of their manuscript holdings. Among the almost 23,000 manuscripts in the University of Pennsylvania library are several notable collections: (1) about 5,000 items in the Lea Library, relating primarily
${ }^{2}$ Cf. annual reports of university libraries-e.g., Columbia, Princeton, Harvard, Yale, Michigan, Virginia, etc. See also R. B. Downs, "Notable Materials Added to American Libraries, 1938-39,"' Library 2uarterly, X (1940), 157-91; "Notable Materials Added to American Libraries, 1939-40"" ibid., XI (1941), 257-301; "Notable Materials Added to American Libraries, 1940-41," ibid., XII (1942), 175-220.
${ }^{22}$ M. L. Raney, University of Chicago Survey, Vol. VII: The University Libraries (Chicago: University of Chicago Press, 1933), pp. 179-83.

[^208]to medieval church history and the Inquisition but containing letters dealing with municipal and state reform, civil service, copyright legislation, and political matters; (2) approximately 3,000 Indic manuscripts, consisting chiefly of Hindu, with some Jain and Buddhistic materials; (3) 4,400 pieces in the Edgar Fahs Smith Library, emphasizing primarily the history of chemistry but containing many items of local university interest; (4) over 3,000 Robert Montgomery Bird items, relating primarily to his literary work; and (5) " 87,2 Franklin letters, 850 of which are calendared in the Calendar of Papers of Benjamin Franklin in the Library of the University of Pennsylvania," published in $1908 .{ }^{26}$ The University of Pennsylvania Indic manuscript collection and Harvard's collection of some 2,500 items make up the majority of the 7,273 pieces listed by Poleman ${ }^{27}$ in 1938 . It is interesting to note that already two doctoral dissertations and several articles have been written on items contained in the Pennsylvania collection. ${ }^{28}$

Acquisition.-Purchases of manuscripts used for research or instructional purposes generally come out of departmental funds. More often than not, however, desirable manuscripts are acquired either through contributions of funds for special purchases or through actual bequests of donors. Some university libraries send collectors into the field. Much southern manuscript material was assembled for the Wisconsin State Historical Society in 1854 through the journeys of Lyman C. Draper to Virginia, Kentucky, North Carolina, Tennessee, and other southern states. The University of California Library possesses the collections gathered by Hubert H. Bancroft, who made trips with his agents during the 1850 's and 1860 's through the Far West to assemble manuscripts and other primary source materials. The collecting programs of the libraries of the University of North Carolina and the University of Virginia are recent examples of the use of field representatives. At North Carolina most of the material acquired has cost the library only the traveling expenses of the collector, Dr. J. G. de Roulhac Hamilton, who is also the director of the Southern Historical Collection, and the expenses for shipping the materials to the library and caring for them after they arrived. Similarly, Dr. Lester Cappon, consultant at the University of Virginia

[^209]Library, has made successful trips throughout the South. Most of the materials assembled for both the University of North Carolina and the University of Virginia collections would have remained with their owners, out of reach of research workers, if direct action had not been taken. It is not surprising that the original owners should cooperate fully in turning over materials to responsible libraries for care and preservation. "Any other plan would have involved the expenditure of great sums of money, competitive bidding among libraries and other agencies collecting such records, and probable failure, or at best only partial success for the whole program. ${ }^{29}$

Description.-The bibliographical tools describing manuscripts which are available for use to scholars, research workers, and librarians have been gradually increasing. Harvard University Library, in its series of "Bibliographical Contributions," has calendared several of its early manuscript collections. ${ }^{30}$ The monumental census of medieval and Renaissance manuscripts by De Ricci and Wilson ${ }^{3 x}$ includes the holdings of university libraries throughout the country. The series of publications issued by the Historical Records Survey should serve as guides to other types of manuscript collections in America. ${ }^{32}$ Scholars and research workers, with access to photographic and other reproductive processes, generally can obtain copies of materials once they have been located. It is thus encouraging to find that individual scholars, librarians, and governmental agencies have taken upon themselves the task of calendaring and describing manuscript holdings.

Organization for use.-As a rule, manusciripts are preserved in rare book rooms of university libraries. Depending upon such factors as the stipulations of donors, the size of the manuscript collections, and the uses made of them, organization and cataloging may take a variety of forms. At Harvard College Library, the early manuscripts are divided into three groups: ( 1 ) in a general series classified by

[^210]languages-for example, Latin, Greek, etc.; (2) in special collections grouped by subjects, such as Dante, folklore, or Harvard University sections; and (3) in special collections named after the original owners or donors, such as the Fearing and the Harry E. Widener collections.

Usually, the early manuscripts are cataloged fully. Classification is likely to be less rigid for manuscripts than for books, and manuscripts are apparently most serviceable when they are arranged in chronological sequences or follow some system which fits the local situation. The notation used for marking manuscripts should be fairly simple, since the purpose of cataloging is to facilitate locating manuscripts and returning them to their proper places.

If the manuscript collection is large enough to warrant the employment of a full-time librarian, it should be situated in a separate room. Since manuscripts rarely circulate, it is necessary to provide reading facilities for users.

Preservation.-Rare, irreplaceable, and fragile manuscript materials require special care if they are to be preserved and still be made accessible to scholars. It is necessary to protect them not only against abuse by patrons but from such injurious agents as light, dust, acidic gases, varying temperatures, relative humidity, and insect pests. ${ }^{33}$ Photostatic copies or microfilms of manuscripts should be used if entire classes are assigned to examine them or if a faculty member or research worker needs them for prolonged use.

## INCUNABULA

For students of art, printing, and related subjects, incunabula are source materials of the first order. Yet, relatively speaking, American university libraries have small collections of incunabula. ${ }^{34}$ It is to be expected, of course, that libraries in Europe should be far richer than American libraries in the number of incunabula held. It is interesting to note, however, that of the 26 libraries in the United States holding 100 or more volumes of incunabula in 1939, II are university libraries. These are: Harvard, 1,860 volumes;

[^211]Brown, 622; University of North Carolina, 489; Yale, 389; Cornell, 322, Michigan, 287; Columbia, 280; Princeton, 206; University of Pennsylvania, 175; University of Chicago, 168; and University of Virginia, 100 or more. ${ }^{35}$

Except for the major university libraries which have endowed funds for the purchase of incunabula, most libraries obtain such materials through the benefactions of collectors or donors. Incunabula are useful in a variety of ways to scholars, and their administration presents comparatively few problems other than those of caring for their use and protecting their contents and bindings.

## MAPS

The use of maps for research purposes has become increasingly important in recent years. This use has been made not only of purely geographical maps-although these have changed so rapidly that new maps are being made each day-but of maps dealing with military, geological, meteorological, commercial, physical, political, social, historical, agricultural, and numerous other subjects. Although used constantly by students, faculty members, and librarians for quick reference purposes, maps are also used extensively for gathering or presenting data in theses and dissertations by students, and in special reports and studies by faculty members.

Like manuscripts, collections of maps in university libraries require special handling if they are to be made readily accessible and usable. Brown ${ }^{36}$ has pointed out that in most institutions maps have been treated as secondary, rather than as primary, materials. As a result, they have been unevenly collected and poorly administered. In addition to keeping the university map collection active and modern, the librarian should be concerned with problems of care, involving storage and equipment, and with problems of description, involving cataloging and classification.

Acquisition of maps.-How far the university library should go in the establishment of map collections depends, of course, upon the

[^212]amount of use the materials will have in the instructional and research programs of the institution. Departments in the University of Chicago, for example, have used maps constantly. As a result of the extensive use, a separate map library was started in 1929. Located on the first floor of Rosenwald Hall, the library has cases sufficient to house 100,000 pieces. A special curator is in charge of the collection. The map library was built up by a purchase of 10,000 maps from the John Crerar Library and by the transfer of smaller map collections from the geography and geology departments. Other items have been secured regularly through purchase, gift, exchange, and deposit. By 1940 the collection had reached 107,613 items (Table 26).

TABLE 26*
Size of Map Collections in 12 University Libraries

| Libraries | No. of Maps | Libraries | No. of Maps |
| :---: | :---: | :---: | :---: |
| Chicago | .107,613 | Illinois. | 3,982 |
| Michigan | 15,62I | Princeton | 3,633 |
| California | 19,073 | Pennsylvania | 3,577 |
| Syracuse. | 7,036 | Texas..... | 2,281 |
| Virginia. | .7,000 | Kentucky . | 1,471 |
| Oregon State | 4,464 | Arizona. | 1,000 |

* Data from 1940 reports to the American Library Association. It is more than likely that a number of libraries, not reporting data, have larger collections than some listed here.

Espenshade ${ }^{37}$ has indicated that librarians should establish a policy concerning their map collection. For example, the plan should consider the area to be covered, the types of maps to be collected, and the time period to be covered. Starting from scratch, it is difficult for some institutions to acquire copies of old maps except through prints and microfilm and color photography. In many institutions the older maps probably will not be essential. The Advisory Committee of the Map Library of the University of Chicago proposed the following policy in building up its map collections: (1) to get all basic topographic maps on the scale of i mile to the inch, involving maps of North America, Europe, Asia, and Africa; (2) to secure about 2,000 general topographic maps on a scale of 16 miles to the inch; (3) to build up a substantial collection of special maps, depending upon departmental needs; (4) to secure a comprehensive collection of Chicago maps, including maps of city plans, boundaries, railroads, power lines, roads, etc.; and (5) to increase the atlas collection from 300 to about 1,500 items. This is a program for a large-scale map collection, but it suggests the aspects of a unified plan.

[^213]- The sources for maps, other than the companies which specialize in producing them, are scientific societies and institutes and governmental agencies. Official agencies are likely to treat maps as serial publications, and hence they have the semblance of government documents. Thiele's Official Map Publications, ${ }^{38}$ issued in 1938, is concerned with maps prepared by governmental agencies. Actual research or studies of maps of localities have been few; Karpinski's story of the maps of Michigan ${ }^{39}$ and De Witt's description of the printed maps of Alameda County, California, and its larger cities ${ }^{40}$ are examples.

Storage and equipment.-Few university libraries have large enough map collections to warrant the installation of separate map libraries. Map rooms, however, are found in the major university buildings. Since maps come in such a variety of sizes and shapes, ordinary housing facilities used for books are inadequate. Most curators of maps have reached the conclusion that the most satisfactory method of storing maps is to lay them flat in trays or shallow drawers of about $2 \frac{1}{2}$ inches in depth. Generally, the maps are filed by regions. For some types of maps, subject arrangements are followed. In addition to the equipment for storing maps, provisions should also be made to facilitate their use by the arrangement of tables where students and research workers can consult, draft, and trace them. Facilities for the reproduction of materials might also be provided. Foreign-language and special-subject dictionaries are useful to individuals examining maps. Adequate working space for the curator and his assistants should be provided. In an institution which has a bindery of its own, mounting of maps can be done away from the map room.

Cataloging and classifying should also be done in the central catalog department of the university library. Boggs and Lewis, of the Library of the Department of State, have set down the following objectives in classifying and cataloging maps.

[^214]1. Classification: (a) to provide for each map a definite position in the map files in relation to every other map; and (b) to bring together in the files, as closely as possible, those maps which consultants will most frequently have occasion to use in association with one another.
2. Cataloging: (a) to record that information which is pertinent, including that information which is peculiar to maps (e.g., scale and map projection), and (b) to make map catalog cards as nearly uniform as possible with printed Library of Congress book catalogs-in size, order of information, and typographical appearance.
3. Subject cataloging: (a) to develop a system or body of headings relating to both the subject matters and the areas covered by the card, and (b) to make them similar to headings already used in library card catalogs of books and periodicals. ${ }^{4}$

For a clear discussion of further possibilities in the cataloging and classification of maps the reader is referred to Brown's work, cited earlier. A system which embodies the logical principles set down by Boggs and Lewis should facilitate the location of maps by users.

## MUSIC

Music collections in university libraries range from a few to several hundred thousand items. Libraries in universities having departments or schools of music are generally required to assemble and handle relatively large collections of music materials. These take various forms, such as orchestral scores, original manuscript scores, ballad operas, piano and vocal scores, choral cantatas, sheet music, song music, liturgies, oratorios, folk songs, and folk dances. Such works, in addition to national series or sets of complete works of American and foreign composers, are necessary for serious study and research in musicology.

Many of the larger collections in university libraries have been built up through the generosity of donors, usually alumni, faculty members, or friends. The rich music collections of Harvard-the sheet-music collection alone contains over 50,000 pieces-have been built up largely through gifts. Smaller collections have been built up similarly at Princeton, Chicago, Texas, Ohio State, Oregon, Yale, and Rochester. In a few instances, such as at Harvard and Rochester, special endowment funds have been provided for the specific purchase of materials of music. Several institutions with active music schools, however, are required to allot a portion of their budgets for the purchase of music materials. The interest not only of the music

[^215]faculty but of the members of the other departments of the university is essential if an effective collection is to be gathered. For example, at the University of Pennsylvania, the interest of the University Museum and the faculty of the department of anthropology has fostered the development of an unusual and large collection of primitive music and music of ancient civilizations-both extremely useful in the study of musical forms and culture of undeveloped and early peoples.

The methods of classifying, cataloging, and handling musical materials have been fairly well standardized, although variations occur from library to library because of local conditions. Large music rooms, such as the one in the new University of Colorado building, which combines the functions of storage and of providing a place for musical events, are not often found in university libraries. Usually, materials of music are located in the departments or schools of music. At Rochester the Sibley Music Library has a building of its own to house a collection of approximately 40,000 items, including collections of instrumental compositions, vocal scores, orchestral scores, musical history, biography, and materials relating to the theater and the dance. Effective service to users apparently calls for a close proximity of the music collections to the various music reference tools, such as dictionaries, encyclopedias, and biographies of musicians.

## FUGITIVE MATERIALS

Into most university libraries come items which do not fall within those categories which have been described in the preceding sections. These items, often referred to as "fugitive materials," because they are not easy to acquire and because they present unusual problems of care, organization, and administration, may be roughly divided into four groups: (1) printed items in unusual form, (2) archival and nearprint materials, (3) nonprinted materials, and (4) museum pieces.

## PRINTED MATERIALS IN UNUSUAL FORM

Most larger libraries and many smaller libraries have collected printed materials which do not conform to the shape of the common book or periodical. The newspaper and the map, of course, have characteristics common to fugitive materials; yet they differ in other aspects which are peculiar to such items. Generally included in the category of "fugitive materials" are such holdings as broadsides, charts, clippings, dodgers, folders, leaflets, music, pamphlets, play-
bills, posters, reprints, tracts, and various reports. Since these materials are frequently collected by individuals, or are released through irregular channels, or are published by new agencies not generally known, or are produced through new techniques, they are likely to be overlooked by the librarian or faculty member. ${ }^{42}$ Even if they are acquired by the library, they are so often treated as ephemeral material or pushed aside in the regular processing routines that they do not receive the use they frequently warrant. The important place of all these types of library materials in instruction and research programs in universities has been recognized, and those institutions which have made a practice of collecting such items are generally prepared to offer students and faculty members primary materials of an unrivaled nature.

Broadsides.-Relatively few libraries have large collections of broadsides. The Harvard collection of early American broadsides is one of the best known in the United States. Libraries of historical and antiquarian societies have made a specialty of collecting these items, many of which, such as The Freemen's Oath, have become documents of significant historical value. In modern times, governments, political organizations, and labor unions have used the broadside technique to advance their programs. It is, of course, difficult to prophesy the value of such items for future research purposes. The Bibliographical Planning Committee of Philadelphia has set up a War Documentation Center to collect systematically and record all materials of the second World War, including broadsides. Local and state library groups have also developed programs of preserving materials relating to the war.

Charts.-Printed charts of unusual size present the librarian with problems of organization. Charts of business, industrial, governmental, and educational organizations frequently are useful in research. More often than not, such materials are acquired and stored in departmental libraries, since they frequently serve specific purposes.

Brochures, dodgers, folders, and leaflets.-The enormous flood of small printed items, issued in the forms of dodgers, folders, and leaflets, not only presents problems of care and organization but places a responsibility upon the librarian to select materials which are of permanent value. Ephemeral materials falling into these categories, of

[^216]course, are kept on file in departmental libraries for current uie. Such materials, unless they are of an unusual nature, are seldom cataloged. These materials, like broadsides, are often propaganda. They should not be discarded for this reason, however, since they may be items which can in the future serve students interested in social and historical research. Large university libraries may contain a million or more of these items, stored in vertical files and usually organized by subject. In some instances, they are bound into volumes. The needs of research are so varied that virtually all such materials may at some time be put to some special use.

Clippings.-Maintained by the reference department and departmental libraries, clipping files often yield information that is unavailable elsewhere. Material in general clipping files has been found to be particularly useful to undergraduate students who are preparing papers for their course work. Very often such material represents the most recent information on certain subjects. Special clipping files, such as those relating to a specific locality, person, or subject, generally require systematic scanning of publications to insure completeness. Journalism, art, business, and education departmental libraries have placed considerable value upon such files. In the journalism library these files are primary tools for study and research purposes.

The sources for material for clipping files are duplicate newspapers, often ordered for clipping purposes, duplicate periodicals, and, to a lesser extent, discarded bulletins, pamphlets, and books. Clippings are often gathered into a single system of vertical files with other small fugitive materials, such as folders, leaflets, preprints, reprints, and pamphlets.

In some of the larger clipping collections, elaborate systems of accessioning and processing are maintained. Generally, however, such material is not accessioned, cataloged, or classified but, rather, is assembled in folders and grouped alphabetically by subjects. If cards are placed in the public catalog, it has been found effective to adopt the same system of subject headings used for books.

Pamphlets.-Pamphlets, which have been defined in various ways, have long been a problem to university librarians, from the point of view of both acquisition and administration. They present the further difficulty of location because they originate in so many different places. Many pamphlets, of course, are not worth obtaining; yet a large amount of worth-while material, even reports of research studies, has appeared in pamphlet form. Pamphlets issued by the
standard book publishers, societies, and educational institutions are commonly secured through the ordinary book channels. Many libraries have their gift and exchange divisions check such publications as the Bulletin of the Public Affairs Information Service, the Vertical File Service Catalog, and Publishers' Weekly for material of this character. Many pamphlets are distributed gratis by authors and publishers. No bibliography of American and foreign publications is yet available which, if systematically checked, would enable a library to secure the most important pamphlets issued.

The handling of pamphlets in university libraries has taken various forms: ( 1 ) cataloging and classifying as separate items-practices which are frequently too expensive for many libraries; (2) binding pamphlets on similar subjects together in volumes and cataloging and classifying them under broad subject headings; (3) placing in vertical files under broad subject headings, along with leaflets, dodgers, clippings, brochures, and other small items; and (4) placing on the shelves in pamphlet boxes arranged by broad subject groupings and subarranged alphabetically by author. Any one of these practices, economically administered, which permits rapid location and accessibility is probably effective for the particular library. Many libraries, however, have permitted their pamphlet collections to be buried in stacks without making adequate records for finding them when needed.

Posters.-Few university libraries have made a practice of collecting posters. In a number of institutions such materials have been acquired as gifts from collectors. The war-poster collection of the Hoover War Library, Stanford University, is probably the largest in the country. Other university libraries, such as those of Chicago, Columbia, Illinois, and Minnesota, have representative poster collections. The potential use of such materials in sociological, psychological, and historical studies has been evident to some librarians, who systematically collect them when they are available. Because posters are scarce, co-operative enterprises in collecting them seem desirable. Like other materials not in book form, posters require special handling and housing if they are to be preserved and made easily accessible. Generally, flat cases, similar to those used for housing maps, are employed.

Preprints and reprints.-Sections of books and articles in periodicals which have been preprinted or reprinted accumulate rapidly in university libraries. Only on a few occasions is it necessary for the acquisitions department to write directly for these items, as the au-
thors usually distribute them without cost. Generally, reprints are not retained if the libraries subscribe to the original titles in which they appear. In some cases, however, it may be highly desirable to seek reprints. This is especially true when reprints represent dissertations or systematic studies which have been published in periodicals which are not widely distributed. Frequently, such reprints are used for exchange purposes by university libraries.

Systematic procedures for caring for reprints are seldom worked out in libraries. For the most part, reprints are treated as pamphlet material and placed in vertical files. A rather common procedure of university libraries is to bind, catalog, and classify reprints which cover subjects which are likely to be used heavily, particularly if the library does not subscribe for the publications in which the originals appeared.

One type of reprint frequently collected by some university libraries is that of publications which form portions of university local collections. Systematic collecting of such items is usually necessary if complete coverage is sought.

## ARCHIVAL, UNOFFICIAL MANUSCRIPT, AND NEAR-PRINT MATERIALS ${ }^{43}$

Interest in the United States in the preservation of official records or archives of federal, state, and local governments has only recently been canalized into effective action. The activity of the National Archives has been an important factor in stimulating and guiding this movement. Recently state university libraries have played an important part in the systematic collecting of unofficial private materials, sometimes in co-operation with state libraries and libraries of state historical societies.

An excellent example of the thoroughness with which a collection of unofficial manuscript materials may be built may be cited in the case of the University of Virginia Library. Here, under the direction of the consultant in history and archives, a systematic program for collecting Virginiana and related materials for the library has been in progress for over a decade. This is not a program of writing for free material or of hopeful waiting, but rather one which has required initiative and personal contacts. "Any historical agency which depends solely upon correspondence and chance offers of manuscripts and imprints," wrote Lester Cappon, "has neglected

[^217]its greatest opportunity by failing to hunt for the buried treasure."'44
The program of the University of Virginia Library has resulted in assembling an extensive collection of unofficial private manuscript material. Original records assembled include manuscripts, letters, tax books, council minutes, war records, church papers, telegraphic dispatches, personal account books, plantation records, family histories, business and industrial records, medical records, weather observations, and personal diaries and travelogues. Biographers, historians, theologians, economists, sociologists, and medical researchers, among others, have found such source materials of inestimable value in preparing scholarly works.

The question of how far the librarian should go in collecting such materials naturally arises. The official records of a state, for example, as in Illinois, should presumably be located at the state capital under the direction of the state archivist. This need not be the case for unofficial manuscript materials. For example, the University of Virginia recently acquired the complete records of the Low Moor Iron Company, near Clifton Forge, Allegheny County, Virginia. This accumulation of records, covering the years 1873 to about 1930, consisted of 1,065 volumes and many unbound items in file boxes, weighing altogether approximately 12 tons. ${ }^{45}$ In 1942 the library of the Graduate School of Business, Stanford University, received the major portion of the account books, minutes books, and correspondence of the Pacific Improvement Company and its subsidiaries, covering the years from 1868 to 1925. The collection consists of 279 ledgers, journals, and minutes books, 42 transfer cases of correspondence, and 150 drawers of vouchers. ${ }^{46}$

It is no easy task to set up criteria for collecting archives and unofficial manuscript materials. Suggestive criteria include the following: (1) the materials should relate to a well-defined geographical or cultural area; (2) they should reflect the social, economic, political, scientific, and spiritual interests of the region; (3) they should have some relation to the programs of instruction and research of the university; and (4) they should possess an interest for scholars and

[^218]authors outside the area. Jenkinson ${ }^{47}$ has stated that the destruction of useful records has happened all too frequently and can be prevented if the necessary selection is made prior to the "record" stage of preservation. Note may be made of Jenkinson's suggestions, which, although colored by his opinion regarding the disastrous effects of wars upon archives, offer some approach to the matter of handling materials for preservation: (1) Sacrifices to urgency and the necessity for speed must be made because it is impossible to examine minutely each archival piece. (2) It is always wise, when possible, to secure the counsel of the owners of the materials on questions of contents and continuity. (3) Faced with mass accumulations, it is best to segregate for examination "likely classes of documents, boxes with suggestive titles, and any distinguishable smaller collections such as those of a commercial concern, public institution, charity, or a body of trustees." (4) Sentiment and aesthetic values are not practical criteria for selecting materials. And (5) certain types of materials, such as vouchers, invoices, cash books, and miscellanea-data which are likely to be included in other records-may be eliminated. ${ }^{48}$ In the case of the Low Moor Iron Company records, for example, a certain amount of loose papers was discarded after a check was made of the company's bookkeeping system. ${ }^{49}$ Obviously, the professional archivist, if he is to build up such collections effectively, must bring to his task an extensive knowledge of racial, political, and economic movements and institutions.

Working in co-operation with the state historical societies and the state libraries, it should be possible for university libraries to orgànize a systematic program for collecting archival materials. North Carolina, Duke, Louisiana State, Kentucky, Georgia, Alabama, West Virginia, Mississippi, and Maryland universities have in recent years devoted considerable attention to the development of policies of gathering manuscript materials necessary for research. State and private university libraries in other parts of the country, such as Washington, Texas, Michigan, and Harvard, are also concerned with maintaining adequate manuscript resources of varying types. It is not easy to delimit the collecting of an institution, even though co-opera-

[^219]tive collecting agreements may exist. Although the state university libraries in North Carolina and Virginia have assumed responsibility for collecting one type of material and the state archival agencies for another, overlapping has occurred. ${ }^{50}$

## NONPRINTED MATERIALS

Since the university library emphasizes research, it is expected that it should direct special attention toward acquiring nonprinted materials which are often rare and even unique. These materials are of three types: (1) graphic, (2) photographic, and (3) auditory.

## a. graphic materials

In the conduct of special studies and investigations, faculty members and graduate students often assemble data which have not yet reached the stage of publication. Data sheets, tabulation sheets, filled-in questionnaires, graphs, drawings, and charts comprise this type of material, which may be consulted by scholars checking on work or seeking fuller explanations of phenomena. Special files, vertical files, and similar equipment are necessary for the satisfactory care of these materials.

## B. PHOTOGRAPHIC MATERIALS

Such nonprinted materials as photographs, pictures, prints, slides, photostats, microfilms, microprints, motion pictures, and newsreels have come to occupy an important place in the resources of the research library. More and more, writers and research workers have come to rely upon them for data concerning literary matters, biographical records, or social or historical conditions.

Photographs, pictures, and prints.-In both science and technology, as a casual examination of scientific and technical journals and books will reveal, photographs, pictures, and prints are being used frequently to convey ideas which are difficult or impossible to portray adequately with words. Collections of pictorial materials, therefore, have been assembled in many of the large university libraries. In 1940 the University of Pennsylvania had a collection of 196,460 photographs. ${ }^{5 x}$ Some libraries have developed special art collections of photographs, pictures, and prints. Like pamphlets, they are often secured at little or no cost to the library. Discarded books, magazines, newspapers, catalogs, and circulars, as well as standard art publica-

[^220]tions, supply materials for the collections. Travel bureaus, publishing houses, governmental bureaus, chambers of commerce, tourist agencies, educational institutions, and industrial and business organizations are also sources which have been tapped by libraries for pictorial materials.

The use of such materials, of course, is not restricted to research. The value of pictorial items for the general reader was early recognized. ${ }^{52}$ Many libraries, both public and academic, have adopted a liberal policy in regard to the use and circulation of the materials. ${ }^{53}$ In order to protect them during use and circulation, however, libraries have had to introduce a careful policy of preparing them for handling. ${ }^{54}$ It is apparent that when a collection reaches the size of -several thousand items, systematic procedures for storing and locating are essential if effective service is to be given.

Microfilms and microprints.-In such institutions as Harvard, Yale, Chicago, Columbia, and Washington (Seattle) definite attempts are being made to fill gaps in collections and to acquire items on desiderata lists through the microphotographic technique. ${ }^{55}$ Probably one of the largest collections of microfilms has been assembled by the University of Chicago Libraries, which had over 3,800 reels in 1942. The films were for books, periodicals, and newspapers. One is impressed by the time period covered by the films, as well as by the range of subjects in this collection. Although fifteenth-, sixteenth-, and seventeeth-century items are included, it is clear that eighteenthand nineteenth-century materials predominate. If the materials are broken down by subject, it is found that literary, historical, and theological items are most prominent, although philosophy, economics, science, philology, psychology, agriculture, political science, sociology, librarianship, and military science are represented. A few examples, selected at random, are as follows: Games at Chess (1474), Timothy Bright's Characteristie (1588), Richard Corbet's Certain

[^221]Elegant Poems (1647), John Hall's Emblems (1658), Journal de l'assemblée nationale (1791-92), and J. N. Cardoza, Notes on Political Economy (1826). The University of Chicago Libraries have also made extensive use of microphotography in the acquisition and preservation of newspaper files. The examination of a list of films such as that of the University of Chicago Libraries or of the University of Washington Library leaves no doubt as to the variety of materials which may be acquired on film for research purposes. ${ }^{56}$

The possibilities of other means of reproduction of materials have given some librarians reason to pause in applying microphotography. The Readex microprint, which is distinctly an edition process, is being carefully watched by university librarians for its applications to their work. This process represents a step between microphotography and offset printing. The method, it may be noted, does not provide copies on demand for continuous reproduction, whereas microphotography does. It seems fairly certain that large projects of reproduction will increasingly use the microphotographic technique. When materials which are otherwise unavailable can be secured through microphotography at a cost which is equivalent to the cost of an ordinary trade book, it merely indicates good business sense on the part of librarians to avail themselves of the technique. ${ }^{57}$

Slides.-As a teaching medium, slides have assumed considerable importance in many institutions. Lecturers and instructors have been able to employ them effectively in their course work in such fields as geology, geography, zoölogy, anatomy, chemistry, biology, medicine, sociology, library science, and music. Slide collections may consist of various types-photographic specimens, sketches on etched glass or lumarith, or typed or ink-written Cellophane squares, made transparent by treatment with diethylphthalate. ${ }^{58}$

Very few libraries actually make slides for their own collections, although the process is relatively simple and inexpensive. More often the slides are either purchased by the library for a teaching department or come into the library through faculty members who have

[^222]either made them or purchased them through departmental funds. In a number of instances, slides are retained as equipment of the instructional departments. With the centralization of visual materials, however, library slide collections are being extensively developed. In 1940 the slide collection at Pennsylvania totaled 34,370; at Illi-: nois, 24,000.

Most slides are $3 \frac{1}{2} \times 4$ inches; but smaller slides, $2 \times 2$ inches, have become popular with the development of the miniature camera. The latter are prepared for filmslides (photographs on films cut into individual frames) placed between cover glasses. These are the types of slides which have been employed effectively in instructing Freshmen in the use of the library at the University of Pennsylvania.

Slides, like films, require projectors for use. Because so many departments of the university are likely to use slides, centralization of work with them is occasionally found in the library. This is particularly true when a special projection room has been set aside in the library building.

Slides are often arranged in specially built files, containing drawers or trays that have individual slots which permit the slides to stand on their narrow ends. Other types of files are not so effective in preserving the slides from breakage. To facilitate the use of slides, broad subject arrangements have been employed. The experience of several libraries indicates that this is a more practical system than a numerical arrangement, particularly since slides are often used in subject groups.

Slides are generally loaned to students and faculty members, just as books and other materials are. Circulation outside the library, however, presents some problems, since few individuals are equipped with home projectors.

Motion pictures and newsreels.-Although the university library may have a photographic department and may have responsibility for making microfilms and prints, it is not ordinarily a center for the storage of motion pictures and newsreels. ${ }^{59}$ Generally, the extension division and the teaching and visual education departments have assumed the task of acquiring and caring for films used in their particular activities. It may be expected, however, that libraries of the future will become the film centers for the entire university.

Already, there are some indications of this movement. At Teachers

[^223]College, Columbia University, the supervisor of the curriculum_reading room is responsible for the storage of film and directs its use. The Washington University Library not only contains a motion-picture projector and screen but also handles the schedule for the use of other university projectors. The Joint University Libraries at Vanderbilt University and the libraries of the University of Chattanooga and Columbia University have made provisions for the storing and projecting of films.

The University of Virginia Library has collected a number of films of historical significance, as well as a group of newsreels concerning the university. Films distributed by the extension division of the university but which have become out of date may well be placed in the library as research material. ${ }^{60}$ Documentary and educational films especially may be useful in research and instruction. Raney has pointed out the role the university library may play as a depository of selected newsreels and motion-picture archives. ${ }^{68}$ The University of Chicago Libraries already have a fairly large collection of mo-tion-picture stills and clippings.
As a film center, the library has the responsibility of providing adequate facilities and service, even though classroom showings may be necessary. Provisions for working space and an expert staff must be made, and housing facilities which insure constancy of humidity and temperature are essential.

## C. AUDITORY MATERIALS

The use of phonal transcriptions in research and instruction has increased greatly in recent years. Such materials have been particularly useful in music, philology, anthropology, and history. With important historical addresses and messages being delivered over the radio, facilities for their reproduction have been extended. University libraries may well take a part in providing sound disks for purposes of research and instruction. As with motion pictures, libraries as a group have given little attention to phonograph records as a type of material which may be used to enrich the educational techniques of academic institutions.

## MUSEUM OBJECTS

Many of the larger universities either possess museums or are affiliated with them. ${ }^{62}$ In a number of institutions, however, the li-

[^224]brary has taken the responsibility of collecting museum objects which may be used for research or instructional purposes. Paintings, statuary, cuneiform tablets, models, and designs are some of the objects which have significance for the study of cultural institutions and social progress. Other materials, such as medals, gavels, scepters, masks, and machines are likely to find their way into university libraries for preservation. Special museum collections require careful attention if they are to be made useful.

## UNIVERSITY ARCHIVAL COLLECTIONS

The university library generally contains a collection of materials concerning the educational and administrative policy of the university, as well as publications by and about administrative officers, faculty members, students, alumni, and others connected with the institution. ${ }^{63}$ Administrative records usually consist of original manuscripts and documents from the various parts of the university. Minutes, papers, correspondence, committee records, and departmental records comprise a major portion of the collection. Another primary division of the material consists of those items which relate to the university's activities. These include histories or descriptions of the institution as a whole or of any of its units, catalogs and registers, photographs and commentaries of student life and undergraduate societies, programs, biographical materials of all kinds, alumni records, student newspapers and magazines, and other publications. In some instances the collections also contain faculty publications and dissertations and theses prepared by students.

If the university librarian is interested in developing such a col-lection-and the experience of a number of institutions has shown that he might well be-concerted efforts with the general acquisitions department of the library may be better than a hit-and-miss program of soliciting items. In most libraries maintaining local collections, circulation of the materials for use outside the buildings is prohibited. If several copies of the publications exist, this rule is often waived.

Associated with the local collection is the list of faculty publications, which is sometimes prepared by the library staff. Examples are lists issued by the libraries of the University of Cincinnati and Colum-

[^225]bia University. If the librarian is charged with this responsibility, he probably should consider the adoption of a uniform system for gathering the data. If a faculty collection is in operation, the librarian may be in a position to gather reprints and copies at the same time he makes requests for information concerning publications for the year. In some cases the librarian has taken the initiative in collecting and publishing lists of faculty publications. Library committees, the registrar, professional fraternities, or other agencies have also taken the responsibility of compiling bibliographies of this type. It is an effective method of interesting the faculty in the activities of the library, in addition to being a distinct contribution to the bibliography of research.

Administration and organization.-Generally, libraries have devised special systems of cataloging and classification for materials which belong to the local university collections. ${ }^{64}$ Although it is difficult to utilize the classification of another library for local history collections which contain abundant manuscript and unique materials, it has been found that the "LD" (Education: Universities, Colleges, Schools) section of the Library of Congress schedules, modified to meet local conditions, might form the basis for almost any college or university library.

## SUMMARY

It is apparent that collecting and organizing special materials in university libraries present important problems to administrators. Past performance in solving these problems has not always been successful. A concise policy of selection, an acquisition program for obtaining materials quickly, and a system of effective arrangement are basic to good service. Rider's proposal ${ }^{65}$ should be considered seriously in connection with the problems these materials create. Microprint may well eliminate many of the problems of binding, cataloging, and storing theses, maps, charts, newspapers, manuscripts, and documents.

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## CHAPTER XII

## THE TEACHING FUNCTION OF THE UNIVERSITY LIBRARY

IN THE preceding chapters those aspects of administration have been considered which are primarily concerned with the operation of the university library. In this chapter it is proposed to consider certain aspects of administration which are intended to promote the effective use of the library by its patrons. Stated differently, it is proposed to consider the administration of the library at a teaching and research, as contrasted with a library-housekeeping, level, in order to enable the library to make its maximum contribution to the university in the attainment of its educational objectives.

The proposal presents a number of difficulties. The first and major obstacle is that there is no generally accepted idea of what is meant by "administering the library at a teaching and research level." A second difficulty is that there is no general agreement among university librarians and administrators that administration at such a level is desirable, although it is generally recognized that many students enter the university who have acquired very little experience in the use of library materials; that the catalogs, reference aids, and resources of the university library are so extensive and complex as to make their use difficult by the uninitiated; and that significant graduate study and research are largely dependent upon knowledge of the literature and source materials in the field of specialization. A third difficulty is that, even if it is recognized as desirable to maintain the library at such a level, funds and means for implementing the proposal in the university program may be lacking, since the carryingout of such a program obviously requires additional staff members with special training not usually possessed by librarians. Furthermore, curriculums and programs of instruction and research have sometimes become so full and so inflexible that there is little opportunity for introducing such innovations. Finally, the university may provide other agencies than the library through which it attempts to achieve some of the desired ends.
The major difficulty noted above may be obviated by defining the
terms "housekeeping level" and "teaching and research levels." By "housekeeping level" is meant the employment of administrative procedures by which a minimum of service is provided for the yarious groups which comprise the university. The ordinary technical routines of ordering, processing, and circulating books are maintained. But a minimum is done by the library staff during Freshman week to familiarize new students with the library. Little attention is paid to educational guidance, remedial reading, or instruction in library use for beginning students. Little effort is made to stimulate student interest in reading. The loan desks are manned in the evening and on Sunday by student-assistants and a minimum of professional staff members. Little or no organized instruction in library use is provided for undergraduate students, and little effort is made by the library to participate in the offering of courses intended to acquaint beginning graduate students in various fields with the bibliographical aids and special source materials in their fields. Reading rooms are not organized on divisional, graduate, or other special bases; and few subject experts, who are also experts in the techniques of librarianship and bibliography, are in charge of special collections.

Administering the library at a teaching and research level means exactly the opposite of this. It is based upon two assumptions: (i) that learning is promoted by means of various methods, including library use as well as the lecture, the discussion group, the laboratory exercise, the field trip, etc.; and (2) that the library may be administered in such a way that it may make a maximum contribution to the learning process. In $1 g 00$ the railroad engine converted only about 15 per cent of the potential energy of coal into train-pulling power. The other 85 per cent went up the smokestack or was lost through radiation or in some other way. Today the modern locomotive engine, as a result of careful studies and experimentation, translates a considerably higher percentage of the potential energy of fuel into actual traction power. The university library spends a considerable part of the total funds of the university. It acquires large collections of books, periodicals, and other materials used by students and scholars. It is housed in a relatively expensive university building with departmental and school libraries in other buildings. All of this equipment and personnel is intended to facilitate instruction and research and many contribute to them effectively, provided they are consciously utilized for this purpose. Administering the library at a teaching and research level involves the recognition
of the idea that the library must play a positive, rather than a merely passive, role in university education. It emphasizes competence and specialization of staff and adequacy of facilities for close co-operation with the faculty and other agencies in achieving the educational goals of the university. It calls for programs of instruction in library use that are not casual or incidental but are so carefully planned and so well-directed that a large proportion of the students and faculty are aided in securing maximum assistance from the library. Such administration necessarily is correspondingly expensive and requires close co-operation with other members of the university. The educational benefits, however, should also be proportionately greater.

In organizing such programs libraries have kept certain well-defined groups in mind. Usually these have included (1) students at the lower and upper college or divisional levels, (2) graduate and professional students, and (3) members of the faculty. They have also organized their services on a functional basis and have directed their efforts to some such ends as the following: (1) the orientation and counseling of the Freshman or immature student concerning the location of library materials and general reference tools; (2) the stimulation of interest of students in reading; (3) the instruction of students, particularly those in the upper divisions, concerning the resources of the library for graduate and professional study; and (4) the assistance of all members of the university who are engaged in advanced study and investigation.

## ORIENTATION AND COUNSELING OF STUDENTS

The orientation and counseling of university students and the administration of tests to determine their reading rate and comprehension are usually placed in the hands of a group of officers and instructors who are specially trained in the handling of students' problems. The relation, however, of these matters to the student's effective use of the library is so direct that the librarian or some member of the library staff may well be informed concerning them and, as the occasion may demand, should be prepared to participate in their conduct. ${ }^{\text { }}$

[^227]Orientation.-A number of librarians have seriously considered the problem of acquainting new students with the functions of the library in education and research. They have endeavored to aid the members of the university community who are not familiar with the library to make effective use of its facilities. The methods employed have usually included: the preparation and distribution of guides or handbooks to the library, the arrangement of library exhibits, the publication of notices and articles concerning library resources or facilities in various university publications, the offering of illustrated lectures concerning the library, and the conduct of tours of the library.

Guides to the library vary from single mimeographed sheets to elaborately printed and illustrated handbooks. ${ }^{2}$ Information concerning rules and regulations, location of rooms, library hours, and services and resources of the library and of neighboring libraries is included in such publications. Such information is supplemented by suggestions concerning the use of the card catalog, the various periodical indexes, encyclopedias, dictionaries, atlases, and other reference works, including titles on such subjects as how to study, how to take notes, and how to prepare bibliographies and manuscripts. Lyle, ${ }^{3}$ writing of college library handbooks, indicated some of the points that should be considered in developing such tools: cover, text, arrangement, style, illustrations, diagrams, and typography. The libraries of Pennsylvania State College and the University of Rochester issue two handbooks each-one for undergraduates, the other for graduate students and faculty members.

In libraries in which materials are decentralized, the use of posters and signs are helpful in orienting the student concerning the facilities available. Not only do such devices directly aid the student, but they reduce the number of questions to be answered by desk attendants concerning comparatively simple matters. Information concerning acquisitions, changes in library policy, the addition of new services, current exhibits, and public readings can usually be supplied through the co-operation of the student newspaper, monthly magazine, alumni bulletin, or other campus publications. ${ }^{4}$ Close relations should

[^228]be maintained with the public-relations office of the university so that press releases on important acquisitions, collections, exhibits, and activities will be distributed to the local newspapers.
Library tours and lectures on library use are frequently provided. If they are to be effective, they should be prepared carefully. Otherwise they are likely to add little to the enlightenment of new students. This is especially true if they are scheduled when new students are being introduced to many other activities and phases of university life during Freshman Week.s Instruction in library use is more effective when it is not submerged in unrelated activities.

The orientation and direction of the student may be further facilitated by providing annotated book lists ${ }^{6}$ relating directly to their studies and by the preparation of displays and exhibits. The judicious use of book jackets and announcements of new books may serve to arouse the interest of students in materials which concern their course work.

Exhibits built around educational and cultural subjects may also prove helpful in developing interest in book use. Each exhibit should have a specific objective. Skilful use of color contrasts, backgrounds, lighting, and equipment should aid considerably in attracting the interests of students and other clientele.

Since close co-operation between the library and the faculty is essential to effective educational effort, it is necessary for the library staff and the faculty members to plan their programs co-operatively. At Brown and Temple universities shelves in the recreational reading rooms have been reserved for books and pamphlets which concern educational, cultural, and vocational interests. Faculty advisers cooperate with the library staff in suggesting titles for the collections. At Brown University, faculty counselors meet with students to discuss individual reading programs.

Readers' advisory services, which have recently been organized in many university libraries, have further contributed to the service rendered students. They have taken various forms, among which may be included assistance in the use of the card catalog, a highly developed consultant or reference service, special services to students engaged in writing papers and theses, and individual consultations. This service has been extended to include the assistance of students

[^229]in the conduct of discussion programs or club meetings, in the development of forums, and in the promotion of interest in cultural reading-through browsing rooms, dormitory libraries, fraternity libraries, bookstores, reading prizes, book exhibits, and public readings.

Vocational counseling.-Special counselors and placement officers are usually charged with the responsibility of aiding students in the important problem of vocational adjustment. The university librarian, however, can assist these officers by providing materials which relate to different professions and occupations. He can give specific advice to students who are interested in librarianship. Guidance shelves, including books on general vocational guidance and specific occupations and displays and exhibits relating to vocations, have often been used effectively in aiding students concerned with the problems of post-university careers.

Other activities.-The relation of the librarian to dramatic associations, language clubs, science clubs, debating clubs, writing clubs, the daily newspaper, and similar organizations on the campus is well established in most university libraries. The possibilities of integrating the work of the library with these activities are considerable and can be promoted by various members of the university library staff. Student committees interested in the development of discipline and self-government among students frequently require library materials in carrying on their activities. They can also be of direct help to the librarian in matters relating to the use of books and the violation of library regulations.

The part which the library plays in acquainting students with books on the methods of study and of taking notes and in inculcating moral and religious ideals among students may be indirect yet significant. The library may co-operate with student groups and religious directors and provide books which concern moral and religious issues. Such a procedure is followed by the library of the University of Texas, which purchases annually a number of books suggested by the Committee on Student Religious Life. The library may likewise maintain contacts with the university organization charged with the care of student health.

## ENCOURAGEMENT OF READING

One function which many university libraries have generally assumed has been the encouragement of reading among students. The
establishment of the reading habit among students is perhaps one of the most worth-while effects of a college education. Since the library possesses many of the materials and facilities for developing the habit, the librarian is in a strategic position to co-operate with the faculty in stimulating reading and in developing reading interests that will serve both practical and recreational purposes in the years after graduation.

The principal devices which librarians have used for this purpose are: (1) special reading courses; (2) browsing rooms; (3) dormitory, fraternity, and sorority libraries; (4) rental collections; and (5) book-stores-each of which will be discussed below. Other devices have included reading prizes, book exhibits, public readings, and the promotion of personal libraries.

Special reading courses.-The responsibility for stimulating student reading has generally been placed upon the faculty. However, when the library supplements this activity by providing special reading courses, students are likely to benefit. This is particularly true if no systematic program of stimulation is carried on by the faculty or if browsing rooms and other facilities for encouraging reading are lacking.

Browsing rooms.-Books included in browsing rooms should be readily available, should have a fresh contemporary interest, should be nontechnical, should not be textbooks or reference books, and should be of interest to various groups of students. Although special rooms for recreational reading are commonly known as "browsing rooms," they are occasionally called "booklovers' rooms" or "reading lounges." Often they are memorials and bear the names of benefactors or of individuals in whose memory they have been established.

In addition to special browsing rooms, libraries have also attempted to provide reading materials for students through student unions. Collections in places where students gather informally may stimulate greater reading, perhaps, than those in elaborate browsing rooms.

Dormitory, fraternity, and sorority libraries.-Through dormitory and residence-hall collections, university librarians have tried to stimulate the reading of students by making materials immediately accessible. Although the materials in these collections are generally duplicates of titles in the general library, the total number of titles contained in them is frequently large. The seven house libraries at Harvard University contain collections which range from 5,000 to

12,000 volumes. Sets of standard authors (fiction and nonfiction), books of current interest, periodicals, and, infrequently, reference books usually comprise the collections of dormitory libraries, Although the three residence-hall libraries at the University of Minnesota are much smaller, their use apparently indicates that close contact with books results in increased reading by students. ${ }^{7}$

The movement to establish dormitory libraries is relatively recent. At the University of Chicago an elaborately furnished library in the Burton Court residence hall has been co-ordinated with the instructional programs by placing in it titles necessary in undergraduate courses. ${ }^{8}$ Few libraries, however, have attempted to include titles required by the curriculum. ${ }^{9}$ While the residence-hall libraries at Harvard and Yale contain materials which are useful to undergraduates in their course work, no definite plan has been formulated to substitute dormitory libraries for reserve book rooms or undergraduate college libraries.

Policies governing the use of dormitory libraries vary from institution to institution. Practically all of them allow the circulation of books in students' rooms. Frequently students charge and discharge books themselves, or a student may be on hand to take care of administrative details.
Rental collections.-The development of rental collections in university libraries, the administration of which is considered in chapter ii, has been closely linked with limited book budgets or efforts of the libraries to provide recreational reading materials at little cost. At California, Washington, Columbia, and other universities the use of such libraries has been of considerable value to students, faculty members, and staff members.

Started as a project of the staff association, the rental collection of the University of Washington Library at Seattle has served as a source of reading matter which the library would otherwise have to provide and has thereby released funds for the purchase of books needed in the instructional and research programs of the library. Faculty groups have co-operated in the patronage of the collection

[^230]and in advertising the service to students. A collection of books assembled by the Faculty Women's Club and a small number of titles in the reserve book room served as a nucleus for the collection. Funds for the extension of the service were supplied by the university administration in 1936.

A portion of the funds was used to provide books selected by a committee of staff members acting in an advisory capacity to the head of the circulation department. The rental fee was fixed at three cents per day. The rental committee, meeting once every two weeks, carefully selected new books, notified the faculty members of their purchases, and advertised the collection to students by book-jacket displays in the library. The returns from the rentals more than paid for the original investment.

The policy of the rental committee in the selection of books is directed at obtaining titles of a fairly high literary standard. The permanent values of the books are also considered. No book is bought simply because there will be a rental demand for it. Since the books are valuable additions to the library and because rental funds are adequate, books are sometimes purchased for which there will be little rental demand. This relieves the strain on other library funds and provides the library with books it might otherwise not be able to buy. From time to time, books are transferred to the main circulation collection.

The lending service of the Columbia University Libraries, started in 1940, is intended to supplement other services already offered. Current books-fiction and nonfiction-are supplied promptly after publication at a low rental fee. On the opening day, January 22, 1940, 115 borrowers registered. The director of libraries makes the following comments concerning the service in his report of 1939-40:

The original book stock was made up of about 400 volumes carefully selected from the publishers' 1939 output. By July 1, the number of volumes had increased to 1,334 , a little more than 54 per cent being non-fiction. . . . . Enough copies of every title have been purchased to keep abreast of the demand, in some cases as many as twenty copies. Special effort has been made to supply books which are too expensive for wide individual ownership, such as $A$ Treasury of Art Masterpieces and Sandburg's Abraham Lincoln: The War Years, published at ten dollars and twenty dollars, respectively.....

On the basis of the first five months of operation it is expected that the Lending Service Department may be wholly self-sustaining. Fees are charged at the rate of four cents per volume, if paid in cash, with a four-day minimum; the purchase of a card for one dollar, good for thirty-four rental days, brings the rate down to less than three cents a day. Books no longer in active demand will be transferred to other departments of the libraries where needed or sold to patrons at bargain prices.
"Books You Want to Read," a list of the titles added in the preceding week, is issued every Monday and distributed to those who request it. ${ }^{10}$

University libraries which maintain rental collections usually restrict their clienteles to the university community. This is to avoid any conflict with tax-paying commercial bookshops. It is desirable, from the point of view of the purposes of libraries, that the commercial bookshops flourish and serve the reading public.

Bookstores.-In his evaluation of American librarianship Munthe ${ }^{\text {rt }}$ refers to the bookstores of northern Europe as "cultural institutions." In America the drug store, the rental library, and the newsstand are among the chief commercial distributors of reading materials. Generally, books found in these agencies are not of such a character as to stimulate intellectual curiosity or to promote the building-up of personal libraries. The titles included in them are usually of mediocre quality and ephemeral value, and they are used primarily for recreational purposes. To meet the needs of its college or university constituency and to serve conveniently both faculty and students are the primary functions of the campus bookstore. Needs dictated by university classes may be expeditiously met when close co-operation of the instructional staff and the bookstore exists. "No privately managed bookstore could be expected, according to accepted business methods, to provide as promptly, accurately, and economically, the books that are necessary for the work of the faculty and students of the university." ${ }^{12}$ As an outlet for the university press, the bookstore is likewise important. The local community is friendly toward the publications of known scholars, and their works should be made readily available. Planographed and mimeographed textbooks and laboratory outlines usually have only a local market, and the university bookstore is the logical distributor.

But the bookstore should be more than a supply depot for students. Studies show that immediate availability of good literature is an important stimulus to reading. Attractive displays of worth-while books can be suggestive, particularly if the books are permitted to be inspected in surroundings conducive to leisurely and comfortable

[^231]reading. A well-arranged bookstore can be a place where scholars, students, and books meet, where discerning literary judgments may be developed, and where ownership of a personal collection is encouraged. ${ }^{13}$

In addition, the bookstore can play an important role in stimulating reading. In a number of instances, prizes have been offered Seniors for the best fundamental collection acquired throughout college years. Stipulations usually prescribe that the collection indicate discriminating judgment, that it contain works of general culture, and that the items included in it have value as a nucleus of a permanent personal library. The prizes frequently take the form of collections of selected books. Literary taste, the book-buying habit, and ownership are thus developed simultaneously.

Equally stimulating is the bookstore that functions as a meeting place of men of letters-a social meeting place where the commercial aspects of bookselling are minimized. The Bull's Head Bookshop of the University of North Carolina has served in this way. Although owned by the university bookstore, it is operated in the library under the direction of the library. Its stock embraces a liberal selection of recent books of educational and recreational value and literary merit which may be read, rented, or purchased. Interesting books of good quality are made available to students in an atmosphere conducive to browsing. Interest in books is also stimulated at frequent intervals through book talks and readings given by faculty members, visiting authors, and others and through informal social activities arranged by the members of the staff and students of the library and library school. ${ }^{4}$

All these activities which foster a love of good books and a desire for ownership are related to the program of the university library. In walking through an American university library Munthe was at once struck by the differences between it and its European counterpart. In the latter, works are more scholarly, or, as Munthe puts it:

The American university library starts at the bottom, on the undergraduate level, and progresses upward, through graduate studies and faculty research, to the heights of pure science and knowledge-while the European starts at the top, and works itself down from the highest scholarly and scientific literature to the level of the student. Books for the European students' daily use occupy a very modest

[^232]place, both in number of volumes (there being no duplicates) and in number of titles. ${ }^{s}$

These two different approaches in the building of a university collection are subject to controversy. If book ownership is fostered by bookstore activities, it should follow that students will need to place less reliance on the library for certain materials. Duplications can thus be decreased; and the funds released can be used for the acquisition of more scholarly works. Furthermore, there are many books of both educational and recreational value which the library cannot supply to readers, as they are not essential for either the instructional or the research ptograms of the university. Such works may be made available to the community through the bookstore. In this way the store complements library activities.

In recent years a number of college and university bookstores, as well as libraries, have incorporated rental libraries in their collections. The first reference rental library in a university bookstore was installed at the University of Chicago bookstore in 1928. ${ }^{16}$ It contains approximately 70,000 volumes, involving about 4,000 titles; and it has contributed significantly to the effectiveness of the "New Plan" which Chicago adopted in 193I. It has made available, at one time, as many as 400 copies of the Russian Primer and 150 copies of Salter's Recovery. Co-operation between the bookstore and the college library is very close. All rental books from the reference section are cataloged both in the college library and in the bookstore. Books needed for the survey courses are supplied in sets of from 3 or 4 volumes to 10 or 12 and are rented for the quarter or by the year. In the case of language courses, the student pays $\$ 1.00$ on withdrawing a title and may turn in the original book and borrow another, required in the same course, as often as he wishes. In three to five years the bookstore pays for the investment. This function of the bookstore is of inestimable value to the library. It not only saves the library money, which it can use in acquiring scholarly works, but it reduces the space which otherwise would be required for a reserve reading room.

## COURSES OF INSTRUCTION

Instruction in the use of libraries through formal courses has long been recognized as an effective means of increasing library use. The

[^233]principal reasons why it is not provided have usually been lack of staff members and lack of opportunity to include additional courses in the curriculum. In general, such instruction, when provided, has been offered at two levels-undergraduate and graduate.

Undergraduate instruction.-Formal courses in the use of the library for which credit is given are offered undergraduates in several institutions. Such courses are usually offered in three forms: (1) complete courses for Freshmen; (2) elective courses for Freshmen or more advanced students; and (3) abridged courses that are offered as a minor part of a course in some subject field. Examples of the three forms are given below. Other combinations or variations are frequently met with, but these may serve as illustrations.

A carefully prepared course in library use is required of all Freshmen at Louisiana State University. An elaborate manual, worked out by one of the instructors, is used in connection with the course. Onehalf of the members of the Freshman class take the course during the first semester; the other half, during the second semester. Three instructors, all on the library staff, conduct the classes. In order to integrate the work given in the course with the actual services of the library, the chief of the readers' advisory service and the browsing room is also one of the instructors. Problems brought up in class may be further clarified by individual consultation with the reader's adviser.

Perhaps one of the oldest courses in library instruction is given at the University of Illinois. "Library $\mathbf{1 2}$," as it is known, is an optional course which is taken by three or four sections of the Freshman class. Members of the library school faculty serve as the instructional staff.
An elective credit course in bibliography, involving the use of the library, is given co-operatively by the librarians of the four divisional reading rooms at the University of Colorado.

Since 1937, members of the library staff at Rutgers University have given courses in library use in conjunction with the English department. The staff members meet all Freshmen for a series of lectures. Twelve hours are spent on various problems concerned with the use of the library. Library tools, bibliographies, reference works, and services are considered. In order to give the course a formal basis, grades are given for the performance of the students in the solution of problems. Similar courses, but not carrying credit, are given Freshmen at Georgetown and Temple universities. At Yale and sev-
eral other institutions problems which involve library use are assigned by teachers of English and history courses. The observations of the librarians in the institutions in which the courses are provided indicate that beneficial results have been obtained, from the point of view of both the students and the library staff. The experience of librarians also shows that formally organized courses, integrated with the instructional program, are more desirable than a loose series of lectures or tours through the library.

Graduate level.-The problem of familiarizing graduate students with the resources of the library and their effective use is dealt with in various ways in most universities. In many instances introductory courses in methods of research and source materials are offered by the different departments. At Chicago such courses have been provided in various departments and professional schools. In history four such courses have been given: "Laboratory Course in Historical Method: Europe"; "Laboratory Course in Historical Method: United States"; "Medieval Historiography and Bibliography"; and "Modern Historiography and Bibliography." In English two courses are offered: "Introduction to Methods of Literary Study" and "Introduction to Research in English Literature: Bibliography and Historical Method." These two courses have involved the use of the Bibliographical Guide to English Studies, ${ }^{17}$ by T. P. Cross, which is now in its eighth revised edition.

Similar instruction is presented in seminar courses at Pittsburgh (English, history, science), at Temple (education, history, literature), at Brown (history, English, biology), at Rutgers (most graduate seminars), at Harvard (history, fine arts, literature, philology, and various other departments in which students prepare for the investigation of special topics), at New York University (medicine, history, English, and various other departments), at Louisiana (chemistry and special talks by librarian in other departments), at Denver (Latin-American studies), at the University of Southern California (talks to all graduate students), and at Pennsylvania (various courses). In many instances the librarian or a member of the library staff talks to graduate students on the various services of the library. In a few cases the librarian or a staff member gives a course that is carefully planned and is required and rewarded with degree credit. At Louisiana, Columbia, Harvard, California, and Princeton the value of providing courses for graduate students has been recognized

[^234]and given adequate expression. At Louisiana a graduate course in chemistry is offered by the chief of the readers' advisory service of the library. A special manual concerned with chemical literature and a list of subject headings prepared by the chemistry librarian provide a substantial basis for the course.

At Columbia the reference librarian, who is a member of the proseminar faculty in English, participates in the instruction of graduate students. Students registered for the English proseminar, "Introduction to Literary Research," attend "Lectures on Methods of Research," which is offered by the reference librarian during the first semester of the school year. A similar course is offered by other members of the proseminar faculty to students registering in the second semester. In the School of Architecture the librarian of the Avery Architectural Library offers courses in "The Literature of Architectural Theory."

The graduate courses at Harvard which pertain to the effective use of the library's resources are found in several of the departments. Examples are: "Special Reading Programs and Research Problems for Advanced Students," given by the department of Germanic philology and linguistics; "Historical Method and Interpretation," offered by the history department; and "Problems and Methods of Comparative Literature," given by the comparative literature department. But other courses are directed at the general problems of bibliographic techniques and book collecting. A member of the English department, for example, offers a course entitled "Bibliography and Methods of Literary Research." The course is intended primarily for first-year graduate students. The librarian has observed that a course of this type should save some graduate students at least'a semester in familiarizing themselves with the library's resources in their particular fields of investigation. Most graduate students in English, as well as graduate students from Radcliffe College, attend this course. In addition to this course, a member of the library staff offers a course, "Bibliography," which is an advanced course for students of bibliographical evidence and is open to specially qualified students. The head of the order department of the Harvard Library also offers a course, primarily for graduate students, in the "Principles and Practice of Archive Administration." Two members of the library staff-the bibliographer and the chief of the rarebooks department-give a course in the "History of the Book."

At the University of California instruction in the use of indexes
and guides to library materials is presented in the course "Library Use and General Bibliography." Special emphasis is placed on the needs of upper-division and graduate students in the social sciences preparing term papers, seminar reports, and theses. Problems in the student's individual subject field are generally studied. Another up-per-division course, "Introduction to Historical Method and Bibliography," is prescribed in the Junior year and restricted to students majoring in history. The use of the library is emphasized. Each student prepares two papers and a bibliography.

Since the general examinations in the English department at Princeton University are designed to test, among other things, the acquaintance of students with scholarly methods of research (in particular, their familiarity with bibliographical technique), graduate students are generally given bibliographical instruction in the English courses they take. In the department of history, all students during their first year of graduate work (unless a similar course has been taken elsewhere) are required to take "Introduction to the Advanced Study of History." The course considers general bibliography, historical bibliographies, the historical journal, serial publications, problems and method in history, and selected topics in historiography. A more general course is offered to all graduate students by the university library bibliog:apher. By arrangement with the departments of art and archeology, classics, economics, English, history, modern languages, philosophy, and politics the bibliographer presents a series of lectures to graduate students during their first year. It is designed to introduce them to the general field of bibliography, and, on certain occasions, to the bibliography of special fields. The students are permitted to consult with the bibliographer during the whole year. More specialized courses are also offered by the bibliographer and the curator of medieval manuscripts. The bibliographer, for example, offers a course in "Latin Paleography and Text Criticism," which is a general course with special reference to Roman authors. The curator of medieval manuscripts, an officer of the library, offers courses in "Diplomatics" and "Medieval Latin Paleography." The first of these courses is a study of scripts and forms of medieval documents and is mainly a practice course in which actual documents located in the university library are examined. The course in paleography is primarily concerned with financial documents of the thirteenth century. Other courses related to the resources of the library are the "History of Illustrations in Medieval Manu-
scripts," offered by the department of art and archeology, and "Greek Papyri," offered in the department of Greek.

Such courses as these indicate the consideration given to the ori entation of graduate students in bibliographical procedures. In some instances contact between the instructor and the university library has been slight. Most of the courses, however, are directly connected with actual library source materials. Perhaps there is no better place for the inculcation among graduate students of the idea that the library is equipped to render research service than in courses of these types. A university librarian who has the confidence of faculty members can arrange-to have graduate courses integrated with the facilities of the library.

A further service which the library may perform for the benefit of the student is to check all bibliographies assigned for course work. The reference or circulation departments may be charged with this responsibility. The benefits to the student from such checking are twofold: (1) bibliographies are likely to be more uniform and hence more easily usable and (2) citations are likely to be more accurate. The benefits to the library are threefold: (1) the reference or bibliography department is given an opportunity to correct errors which, if not caught at the outset, will require checking later when students need materials; (2) the library can note citations for materials which are not in the university library; and (3) the library can secure materials which must be ordered before students call for them.

## INCREASING EFFECTIVE LIBRARY USE

The forms which efforts to increase effective library use may take include: (1) the organization of the library on a functional basis; (2) the staffing of the library with experts; and (3) the provision of extensive bibliographical assistance through union catalogs and bibliographical resources.

Functional organization.-The functional organization of the library referred to here relates to the organization of the facilities of the library for use by members of the university community. Such organization has been carefully developed in the last two decades. As a result, reserve reading rooms have been located and equipped physically according to certain patterns; the public catalog, the main delivery area, the reference and bibliographical apparatus have been organized in keeping with their functional relations to each other; divisional and graduate reading rooms have been placed near related
materials in the stack; and carrels, seminars, and studies have been arranged to provide for the maximum use of materials under the most effective conditions. Departmental collections both within and without the central library have been developed in accordance with this principle. Brown University has recently enlarged and reorganized its library upon a divisional basis, and the new library buildings at the universities of Colorado and Nebraska have been organized completely on this basis. In all three instances considerably greater use of materials has been recorded, and the results of instruction and research are reported to have been considerably improved. In this respect the organization of the university library in the United States has gone somewhat in the direction of the European university library, in which the libraries of the various faculties have been separate. The emphasis in the case of the American development, however, has not been so much upon the separateness of materials as upon their specialization for specific groups, all under the general administration of the central library.

Service through experts and consultants.-Reference has been made earlier in this chapter to the provision of a readers' advisory service in some libraries and to the staffing, at all hours, of various desks with professional staff members. At the library housekeeping level a minimum of this is done. But in a number of universities, service at the teaching level is maintained throughout the entire library, and for the greater part of the time that the library is open. At the University of Florida the reserve reading room, which was, at one time, largely manned by student-assistants under the general direction of the circulation department, has been placed under the special direction of a member of the department who was assigned to co-ordinate the services of the room with the instructional program of the lower division of the university through its reading, writing, and speech laboratory. At Chicago, faculty student-advisers have offices in the special reading room for the general courses in the college, who, in addition to assisting in offering the general courses, in keeping the syllabi of the courses up to date, and in advising the students concerning various aspects of the courses, also advise them concerning their reading. Students are referred by them to the remedial reading clinic of the university laboratory schools when faulty reading methods are discovered, and careful observation of book use in relation to course work is maintained. At Texas a library service coordinator has been appointed to the library staff whose principal
duties are: (1) to co-ordinate the present or potential services of the public service units with the needs of clientele, especially undergraduates; (2) to maintain contact with the faculty, especially those responsible for undergraduate work requiring use of the service units; (3) to solicit faculty advice in recommending new services and improvements in old ones; (4) to give instruction in library usage and to lecture on library use to classes; and (5) to expedite, in any reasonable way, the purchase, cataloging, binding, etc., of books needed for class use. At Colorado a policy has been adopted of staffing all divisional reading rooms with personnel which has combined graduate training in the subject field and basic training in library science. The practice, of course, has long been general in many libraries of staffing special collections in law, medicine, music, art, architecture, and other fields with staff members who are specialists in the fields concerned. But there has frequently not been equal insistence upon a combination of knowledge of library science and knowledge of the subject field.

Two further variations of the idea of providing experts for the assistance of special groups have been furnished by Teachers College of Columbia University and the Library of Congress. At Teachers College the library has assigned three staff members to work directly with students in special fields of education. One advises with students concerning problems relating to library use and materials in the elementary field; a second, concerning the secondaryschool field; and a third, concerning the organization and writing of theses in all fields of education. All three members of the staff are available for consultation with individual students; all are available for participation in lectures in connection with courses in their fields of specialization; and one conducts formal classes and a seminar in the location and organization of materials for Master's and doctoral theses. A special publication, How To Locate Educational Information and Data, has been provided for general use by students in education. ${ }^{18}$

At the Library of Congress two groups of specialists have been engaged in aiding the scholar and in building up the collections of the library. These have been the consultants, who have been available for the assistance of scholars, and, since 1940, the fellows, who have been concerned primarily with the development of the collec-

[^235]tions. Both groups emphasize the importance of expertness in subject matter and knowledge of the bibliographical resources of the library; and, in the case of several of the fellows, training in librarianship has proved very advantageous.

Bibliographical apparatus.-Union catalogs and other forms of bibliographical apparatus have further extended the use of university library resources for scholarly purposes. Interlibrary loans, the publication of various union lists, and the Union Catalog of the Library of Congress have been employed increasingly for this purpose, as well as microphotography. But since the early 1930's the regional depository catalog, based upon the author cards of the Library of Congress and supplemented by cards from other major university and research libraries in the United States and Europe, has come into fairly extensive use. The descriptive survey of resources for research held by individual libraries or groups of libraries, the regional union catalog, and the bibliographical center have likewise been extensively developed. This subject is treated in greater detail in chapter xiii; but it is important to mention it here, since it constitutes additional evidence of the means which university libraries have employed to increase, to the greatest extent possible, the use of library materials by students and scholars. The multiplication of depository catalogs, of union catalogs, and of collections of printed catalogs and bibliographies, for the location and description of materials, and the addition of expert bibliographers and subject specialists to assist in the organization and direction of research have greatly aided in lifting the administration of the university library from a strippeddown, library-housekeeping level to an effective level of teaching and research. This accomplishment, where it has been effected, constitutes one of the most significant developments in American universities in the twentieth century.

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## CHAPTER XIII

## CO-OPERATION AND SPECIALIZATION

AMERICAN university and research librarians have long appreciated the benefits of co-operation. However, opinion within the profession has not, until recently, been strong enough to brush aside institutional isolationism and translate theory into extensive successful practice. But some progress has been attained. Indeed, the development of ways and means to make their vast resources available to scholars and research workers through various co-operative undertakings has been one of the most significant contributions university libraries have made to scholarship in the United States.

These ways and means include: (1) extension of the interlibrary loan service; (2) co-operative and centralized cataloging; (3) multiplication of bibliographies, union lists, and surveys of library holdings; (4) creation of the Union Catalog at the Library of Congress and the establishment of regional and local union catalogs; (5) development of bibliographical centers; (6) development of various techniques of reproducing materials; (7) specialization in collecting and preserving book materials; and (8) provision of co-operative storage libraries. Certain aspects of co-operative buying have been considered in chapter iii.

## EXTENSION OF INTERLIBRARY LOAN SERVICE

Lending of materials by one library to another for the use of a patron has long been a method of library co-operation. Advocated by Green in the first issue of the Library fournal ${ }^{\text { }}$ and by Richardson in $1905,{ }^{2}$ interlibrary lending has been accentuated by the recent development of devices for recording resources and by the provision of low postal rates on books since 1938. The great increase in the amount of research and in the number of graduate students and

[^236]faculty members in universities has likewise added to the practice of interlibrary lending.

Purposes of interlibrary loans.-The major purpose of interlibrary loans is to place every book, manuscript, archive, or other graphic record within the reach of persons who need them. Through union catalogs, union lists, and special bibliographies, materials are becoming more accessible than they ever were before; through interlibrary loans, they are being made available.

Extent of interlibrary lending.-Data from a few typical institutions may make more explicit the development of interlibrary loan service among libraries. At Columbia, for example, the number of

TABLE 27*
Interlibrary Loan Statistics, 1932/33-1938/39
Columbia University Libraries

| Year | No. of Volumes Loaned | No. of Institutions Lending | No. of Volumes Borrowed | No. of Institutions Borrowing |
| :---: | :---: | :---: | :---: | :---: |
| 1932-33. | 1,424 | 191 | 281 | 42 |
| 1933-34. | 1,300 | 216 | 412 | 5 F |
| 1934-35. | 1,006 | 203 | 568 | 47 |
| 1935-36. | I,201 | 209 | 476 | 48 |
| 1936-37. | 1,353 | 185 | 653 | 73 |
| 1937-38. | 1,311 | 220 | 655 | 68 |
| 1938-39. | 1,392 | 247 | 763 | 8I |

- Data from Annual Report of the Director of Libraries, 1932/33-1938/39.
volumes loaned has remained constant since 1932, but there has been a gradual increase in the number of volumes borrowed (Table 27). Volumes loaned and borrowed have steadily increased at Princeton since 1935 (Table 28). It may be observed in both tables that there has been an increasing number of institutions involved in both lending and borrowing. Statistics of interlibrary loans have been kept by the University of Chicago Libraries since 1898. The median ratio of titles borrowed to titles loaned is 32 per cent for the entire period. If only the last ten years are considered, it is 26.5 per cent (Table 29). Situated in a central position in relation to the libraries of the country, the University of Chicago Libraries offer perhaps an atypical illustration of a system which distributes material through interlibrary loan service. It is apparent from the figures in Table 29, however, that Chicago, like other large libraries, is called upon to render a greater service quantitatively than it receives. Columbia and Princeton, for example, have median ratios of volumes borrowed
to volumes loaned of 49 per cent and 50 per. cent, respectively (Tables 27-28). During a thirteen-year period, from 1926-27 to 1938-39, Princeton University Library increased its borrowing of titles 93 per cent; its increase of titles loaned was 205 per cent. The

TABLE 28*
Interlibrary Loan Statistics, 1935/36-1939/40
Princeton University Library

| Year | No. of Volumes Loaned | No. of Institutions Lending | No. of Volumes Borrowed | No. of Institutions Borrowing |
| :---: | :---: | :---: | :---: | :---: |
| 1935-36. | 1, 268 | 187 | 456 | 65 |
| 1936-37. | 1,278 | 171 | 642 | 74 |
| 1937-38. | 1,34I | , 168 | 758 | 78 |
| 1938-39. | 1,485 | 221 | 738 | 88 |
| 1939-40. | 1,987 | 234 | 1,051 | 117 |

*Data from Annual Report of the Librarian, 1935/36-r939/40.
TABLE 29
Interlibrary Loan Statistics, 1930/3i-1939/40 University of Chicago Libraries
$\left.\begin{array}{l|c|c|c}\hline \hline \text { Year } & & \begin{array}{c}\text { No. of } \\ \text { Titles } \\ \text { Loaned }\end{array} & \begin{array}{c}\text { No. of } \\ \text { Titles } \\ \text { Borrowed }\end{array} \\ \hline 1930-31 \ldots \ldots \ldots \ldots \ldots & \begin{array}{c}\text { Ratio of } \\ \text { Titles } \\ \text { Borrowed } \\ \text { to Titles } \\ \text { Loaned }\end{array} \\ \text { (Per Cent) }\end{array}\right\}$
number of institutions loaned to increased 274 per cent, while the number of institutions borrowed from increased 73 per cent.

Regional distribution.-Presumably, interlibrary lending is conditioned, at least in part, by the scope of the collections, by the locations of libraries, and by the services they render. It should be apparent that borrowing and lending should be so organized that the nearest libraries are always used when practicable. This, of course,
cannot always be done. The boundaries of interlibrary loans extend beyond local, state, or even regional lines. Concentrations of rich book collections in the Northeast, for example, make libraries in that location a magnet for loans. The Library of Congress, too, as possessor of the largest collections in the country and as a willing lender of materials, generally serves the whole country.

The geographical distribution of books borrowed and loaned by the University of Chicago Libraries in 1938 - 39 is given in Table 30. The Midwest and the Northeast account for 93 per cent of the books needed for Chicago students and faculty and for others. The libraries

TABLE $30^{*}$
Distribution by Region of Titles Borrowed and Loaned by the University of Chicago Libraries, 1938-39

| Region $\dagger$ | Volunes Borrowed |  | Voltores Lonned |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. of Vols. | Percentage | No. of Vols. | Percentage |
| Northeast. | 451 | 48.5 | 780 | 19.7 |
| Midwest. | 414 | 44.5 | 2,564 | 64.7 |
| Far West. | 31 | 3.5 | 367 | 9.3 |
| Southeast. | 20 | 2.0 | 64 | 1.7 |
| Southwest. | 9 | 1.0 | 89 | 2.3 |
| Northwest | 4 | 0.5 | 88 | 2.3 |
| Total. | 929 | 100.0 | 3,952 | 100.0 |

* Data from Miss Katherine Hall, reference librarian, University of Chicago Libraries. $\dagger$ Follows regions outlined by Howard W. Odum, Southern Regions of the United States (Chapel Hill: University of North Carolina Press, 1936).
lending most materials to the University of Chicago were the Library of Congress, University of Illinois, John Crerar, Harvard University, and University of Michigan. The pattern of the regional distribution of the loans made by the University of Chicago Libraries for 1938-39 differs somewhat from that of the borrowings. These data show that near-by libraries furnish a large part of the materials needed for research and other purposes. Approximately 65 per cent of the material came from Midwest libraries. They also indicate that, primarily, centers with large and rich collections are called upon for materials; the same centers also seek more books from large libraries than from small libraries. Libraries to which most books were loaned include: Northwestern University, the University of Illinois, the University of California, the State University of Iowa, the University of Colorado, and Louisiana State University.

Libraries borrowed from.-The interlibrary loans made by a university library are not limited to libraries of its own type. ${ }^{3}$ For example, books are borrowed from, as well as loaned to, college libraries, public libraries, and libraries of industrial organizations, schools, institutions of various types, business houses, and governmental units. With the development of union catalogs it is likely that small special and semiprivate libraries will be called upon to lend more materials than they do at present. Some of these libraries, not equipped for extensive lending, have in the past been unwilling to participate in a liberal interlibrary program.

Materials.-Any satisfactory system of interlibrary loans involves a strict definition of the types of materials that are loanable. For example, loans of the following materials are generally not made (except, perhaps, in the case of state university libraries which engage in extension programs): books which are easily available on the market at reasonable prices, reference works, books which are needed for instructional work, rare books, periodicals (particularly if they are current), fragile materials, manuscripts (except theses), local history materials, single copies of theses, and archival materials. Libraries which permit the borrowing of rare materials generally require high insurance during transportation. Boyer, ${ }^{4}$ in his study of interlibrary loans, found that actually there had been little loss of material.

Clientele.-The functions of aiding research and meeting the book needs of the average reader suggest that the clientele of interlibrary loan service may comprise the entire student body, the faculty members and research members of the staff, administrative officers, library staff members, and other individuals or groups associated with the university.

Many libraries secure books for undergraduate students without considering whether or not the need is genuine. More recently, some reference librarians have instituted the procedure of checking with instructors to make certain that the need for borrowing specific materials is genuine. In libraries having large and varied collections it has been found that undergraduate students frequently may be satisfied with substitute titles. However, when the educational program requires a carefully prepared Senior thesis or paper for gradua-

[^237]tion, a liberal policy of borrowing for undergraduate students is usually maintained.

The amount of research work carried on in an institution determines, to a certain degree, the amount of borrowing that will be necessary. Candidates for the Master's and doctoral degrees and research assistants and associates connected with the university, both as students and as assistants to faculty members, comprise a group for which interlibrary loan service is theoretically organized.

Faculty members in institutions in which extensive programs of research are carried on often comprise the largest number of users of interlibrary loan service. This is clearly evident from the statistics of the University of Minnesota Library for the academic year 1939-40, reproduced here in Table 3r.

TABLE 31*
Individuals Borrowing materials through Interlibrary Loan, University of Minnesota Library, 1939-40
Individuals No. of Loans Individuals . No. of Loans
Professors....................... 22 Staff members....................... 14
Associate professors................. 8 Miscellaneous............................... 3

Assistant professors. . . . . . . . . . . . . . . 14
Instructors. . . . . . . . . . . . . . . . . . . . . . . 13
Ph.D. candidates .................... 21
"University of Minnesota Library, "Report . . . . to the President for the Year Ending June 30, 1940" (Minneapolis, 1940), p. 277 (derigraphed).

In an analysis of interlibrary loans at the John Crerar Library in Chicago it was found that scholars from the University of Chicago, Northwestern University, and the University of Illinois Medical School were among the heavy users. ${ }^{5}$ College and university libraries as a group led other types of institutions in seeking interloans from the Crerar Library during the period January-June, 1937, asking for 104 out of a total of 251 requests. ${ }^{6}$

In his study of the use of union catalogs Stone ${ }^{7}$ found that, of 2,069 items of service requested of the Bibliographical Center at Denver, 1,689 were interested in information for academic purposes (graduate, 28.23 per cent; undergraduate, 7.10 per cent; and teachers and

[^238]${ }^{6}$ Ibid., p. 69.
'J. P. Stone, "Regional Union Catalogs: A Study of Services Actual and Potential," in' R. B. Downs (ed.), Union Catalogs in the United States (Chicago: American Library Association, 1942), pp. 176-86.
academic workers, 46.30 per cent); II 3 , or 5.46 per cent, were commercial laboratory workers, field researchers, and businessmen; 60, or 2.9 per cent, were governmental personnel; and 207, or io per cent, were miscellaneous individuals. Stone further notes the breakdown, by purpose, of 1,038 requests for information of the Bibliographical Center. These were as follows: ${ }^{8}$

|  | Percentage |
| :---: | :---: |
| Research on theses | 22.16 |
| Use in classroom by teachers and students. | 21.29 |
| Use in work or business by governmental personnel and others | 13.97 |
| Research (except theses). . . . . . . . . . . . . . . . . . . . . . . . | 13.20 |
| Authorship of books (except theses) | 7.71 |
| Adult study. | 5.88 |
| Miscellaneous uses | 5.20 |
| Use in writing class papers by graduates and undergraduates | 4.62 |
| Hobby interests. | 2.50 |
| Author of magazine articles. | 1.06 |
| Cultural use. | 0.96 |
| Recreational reading | 0.87 |
| Preparation of speeches. | 0. 58 |
| Total. | 100.00 |

It is not easy to determine for what use a library requests a book. Some libraries have form letters which include the name and rank of the individual (and, more rarely, the purpose of the loan) for whom the books are requested. Direct lending to individuals, of course, falls outside the strict pale of interlibrary lending. Such lending is generally placed in the category of extension work, which is discussed elsewhere in this volume. Where extension systems do not exist, individuals requesting loans are instructed to file their requests through their institutional or public library. Experience has demonstrated that this is the safest way of serving individuals without loss to the lending libraries. Immediate control over the use of the book is gained by this procedure.

Organization.-In most large libraries the actual work of interlibrary lending is centralized in the reference department because the making of a loan generally requires checking by the borrowing library in order to make sure that the entry, title, and other items are bibliographically correct. The co-operation of the borrowing library in this respect is very important. This is particularly true in tracing obscure items. In some instances the work is placed in the circulation department or, more rarely, in the order department. Definite regulations govern such matters as the length of loans, the

[^239]amount of freedom to be given in the use of borrowed materials, renewals, transportation charges and other fees, and care of materials. ${ }^{9}$

## PROBLEMS INVOLVED

The maintenance of interlibrary loan service involving the lending and borrowing of several thousand volumes annually is inevitably attended with certain difficulties. These, in the order of their frequency, relate to cost, limitation of local service, inequalities between large and small libraries, "parasitism," and lack of co-operation.
Cost of service.-In his report of 1939-40 C. C. Williamson stated that loan by mail, at Columbia, of 1,593 volumes to other libraries entailed an average cost per volume of $\$ 2.00$, exclusive of transportation costs, which were borne by the borrowing libraries. He estimated the corresponding cost of lending the same number of volumes over the loan desks at Columbia as between 10 and 12 cents. The figure for lending by mail is comparatively high; yet other libraries have indicated that similar expense is necessary for lending. ${ }^{10}$

In view of the cost involved, it is not surprising that some libraries have instituted service charges. Stanford began charging fees in September, 1932, while the University of California introduced service charges in October, 1933. Van Patten, writing of the Stanford fees, remarked that the situation on the Pacific Coast was not comparable to that in the East. The relatively large number of eastern libraries with rich collections has made it possible to distribute the

[^240]burden of interlibrary lending. California and Stanford, however, have carried the major burden of lending on the Pacific Coast. Both libraries charge a fee of 50 cents for lending a single volume and 25 cents for any additional volumes in one shipment. ${ }^{11}$ The University of Nebraska charges a fee of $\$ 1.00$, including transportation, to anyone requesting the library to borrow for him, and adds any fees charged by the lending library. Nebraska also charges a lending fee to libraries which charge fees for books borrowed from them. ${ }^{12}$ Other libraries, which generally do not charge fees for borrowing, require compensation from lending libraries that charge for their services.

Practices among libraries regarding the payment of fees and transportation charges vary. The prevailing tendency has been to have the individual borrower meet all charges. Exceptions are most often made in the case of faculty members, who may be required to pay a portion of the charges. There seems to be no question that in the larger libraries, even in instances where charges are made, the fees do not pay for the entire service.

Loss of service to a library's patrons.-One of the objections to interlibrary loans is the occasional resulting limitation of service to local patrons. This objection is perhaps not so serious as some librarians believe. Occasionally, however-particularly when the books are sent a considerable distance-students and faculty members in an institution may be hindered in their work. This is most likely to occur in the case of unpublished theses. A few libraries, therefore, refuse to lend theses and other much-used materials during the academic year.

Inequalities between large and small libraries.-Obviously, the large library is at a disadvantage, so far as reciprocity in lending is concerned. This difficulty, however, may be remedied in the future through the services of union catalogs as locating devices. ${ }^{13}$ Yet it is unlikely that small libraries will ever be able to lend as extensively as they borrow. Large libraries will need to consider this problem from a liberal point of view-when important service is rendered to research workers wherever they may be.

[^241]Parasitism in borrowing on the part of small institutions.-The problem of lending, however, assumes a different character when an academic institution offers courses for which it has inadequate library resources with the expectation that it will use materials in near-by libraries through interlibrary loan. ${ }^{14}$ Williamson, ${ }^{15}$ in the re-. port cited earlier, raised the point of the extent to which a library should go in "lending books to libraries that cannot and do not expect to give any similar service in return." It has also been suggested that a library is under no obligation to have its books worn out by other institutions without due recompense. Although it is admitted that some few libraries take undue advantage of the interlibrary loan service, the evidence indicates that most requests made by libraries are of a legitimate nature.
'Lack of co-operation on the part of the borrowing library.-Another problem which frequently arises is that of lack of thoughtful cooperation on the part of the borrowing library. This is a problem that both the borrowing and the lending libraries can settle with dispatch. If the borrowing library restricts its requests to unusual books for unusual purposes, a considerable saving of time should result. Centralization of borrowing and lending activities in a library, a complete check of sources before making a request, insistence upon observation of the lending library's rules, using near-by libraries whenever possible, and careful wrapping of books are means by which the borrowing library can relieve the lending library of much dissatisfaction. The lending library, by clearly specifying and demanding adherence to its rules, can foster co-operation in interlibrary lending.

Although these problems are encountered in interlibrary lending, they are not great enough to warrant the elimination or serious restriction of interlibrary loans. Rather, the problems suggest that librarians, by facing the situation, can extend lending so that no or little hardship is imposed upon the generosity of their colleagues. Instead of hundreds of books loaned each year, actually there should be tens of thousands. Moreover, it is likely that after the war international interlibrary lending will receive more attention than it has in the past. Developments in fast airmail service may increase lending of this kind. The problem is closely related to the question of low-cost reproduction of materials.

[^242]
## CO-OPERATIVE AND CENTRALIZED CATALOGING ${ }^{16}$

In 1851 Charles C. Jewett proposed an organization of libraries in the United States with the Smithsonian Institution as a national center which would engage in co-operative enterprises, including co-operative cataloging. The Smithsonian authorities declined to enter into the plan, however, and the idea gathered dust until 1876 , when the American Library Association was organized. The development of standard cataloging rules and the adoption of the $3 \times 5$-inch card were principal achievements toward uniformity in practice during the nineteenth century.

In 1902 the first really centralized system of producing cards was started at the Library of Congress. A co-operative agreement for acquiring card copy from other governmental departmental libraries was also put into effect. In 1910 this policy was extended to include libraries outside the District of Columbia. A more aggressive attitude toward co-operative cataloging was taken in 1926, when the A.L.A. Co-operative Cataloging Committee was established. With subsidies from the General Education Board, as well as assistance from the Library of Congress, the Committee embarked upon an ambitious co-operative program. Entries for new foreign books not in the Library of Congress and analytical entries for monographs in series not cataloged analytically by it have been prepared by a number of co-operating libraries under the auspices of the Committee. The Cooperative Cataloging Section of the Descriptive Cataloging Division at the Library of Congress is the present agency for this work.

Two studies in the field of co-operative and centralized cataloging have recently been completed. The first of these is Velva J. Osborn's "A History of Cooperative Cataloging in the United States," ${ }^{17}$ which is a description and analysis of the various attempts of American librarians and others to organize co-operative cataloging projects.

Osborn suggests that, although co-operative cataloging avoids the need of shipping all books to a central location and that it permits consultation with highly trained subject specialists who take charge of special book collections in their own libraries, it does not function

[^243]as well as centralized cataloging. A well-organized centralized plan provides for ( 1 ) a concentration of expensive cataloging reference tools; (2) a concentration of able catalogers; (3) shortened lines of communication, with corresponding efficiency of administration; (4) greater use of standardized, co-ordinated rules and practices; (5) elimination of extra revising and editing; and (6) greater ease in maintaining a sustained policy in classification and subject headings.

Osborn is not optimistic that a complete solution to cataloging problems will be found soon. Past attempts at organization have remedied only the most glaring difficulties. Experience has demonstrated that the various approaches to cataloging, bibliography, and documentation require constant attention and considerable co-ordination. In so far as cataloging is concerned, the opportunities for centralization have only been scratched.
How far the Library of Congress can serve as the pivotal point of a centralized cataloging program is conjectural. MacLeish has acknowledged the seriousness of arrears in cataloging in the Library of Congress and in other large libraries. He suggests that
the profession....candidly face the fact that present cataloging methods are nineteenth century methods devised for forms of print which no longer constitute the bulk of library accessions, and for categories of readers who constitute a part only of present and potential library clienteles. ${ }^{18}$
Several studies have been started at the Library of Congress to test various solutions of the problem. A number of libraries, such as the University of Chicago Libraries, the New York Public Library, Columbia University Libraries, and the John Crerar Library, have already instituted simplified cataloging rules for certain types of materials.

The second study in this area of co-operation and centralization is that by Altmann, ${ }^{19}$ who substantiates Osborn's findings concerning the greater possibilities through centralization rather than co-operation. Altmann concludes that, despite various difficulties in the way of a program of centralized cataloging, statistical data show that the problems of coverage, time, form, and cost could be solved by the Library of Congress for all types of libraries, provided that the administration could change its present objectives of cataloging and

[^244]take over the responsibility for recording on cards the entire output of American book publishers. The case is more difficult for publications of foreign countries.

Undoubtedly, much needs to be done in the way of co-operative and centralized cataloging. Probably both of these approaches are necessary at present to solve the problems of waste and duplicated effort in libraries. Cataloging of local materials, especially manuscript materials, by individual libraries will help materially to build up the Union Catalog in Washington. Any plan for centralization needs the whole-hearted co-operation of librarians. So long as libraries use the product issued by centralizing agencies, co-operative technical work appears to have a raison d'être; but, so long as librarians refuse to accept the work of the agencies, co-operative and centralized cataloging and classification will be of doubtful value. ${ }^{2 \circ}$

## BIBLIOGRAPHIES AND UNION LISTS

University librarians have always emphasized the importance of compiling bibliographies. The activities of Gerould, Richardson, and others in this field are commented upon in chapter xv. During recent years co-operative enterprises in the compilation of bibliographies and union lists have increased rapidly. Assistance given libraries through the Work Projects Administration and the National Youth Administration has undoubtedly aided materially in the production of bibliographic compilations.

Co-operative activity, in which university libraries have played a prominent role, has resulted in the publication of such lists as the following: American Newspapers, 1821-1936; A Union List of Files Available in the United States and Canada, edited by Winifred Gregory; Census of Medieval and Renaissance Manuscripts in the United States and Canada, edited by Seymour De Ricci; International Congresses and Conferences, 1840-1937; Union List of Serials in Libraries of the United States and Canada, edited by Winifred Gregory; and the List of Serial Publications of Foreign Governments, 1815-I931, also edited by Miss Gregory. University libraries have contributed substantially to both editions of the Union List of Serials. The aid rendered by the individuals supported by the Work Projects Administration and the National Youth Administration has taken a variety of forms but has been particularly notable in the compilation

[^245]of union catalogs, the preparation of innumerable local lists of newspapers, municipal and state documents, and indexes to local historical collections. University libraries have opened their collections to the Historical Records Survey in the compilation of many lists of materials which were either buried in old files or which had not been effectively organized for easy use. This was true in the case of the American Imprints Survey, one of the greatest bibliographical tasks ever undertaken.

Special bibliographies have also been prepared through the cooperation of university libraries. The Bibliography of Research Studies in Education, issued annually by the U.S. Office of Education, contains records of theses and dissertations prepared annually in the graduate schools of universities. In many institutions these data are prepared for the Office of Education by libraries. Similar efforts have resulted in the publication of Doctoral Dissertations Accepted by American Universities, which since i933-34 has been issued under the editorship of university librarians and the Association of Research Libraries. Many university librarians have assumed responsibility -for issuing guides to theses and dissertations prepared at various institutions. ${ }^{2 I}$

Individual libraries have sponsored the publication of union lists. For example, the Publications of Cook County, Illinois and Atlases in Chicago are both compilations of the former documents division of the University of Chicago Libraries.
Other publications of individual libraries have contributed to the growth of scholarship. Catalogs of the Vatican Library, the John Rylands Library, and of the British Museum are examples of work done in Europe. Catalogs of the New York Public Library and of the Library of Congress represent distinct contributions to scholarly activity. Similarly, university libraries-Brown, California, Chicago, Harvard, Michigan, and Yale, for example ${ }^{22}$-have compiled and

[^246]distributed catalogs and bibliographies of their holdings and special collections.

## UNION CATALOGS AND BIBLIOGRAPHICAL CENTERS

In chapter ii mention was made of the relation of the university librarian to union catalogs and bibliographical centers. At that time it was pointed out that the librarian is required to decide whether or not his clientele would benefit from co-operation with a union cata$\log$, in view of the time and expenditure necessary to contribute. Moreover, it was suggested that participation in a union-catalog program places a definite responsibility upon the university library to serve non-university patrons. At this point attention will be given to the purposes which union catalogs serve, to the stage of their development, and to the problems to which their presence in university libraries give rise.

## PURPOSES

Although writing of the pre-war European scene, Pafford ${ }^{33}$ has given a concise description of the purposes of union catalogs that are applicable in America. Probably the principal purpose for the establishment of union catalogs has been to facilitate the location of specific items. This is the finding-list purpose of the union catalog. But union catalogs may be considered from other points of view. It has been claimed that they distribute the burden of interlibrary loans, that they eliminate the need of several libraries purchasing expensive sets of rarely used materials, that they diminish or prevent the amount of duplication of certain types of library materials, that they indicate gaps in the holdings of libraries within an area and suggest fields of purchase, that they make co-operative purchasing practicable and feasible, and that they serve as useful bibliographical tools to various departments of libraries. ${ }^{24}$

The extent to which union catalogs in the United States serve all these purposes is now known. The recently issued study by the American Library Association Board on Resources of American Libraries clarifies the situation. ${ }^{25}$ Stone ${ }^{26}$ has described in detail the work of

[^247]union catalogs in locating items, in improving cataloging practices, in spreading the burden of interlibrary loans, and in rendering other services. In such fields as co-operative purchasing, specialization in collecting, and exchange of duplicates it seems that the libraries, rather than the union catalogs, should take the initiative. ${ }^{27}$ In the Oregon Centralized System of Libraries, a compulsory form of cooperative organization, the union catalog is definitely a tool that can be used for such purposes. The majority of union-catalog organizations, however, are comprised of units which co-operate voluntarily; and, while union-catalog officials can be sympathetic and can point out activities which involve several libraries, they have no power to order such procedures.

## UNION CATALOG OF THE LIBRARY OF CONGRESS

The development of union catalogs in the United States may be said to have started with the Union Catalog of the Library of Congress in 1901. To the basic set of Library of Congress printed cards were added author cards from the Boston Public Library, the New York Public Library, Harvard University Library, John Crerar Library, the University of Illinois Library, and several Washington libraries, increasing the card holdings of the national Union Catalog to 1,960,000 in 1927. A grant of $\$ 250,000$ from John D. Rockefeller, Jr., in 1927 served as an impetus in the development of the Union Catalog. At present, it is the greatest tool of its kind. On June 30, 1943, it contained 11,965,251 cards, of which it was estimated that approximately $7,600,000$ represented different titles and editions of the same title after cards for cross-references and duplicate entries were excluded. ${ }^{28}$

Regional and local union catalogs.-The distribution of depository catalogs by the Library of Congress marked another step in making available to scholars the resources of the national collections in Washington. There are, at the present time, 65 depository sets of cards and II other sets (the latter consisting mainly of entries cut from proof sheets), located in centers of research in this country and abroad. ${ }^{29}$ Figure 20 shows the location of 58 Library of Congress card

[^248]
depositories and 6 proof-sheet catalogs in the United States. ${ }^{298}$ The card depositories contain copies of all main author cards published by the Library of Congress. Regional union cátalogs, based upon these sets of cards, have been developed at Philadelphia, Cleveland, Chapel Hill-Durham, Nashville, Atlanta, Austin, Denver, and Seattle.

Berthold ${ }^{30}$ has listed the following distribution of union catalogs by type:

> National union catalogs. . . . . . . . . . . . . . . . . . . . . . . . . 2
> Regional and local union catalogs...................... 18
> National subject union catalogs........................ 7
> Regional and local subject union catalogs. ............ 25
> Exchange catalogs
> 6
> Library of Congress depository catalogs. ............... 59
> 117

The geographical distribution of union catalogs is shown in Fig-, ure 21. Merritt's proposal for the establishment of regional union catalogs is given in Figure 22. Since 1938, when The Geography of Reading appeared, the Far West, the Southwest, and the Southeastregions which were inadequately supplied with depository catalogs -have each received a new depository catalog. ${ }^{3 x}$

The service of these union catalogs in revealing the resources of the country is important. Through correspondence the individual scholar or librarian may learn the location of specific titles or the existence of special collections. These union catalogs are bibliographical sources to which individuals can go in their search for details concerning books, periodicals, manuscripts, and other graphic materials. ${ }^{32}$

In order to keep the Union Catalog of the Library of Congress abreast with the new accessions of libraries, university librarians, along with others, have co-operated in reporting acquisitions of new titles. The reports of the director of the Union Catalog contain long lists of the university libraries that submit copies of cards for their accessions. Many other academic libraries which do not send cards

[^249]

R. B. Downs, "Union Catal.gs in the United States" (1.L.A., 1942)

Fic. 22.-Proposed regional union catalogs
directly to the national Union Catalog do so through their connections with regional or local union catalogs. The Bibliographical Center at Denver and the Philadelphia, Providence, and other union catalogs have made arrangements to permit examination of their records by the Union Catalog for the purpose of copying cards for items which either are not in the Washington catalog or are rare enough to warrant further locations. The potential service of these catalogs, therefore, is important.

## ADMINISTRATIVE PROBLEMS

The development of union catalogs has necessarily raised problems of administration for the university librarian. The problems may be concerned simply with the amount of money the library is willing to grant the union catalog in keeping its records up to date and in maintaining the enterprise. But in some instances the problems are of wider scope. The emphasis placed upon the union catalog as a tool for extensive reference and bibliographical service, rather than as a mere finding list, suggests that a union catalog is likely to be of greater value when placed under the supervision of a large library or bibliographical center than if it operates as a detached unit. For example, at the University of Pennsylvania close connections have been established with the Union Library Catalogue of Philadelphia and the Philadelphia Bibliographical Center. Under a grant from the Carnegie Corporation the program and personnel of the Catalogue and the Bibliographical Planning Committee are being integrated into the new Bibliographical Center. At Denver, the director of the public library is also executive chairman of the Bibliographical Center. The Union Catalog of the Pacific Northwest is located in the University of Washington Library in space allotted to research in Pacific Northwest history and is under the supervision of the university librarian. The director of the Centralized System of Libraries of the Oregon State System of Higher Education is in control of the union catalog at Corvallis. Mutual responsibilities are held by the libraries of North Carolina and Duke universities for the upkeep of their union catalogs. The Cleveland Regional Union Catalog is housed in the Western Reserve University Library. University librarians have been active in the proposed union catalogs and bibliographical centers for the New York and Los Angeles areas.

Whether or not the university itself pays for the upkeep and maintenance of a union catalog, there are certain responsibilities which fall upon the librarian. These refer to the need of providing space for
the work, providing trays and other equipment, permitting the use of university library bibliographical and reference tools for business which is frequently not of university origin, and collecting payments for the upkeep of the catalog. The actual operation of the union cata$\log$ is generally placed in the hands of a special personnel.

## REPRODUCTION OF MATERIALS ${ }^{33}$

## MICROPHOTOGRAPHY

Ever since the Richmond conference of the American Library Association in 1936 the possible uses of the technique of microphotography in scholarly libraries have been discussed at length in the professional literature. Among the more important uses to which microphotography can be put are the following: (1) to secure materials which are difficult or impossible to obtain because they are unique, out of print, costly, or rare; (2) to provide copies of materials which are in the process of disintegration, particularly wood-pulp newspapers, old manuscripts, and documents of various kinds; (3) to reduce congestion in the stacks of libraries by reproducing bulky materials on film; (4) to publish and disseminate research materials in single copies or in multiple editions. In addition to these uses, microfilming may be of value in the production of institutional union catalogs and the duplication of card catalogs; in the reduction of the amount of handling of irreplaceable materials; in the filling-out of special collections or runs of periodicals; in the facilitation of the exchange and loan of dissertations and other scholarly materials; in the recovery of lost or obscure texts; in the inventory of map, archival, and museum collections; in the storage of little-used or obsolete materials; and in the implementation of classroom instruction. ${ }^{34}$

While such methods as typing, manual copying, and photostating may accomplish such results as preserving and disseminating materials, ${ }^{35}$ they involve higher costs ${ }^{36}$ than microfilming; and only in

[^250]the case of photographic processes is accuracy in transcription certain. Present evidence indicates that microfilming has proved to be of great value to librarians and to scholars who use graphic materials. Actually, only preliminary utilization has been made of the many possibilities and potentialities which exist in microphotography. This is especially true in the case of microprinting.

The extent to which the university librarian needs to avail himself of the facilities for reproducing research materials depends largely upon the nature of the book collections under his control, the needs of the faculty and students within his service area, and the amount of service he is willing to give to scholars throughout the region and nation. The ideal of the university librarian to preserve practically every item that is acquired is based upon the assumption that perhaps at some time a student, faculty member, or scholar will need the particular item for a specific research problem. The acceptance of this belief has placed upon the university librarian the responsibility for binding, cataloging and classifying, and shelving innumerable volumes which frequently do no more than collect dust in the stacks.

At the present time the validity of this assumption is being seriously questioned by some librarians. ${ }^{37}$ Developments such as microphotography and the possibilities of storage co-operatives may no longer be disregarded by the librarian who is planning a new building because the old one is filled to capacity. This does not mean that every university library should establish a highly specialized photographic laboratory in order to take advantage of the possibilities offered by filming. In this respect, just as in interlibrary lending, interinstitutional co-operation may reduce or eliminate duplication of effort. Many libraries should do no more than provide suitable reading machines for their patrons after the films have been produced by laboratories in other institutions.

There are already, for example, in public, college, and university libraries of the country a number of laboratories which microfilm books and other records for libraries not possessing photographic equipment. Among the university libraries which maintain photographic services and which supply microfilm copies of materials in their collections are the following: Brown, Chicago, Columbia, Harvard, Michigan, North Carolina, Princeton, Temple, Virginia, Wash-

[^251]ington, and Yale. Illinois, Iowa, Johns Hopkins, Ohio State, and Pennsylvania have more limited facilities. ${ }^{38}$ Several others are planning to instal equipment. The type and extent of work performed varies with the institution, depending on such factors as quality and quantity of pieces of equipment, adequacy of physical facilities, and the experience and ability of the personnel. The quantity of equipment ranges from the bare essentials-camera, developing apparatus, and reading machine-to the highly complex laboratory for precision work and experimentation maintained by the department of photographic reproduction of the University of Chicago Libraries.

Users of university libraries, however, do not restrict their research to work in academic libraries. Textual or manuscript materials in public and other types of libraries are frequently indispensable to a research worker. Large libraries, such as the New York Public Library and the Library of Congress, place their vast resources at the disposal of the research worker through the processes of photographic reproduction.

While many facilities for microfilming now exist, there has been little conscious planning of the laboratories in respect to the book concentrations in the United States. In The Geography of Reading it was pointed out ${ }^{39}$ that the bulk of scholarly collections is still on the eastern seaboard, particularly in the northeast and north central states, despite the fact that the geographical center of higher educational institutions has been moving westward. This situation results in a definite disadvantage to research workers and students in the South, West, and Far West. A program which would lead to the careful placement of photographic units in centers of major holdings would reduce, and possibly remove, this handicap. This program would include a plan of establishing facilities only where there is concentration of research material sufficient to justify the operation of the type of department proposed. That is, there should be only a very few major laboratories and a greater number of what might be called "basic laboratories" but which are not equipped for all types of reproduction. The distribution of facilities should take into consideration: (I) the present or possible future development of bibliographical facilities for the location of materials, (2) the presence (or lack) of co-operation among the libraries in the regions, and (3) the

[^252]geographic isolation of the region or its proximity to other facilities for reproduction and other concentrations of research materials. All established laboratories should have a volume of work sufficient to justify equipment and personnel adequate for the production of firstclass microfilm.

If these factors are given consideration, some suggestion may be made regarding the possible designation of regions in the United States in which laboratories should exist. ${ }^{40}$ The District of Columbia is, or could be, adequately served by the facilities of the Library of Congress and elsewhere in Washington. New York City could probably be serviced best by an extension of the laboratory at the New York Public Library. An expansion of the facilities now there might enable the staff to produce better work at lower costs. Boston could probably benefit by an expansion of facilities, especially to reduce cost, presumably at Harvard, which would serve the New England regions. The South has four centers: Chapel Hill, Nashville, New Orleans-Baton Rouge (Tulane and Louisiana State universities), and Austin. Any one of these centers might make some use of reproduction facilities, but in general the emphasis here should be on the acquisition of microfilm from richer centers rather than on extensive production. That is, the laboratories would not need to be as elaborate as those mentioned above but might be more nearly like those at Temple and Virginia universities. The Midwest should be adequately served by the University of Chicago, which has been used to serve not only the Midwest but the country at large. ${ }^{41}$ The creation of a major union catalog of materials in the Northwest seems to call for the establishment of a reasonably adequate laboratory at the University of Washington in Seattle. Finally, a fairly extensive laboratory should be established at San Francisco or Berkeley which should serve the libraries of those cities, the library at Stanford Uni-

[^253]versity, and other libraries in northern California. The Huntington Library in the southern part of California may be used to some extent, but it is generally not expected to enter into a plan for general service. A laboratory of reasonable size should be established at Los Angeles in connection with the bibliographical enterprises now being carried to completion in that center. It is to be understood, of course, that the facilities needed for these various places would vary in range and extent.

Danton and Elfont ${ }^{42}$ have described the work of the laboratory at Temple University. The conclusions drawn by these authors definiteJy point to the need for careful planning of the work of a film laboratory.

## USE OF MICROFILM

Two difficulties encountered by patrons in the use of microfilms may be noted: (I) the mechanical handling of the film and (2) the physical effects upon the users. ${ }^{43}$ The experience of the New York Public Library and the Yale University Library indicate that special attendants are necessary to load the projector, to show the uninitiated reader how to use the machine, and to remove the film after use has been completed. Until this was done, frequently the film was damaged when the patron placed the film over the pressure plates instead of between them. Some tearing has also resulted from inexpert handling. These difficulties do not discredit present technique and equipment. When a university library has built up an extensive film collection and sufficient demand has been created, the appointment of a full-time attendant to supervise the mechanical handling of film will probably follow. The libraries of Columbia University, the University of Virginia, and Yale University, among other institutions, have provided special facilities for users of film.

Many users object to film because of the eye fatigue which is said to result from prolonged periods of reading. In a report, Eye Fatigue in the Reading of Microfilm, by the Advisory Committee of the Committee on Scientific Aids to Learning, five prominent, although theoretical, reasons for eye fatigue.were listed: (1) fixity of position of material in projector, (2) poor contrast, (3) lack of sharpness, (4) difference of boundary illumination surrounding the projected film

[^254]frame as compared to conditions surrounding the printed page, and (5) glare. ${ }^{44}$ In a survey of 248 readers Miles found that the most frequently cited reasons were, in order: (1) lack of sharpness, (2) glare, and (3) insufficient contrast.45 The answers clearly indicated that reading film produced more eye fatigue than reading print on paper. It should be noted, however, that a large number of the individuals reporting fatigue used improvised reading machines or hand magnifiers. Suggestions for reducing fatigue were directed at increasing contrast and at making possible the regulation of light intensity.

## OTHER MEANS OF REPRODUCTION

In addition to microphotography, university librarians have availed themselves of other techniques of reproduction. Photostating and photoprinting continue to be effective methods of reproducing a short run of pages. ${ }^{46}$ The Readex Microprint, which is distinctly an edition process, has recently been emphasized as a technique for duplicating materials. ${ }^{47}$ This system consists of "(I) a perfected method of reproducing books or any kind of documentary material in greatly reduced facsimile in the form of a paper print, and (2) the Readex, a reading machine in which the minute facsimile reproductions are projected on a translucent screen, automatically focused in sharp definition." ${ }^{8}$ It seems fairly certain that the large projects of reproduction involving a small number of copies will continue to use the microphotographic technique. However, it is possible that prints instead of films may be used in certain cases. Experiments are being undertaken to determine the most satisfactory medium of microprinting. These are based on the belief that extreme reductions are neither economically practicable nor entirely acceptable to the users of the material in such form. Along with these experiments, study is being made of the possibility of using low-cost reading glasses as against the more expensive projection type equipment now used for microfilm and microprint.

[^255]
## SPECIALIZATION

The idea of specialization in collecting materials is not new in American librarianship. Although librarians discussed the problem in the latter part of the nineteenth century, it was not until the past quarter-century, when library collections began to grow geometrically, that the problem was given serious attention. Recently the Board on Resources of American Libraries of the American Library Association, the American Historical Association, and the Library of Congress have been concerned with the problem of collecting materials in specialized fields. In the development of the topic of specialization, attention will be given to the following points: (i) definition of "special collection" and "specialization," (2) factors which have been influential in reviving interest in specialization, (3) individuals and groups interested in the problem, (4) the present tools for describing resources, (5) the extent of specialization as revealed by some current examples, (6) difficulties in the way of specialization, and (7) the future of specialization.

## defintions

The difficulty of defining the terms "special collection" and "specialization" arises out of the loose way in which they have been used. Van Hoesen, ${ }^{49}$ reporting to the special conference on library specialization of the Board on Resources of American Libraries, indicated the possible approaches to the problem. These, briefly, involved: (a) the field of collecting, or the types of materials; (b) the policy within the field of collecting, or the inclusiveness or selectiveness of the col lections; (c) the status of collecting, or the completeness or adequacy for certain levels of research; (d) the comparative size and quality of the collection, as measured by standard bibliographies; and (e) the quality of the personnel and their bibliographical projects in relation to the collection, the library, and the students. ${ }^{50}$ In order to have a working definition for the conference, it was agreed that specialization on the research level concerned "materials for the Ph.D. level or above, all-inclusive in nature." ${ }^{s}$ The "special collection" which

[^256]is all inclusive and exhaustive is the tangible result of specialization in collecting materials.

## FACTORS INFLUENCING REVIVAL OF INTEREST IN SPECIALIZATION

A number of factors have been responsible for the revival of interest in specialization. Primary among these is the enormous increase in the rate of publication of books, pamphlets, periodicals, and documents. The great output of materials ${ }^{52}$ has had, as indicated earlier, a number of direct effects upon university library development. It has not only made necessary the use of more extensive quarters and larger budgets and given rise to problems of inventory and integration, but it has also made it necessary for libraries to provide larger and more specialized staffs. Constant growth in resources and enlargement of physical quarters and staffs, therefore, have made librarians conscious that a point of diminishing returns may be reached from sheer size.

In the second place, changes which have occurred in the educational field have directed the attention of educators and librarians toward specialization. Is it likely that higher education in America in the future may take on the specialized character of pre-war European institutions, in contradistinction to the present situation, in which the university attempts to cover all fields? This is a question which has concerned educational administrators, particularly those in charge of state institutions. Educational changes made in the institutions of higher education in Georgia, North Carolina, and Oregon, for example, have had effects upon the range and depth of the bookcollecting policies of the libraries. ${ }^{53}$

A third factor for the renewed interest in specialization in book collecting has been the increased specialization in subject fields and the splitting of them into finer subdivisions. For example, workers who were once classified as "zoölogists" have divided into a score of specialized groups. Each group issues its own series of monographs, periodicals, and pamphlets, thus adding to the growing mass of scientific literature used in research. New fields of research-physical chemistry, biophysics, biochemistry, etc.-have resulted from combinations of sciences. Entirely new fields in both the sciences and

[^257]the humanities-for example, psychiatry and social psychologyare relatively recent developments. Librarians have been faced with the problem of determining the extent to which they should collect the literature in these new fields, in the light of the educational and research programs of their institutions.

A final factor in directing attention toward specialization has been the growth in the enrolment of graduate students and the increase of faculty members in universities. While the growth of the general student body has been relatively large, the increase in the number 'of graduate students since 1900 has been almost three times as great as that of the student body as a whole. The growth of the number of faculty members has been similar to that of graduate students. To meet the demands of the graduate students and faculty members, who often investigate very limited fields of knowledge, libraries have been required to collect materials in special areas.

Singly and together, these factors have influenced librarians to look upon acquisition of materials with a minimum of the competitive spirit that once was so current in library book buying. A welldefined and clear-cut policy of specialization requires all the ingenuity of librarians if it is to be effective in practice and meet the needs of the clientele of the libraries involved.

## INDIVIDUALS AND GROUPS INTERESTED IN SPECIALIZATION

Librarians have not been the only persons who have been interested in the furtherance of the idea of specialization, nor is it wholly a library problem. There are at least two other groups of persons who must be convinced and whose approval must be obtained before any definite action can be taken. These are the administrative officerssuch as the board of trustees, the president, and the executive offi-cers-and the faculty members. Another group of individuals-members of learned societies and associations-should also be considered in any program of national library specialization. Such groups, particularly if they contain university faculties, presidents, deans, other administrative officers, and members, can be very influential in dealing with matters involving specialization. The action of the Social Science Research Council in dealing with the problems of distributing documents affords an excellent illustration.

## PRESENT TOOLS FOR DESCRIBING RESOURCES

Before any program of specialization is actively put into operation, certain information concerning the resources for research in American
libraries is necessary. It has been assumed, for example, that the Union Catalog of the Library of Congress presented a fair representation of the materials in the country. A sampling of 2,000 titles in the card catalogs of 80 libraries and other union catalogs, however, disclosed the existence in other libraries of 50 per cent additional (new) entries which were not in the national Union Catalog. ${ }^{54}$ This indicates that other methods of recording resources are needed to supplement this tool. These include union catalogs, surveys of holdings, lists of special collections, guides to individual libraries, and special check lists.

Bertholdss has found that there are 117 union catalogs of various types in the United States. These catalogs, plus such monumental works as American Newspapers, 1821-1936, the Union List of Serials, the List of Serial Publications of Foreign Governments, 1815-1931, and International Congresses and Conferences, 1840-1937, are basic tools in listing the holdings and noting the locations of materials in American libraries.

Surveys of resources are also fundamental in any successful plan of specialization, since they indicate, frequently by specific titles, what resources are available to scholars and research workers. Fortunately, the number of such surveys is increasing; and, as a special type of aids in co-operation and specialization, certain groups of surveys merit further description.

First of all, there are surveys of resources at the national level. Among these are the publications by Brown, Johnston and Mudge, Richardson, Cannon, and others. ${ }^{66}$

Next, follow the descriptions of materials by regions. The most extensive of these are the one by Downs and his fourteen associates in

[^258]Resources of Southern Libraries, and that by Van Male, in Resources of Pacific Northwest Libraries. ${ }^{57}$

The list of local surveys is steadily increasing, the most recent title being Resources of New York City Libraries, by Downs. ${ }^{58}$

A fourth group is of special interest to university librarians because it contains surveys of a number of university, as well as other research, libraries. Notable among these are the surveys of the libraries of Harvard University, the University of Chicago; and the University of Pennsylvania. ${ }^{59}$

A fifth category relates to descriptions of materials in special subject fields, such as Gilder and Freedley's Theatre Collections in Libraries and Museums and Greene and Morris' $A$ Guide to the Principal Sources for Early American History (1600-1800) in the City of New. York. ${ }^{6}$

A final category is that of the extensive publications-many in mimeographed form and in comparatively small editions-of the Historical Records Survey. These publications, compiled and issued through the Works Progress Administration, in co-operation with officers of the National Archives and the Library of Congress, run well up into the hundreds and have appeared under eleven general titles: (I). "Inventories of County Archives," (2) "Inventories of State Archives," (3) "Inventories of Town and Municipal Archives," (4) "Inventories of Federal Archives in the States," (5)

[^259]"Manuscript Publications," (6) "American Imprints Inventories," (7) "Church Archives Publications," (8) "American Portrait Inventories," (9) "Newspaper Inventories," (io) "Guides to Vital Statistics Publications," and (11) "Miscellaneous Publications." Begun in 1936, these publications cover a wide range of historical and archival materials which have not been available to scholars formerly and have, consequently, greatly increased our information concerning the location of primary source materials, particularly in the fields of history and political science.

- It has been observed that these compilations, useful though they may be, are actually drops in the bucket in solving the national problems of documentation and bibliography. Up to the present time, a commercial firm, the H. W. Wilson Company, of New York, has developed some of the principal bibliographical tools for libraries. Some librarians have been critical of this situation, especially in so far as the service charges of the company are concerned. ${ }^{68}$ Nothing short of united action on the part of all libraries, however, can alter it. Two proposals for attacking the problem on a large scale are discussed by Kellar ${ }^{62}$ in his "Memoranda on Library Cooperation." These are: ( 1 ) the geographical approach and (2) establishment of a National Institute of Bibliography.

The first approach would make groups of libraries in communities, states, and regions, as well as the Library of Congress and selected research institutions, responsible for planned progress in their respective areas. Thus, the whole field of bibliography could be blocked out and assignments given to the co-operating institutions. Obviously, there would be considerable difficulties in starting this undertaking, as well as the expense of maintenance. There is reason to believe, however, that a united effort of this type would help fill in the gaps which appear on the bibliographical map.

Kellar also suggests establishing a National Institute of Bibliography, which could be a part of the Library of Congress or be sponsored by it and other agencies, such as the Bibliographical Society of America and the Association of Research Libraries. Among the tasks of this Institute would be (i) the compilation of a list of all existing bibliographies, which could be accomplished by a central staff with the aid of co-operating libraries, (2) a clear indication of the strong and weak places in bibliographical effort, and (3) the giv-

[^260]ing of service as a clearing house of bibliographical information. Kellar succinctly notes that "this program is essentially a long-range one which will take years to complete, but never before have conditions so strongly demanded action, nor indeed have the means of fulfilment ever been so near at hand. ${ }^{2}{ }^{63}$

## CURRENT PROGRESS OF SPECIALIZATION

At present there are a number of agreements between universities and their libraries concerning library specialization. Although most of these have been concerned more with the local, rather than the regional and national, concepts of specialization, they indicate that specialized collecting has had practical application. A brief statement of each of these agreements is given below. ${ }^{64}$

Boston.-In order to eliminate duplication in acquiring serials of limited use, the larger libraries of Boston have planned to check the new Union List of Serials. Harvard University and the Boston Public Library already have a tentative agreement in regard to the purchase of expensive titles.

Chicago.-In Chicago there has been an agreement of long standing that the Newberry Library should collect materials in the field of the humanities, while John Crerar should specialize in collecting works in technology, the sciences, and medicine. In a limited field, Newberry also collects finely printed books, while the Graduate Li brary School of the University of Chicago concentrates on library reports and other library literature. The compilation of medical, law, and art union catalogs by the principal research and scholarly libraries in Chicago has also been directed at reducing the duplication of materials.

Florida.-Specialization in the collecting of local newspapers has been inaugurated by Florida libraries. The University of Florida, unable to collect and preserve a sufficient number of titles, stimulated the collecting plan by agreeing to distribute among a group of libraries a large number of volumes of state newspapers. The responsibility for the upkeep of runs has been assumed by the cooperating libraries.

Iowa.-A collecting agreement between the Iowa State College and the State University of Iowa has worked efficiently because the heads of the schools have agreed to forego duplication of work in

[^261]the graduate fields. Iowa State College, for example, buys very little on medicine, in which the state university specializes. In turn, the University purchases little on veterinary medicine, since this is a specialty of the Iowa State College. This is an interesting example of the effect of educational policy upon the collecting practices of libraries.

Midwest.-The presidents of 13 midwestern universities have been meeting informally for several years to discuss the possibilities for a regional storage center. This plan has been carefully studied and summarized in a report. ${ }^{65}$

New York State.-Since 1933 a group of New York institutionsGrosvenor Library of Buffalo, the University of Buffalo, Rochester University, Syracuse University, Colgate University, Hamilton College, and, more recently, Union College and Cornell Universityhave been discussing the practice of specialization and have actually been carrying it out to some degree. Grosvenor has been building up a collection of American poetry; and, while the other libraries do not avoid American poetry entirely, they make no attempt to acquire rare books in the field. In another instance, Hamilton College had been building up a collection in the classics. Cornell University, which has a larger collection, was willing to permit Hamilton to take the responsibility for the modern field, but, because of faculty and student pressure at Cornell, it has been necessary to forego this plan. When two or more contiguous universities or colleges offer the same type of curriculums, it is incur bent upon the library of each institution to provide materials for its faculty and students.

New York City.-An understanding between Columbia University and the New York Public Library, largely adhered to but not followed strictly, exists in the field of collecting materials, particularly newspapers. Generally, they do not compete with each other for the purchase of the same item.

Both Columbia and the New York Public Library take cognizance of the purchases of other libraries in the city. There is a working agreement between Columbia and the Museum of Natural History, the Engineering Society, the New York Academy of Medicine, and the Numismatics Society in the purchase of special materials. Also, the New York Public Library leaves the field of medicine to the

[^262]New York Academy of Medicine. The Union Theological Seminary has taken the responsibility of collecting thoroughly in the field of theology.

North Carolina.-One of the most interesting examples of specialization exists in the co-operative enterprise in which the University of North Carolina and Duke University are the participants. The agreement involves the educational policies of the institutions as well as the libraries, and its operation has been facilitated by grants from the General Education Board and the Rockefeller Foundation.

Duke University has the responsibility for collecting newspapers of representative cities throughout the South and some few outside the South, and the University of North Carolina and the North Carolina State Library are responsible for acquiring newspapers published within the state. The University of North Carolina collects library materials in the fields of public health, library science, geology, history of printing, bookmaking, and philology, while Duke specializes in materials relating to industry, medicine, and religion. In English literature North Carolina collects materials on the Chaucerian period; Duke, on the nineteenth-century period. Because of curricular overlappings, there is no clearly defined field of specialization for the Elizabethan period. In history North Carolina has taken the responsibility to collect materials relating to the French Revolution, while Duke has specialized in European history since 1870. In both literature and history the two libraries strive to avoid expensive duplications.

The plan for specialization in this case is definite. The fact that a subject is allocated to one or the other of the institutions makes its library responsible for purchasing materials in that field, for filling requests for orders which originate in the co-operating library, and for making such materials available for use in either of the two institutions. A catalog of all holdings of the other institutions is located in each library. The cost of making these duplicate catalogs and of providing the resources for research mentioned above was met at the. beginning by grants from the General Education Board. Daily messenger service between the libraries is maintained. ${ }^{66}$ Lately there has been an attempt to interest college libraries in joining the plan. Service to college libraries has been undertaken. If a college library wishes to borrow a book that is not in either of the university li-

[^263]braries, Duke buys the book and lends it to the college library for a relatively long period-for example, the academic year. At the close of the loan period the volume is deposited in one of the two university libraries. Faculty members in the Negro institutions of the area have received increasing loan service from the university libraries.

A further project of specialization participated in by Tulane University, Duke University, and the University of North Carolina involves Latin-American materials. This project, which received its impetus from the faculties rather than from the libraries, is supported by a grant from the Rockefeller Foundation. To insure a complete coverage of Latin-American public documents, as well as general literary output, Tulane has accepted the responsibility for collecting materials from the Caribbean area, the University of North Carolina for the southern part of South America, and Duke University for the northern part of South America.

North Central area.-In the North Central area there are several agreements, both formal and informal. In the case of the University of Minnesota and Iowa State College, the former has been building up a strong classics collection, while the latter has been purchasing practically nothing in that field. Except for the scientific sections the State University of Iowa does not attempt to duplicate the Minnesota collection of publications of European learned societies. Minnesota, on the other hand, does not buy heavily of the scarcer items in veterinary medicine, in which Iowa State College specializes. While the University of Minnesota does not strive to rival the collection of Icelandic literature at Iowa State College or the Scandinavian collection in the Minnesota Historical Society Library, it does buy some historical materials, particularly those from the Baltic area.

The University of Minnesota consults with the Minnesota Historical Society and the Minnesota Athenaeum before it purchases rare or expensive items in the field of local American history. The practice is reciprocal. Although there is no fixed agreement, close co-operation is maintained to avoid unnecessary duplication of materials:

Publications of local European learned societies have been acquired according to an agreement among the Minnesota, Michigan, Newberry, and John Crerar libraries. Michigan has assumed responsibility for the French and Belgian local society publications,

Minnesota for the Scandinavian and Baltic publications, and Newberry and Crerar for the publications of the remainder of the Continent.

North Texas.-The libraries of North Texas State Teachers College, Southern Methodist University, Southwestern Baptist Theological Seminary, Texas Christian University, Texas State College for Women, and the public libraries of Dallas and Fort Worth in the Dallas-Denton-Fort Worth area of North Texas have developed a number of co-operative activities looking to the facilitation of research in that region. The group has issued two publications: the first, by A. F. Kuhlman, ${ }^{67}$ outlines the general proposal for co-operation; the second, edited by W. S. Hoole, ${ }^{68}$ lists the serials in the libraries.

Ohio.-An Ohio group of colleges, organized in 1940 and consisting of Akron University, Hiram College, Kent State University, and Mount Union College, has planned to exchange information relative to their holdings of titles in the Shaw lists, to co-operate in preventing unnecessary duplication, to prepare a union list of periodicals, to share the responsibility of specialization in acquisitions, and to build up bibliographical and other resources. ${ }^{69}$

Pacific Northwest.-In 1938 an informal group was started in the Pacific Northwest. The purposes of the group are primarily co-operative: to facilitate the exchange of duplicates, to prepare union lists of periodical holdings, to discuss common library problems. Institutions represented in the group are: Albany College, College of Puget Sound, Gonzaga University, Linfield College, Longview Junior College, Marylhurst College, Multnomah Junior College, Pacific University, Reed College, St. Helen's Hall, University of Portland, Whitman College, and Willamette University. ${ }^{7 \circ}$ The Pacific Northwest Library Association has long maintained a program of co-operative undertakings, of which the development of the Bibliographical Center at the University of Washington at Seattle is an excellent example.

[^264]Pennsylvania.-With the establishment of the Union Library Catalogue of Philadelphia and the more recent Bibliographical Center of Philadelphia, library co-operation in the eastern Pennsylvania region has developed rapidly. The efforts of the administrations of the University of Pennsylvania, Haverford College, Bryn Mawr College, and Swarthmore College to co-operate educationally have also had effects upon the libraries of the institutions. There has been an increasing amount of exchange in respect to instructional programs and graduate study. For example, Pennsylvania, Haverford, and Swarthmore hold joint seminars.

Providence.-Libraries in Providence have had standing informal agreements in the collection of materials. The Brown University Library, for example, has specialized in mathematics, Latin-American materials, American poetry, Lincolniana, and law. Ballistics has been a specialty of the Providence Athenaeum, while the Rhode Island School of Design has notable art collections. Items of local history have been the province of the Rhode Island Historical Society.

Virginia.-In order to insure systematic collecting of both nonstate and state newspapers, a plan has been adopted whereby some thirty libraries acquire, store, and make accessible certain titles. The new buildings of the University of Virginia and the Virginia State Library have made it possible to redistribute materials. In this agreement the administrative officials of the institutions participated.

Washington, D.C.-In 1942 the Library of Congress, through three members of the Librarian's Council, proposed a plan of agreements by which individual libraries would assume responsibility for the acquisition of one copy of all current publications in a given subject which might be of importance in research. It was suggested that the Library of Congress Classification be used for limiting specific subjects and that catalog cards be sent by the library to the Library of Congress for inclusion in its Union Catalog and for a proposed union classified catalog.

## OTHER AGREEMENTS

In addition to the types of agreements discussed here and in other sections of this chapter, Lowell has made a thorough study of all types of co-operation, ranging from informal agreements to contractual arrangements, mergers, and complete consolidations. These are summarized in Table 32, and the benefits and advantages derived from them are summed up as follows:

TABLE 32*
Types and Characteristics of Agreements and Consolidations
among Academic Libraries

| Types and Names of Agreements and Consolidations | Libraries Included | Nature of Co-operation |
| :---: | :---: | :---: |
| I. Close co-operation: <br> a) University Center in Atlanta ( I 933 ) <br> b) University of North | Emory University, Agnes Scott College, Georgia School of Technology, Columbia Theological Seminary, High Museum and School of Art, University of Georgia University of North Car- | Plans for specialization in acquisitions; development of union catalogs of holdings |
| b) University of North Carolina and Duke University (1934) | University of North Carolina, Duke University | Exchange of duplicates; preparation of North Carolina public documents; development and exchange of catalogs; systematic buildingup of collections; General Education Board and Rockefeller Foundation grants |
| II. Contractual arrangements: <br> a) Claremont Colleges (1925) |  |  |
|  | Pomona College, Scripps College, Claremont College | Central technical processes; co-operation to a void unnecessary duplication in acquisition |
| b) Fisk University and Meharry Medical College (r931) | Fisk University, Meharry Medical College | Meharry regarded as a departmental library within Fisk University Library; centralized cataloging and processing |
| c) Joint University Libraries (1936) | Vanderbilt University, George Peabody College for Teachers, Scarritt College | Joint ownership of new building; control of book collections, building, and investment of endowment funds by a board of trustees; payment for upkeep on basis of student enrolment; union catalog of all holdings in Nashville; grant from General Education Board and general endowment |
| III. Mergers: <br> a) Atlanta University Library (5932) | Atlanta University,Morehouse College, Spelman College, Atlanta School of Social Work, Morris Brown College, Clark University, Gammon Theological Seminary | Book collections merged into one library; library open to students in all institutions; maintained in part by endowment |
| b) Western Reserve University Library (1934) | Case Library, Adelbert College (plans to include ${ }^{2}$ libraries in one building) | Centralization of ordering; centralization of records; union catalog; allocation of fields of purchase and service; centralization of book storage; co-operation with Cleveland Regional Union Catalog |
| c) Dillard University (1935) | Dillard University, New Orleans College, Straight College | Consolidation of resources |
| d) Tulane-HowardNewcomb (1938) | Tulane University, Howard Memorial Library, Newcomb College | Consolidation of resources; services for Tulane and Howard remain separate; catalogs not united |
| e) University of Chattanooga and Chattanooga Public Library (1940) | University of Chattanooga; Chattanooga Public Library | Separate facilities in same building |

TABLE 32-Cominued

| Types and Names of <br> Agreements and Consolidations | Libraries Included | Nature of Co-operation |
| :--- | :---: | :---: |
| IV. Reorganization of state |  |  |
| system of higher edu- <br> cation and unification <br> of libraries: <br> a) Centralized Librar- <br> ies of Oregon (1932) | University of Oregon, <br> Oregon State College, <br> 4 state normal schools | Single director for all libraries; uni- <br> fied book resources; entire re- <br> sources of all available to each li- <br> brary; centralized ordering; union <br> catalog; co-ordination of service <br> departments where possible |
| b) University of | Georgia (1933) | University of Georgia, <br> College of Agriculture, <br> State Teachers College | | Libraries merged; centralized tech- |
| :---: |
| nical processes and service |

1. Larger library resources are made available.
2. Substantial savings are made in overhead and administrative costs and in purchases.
3. Duplication of holdings is prevented or reduced to a minimum.
4. Acquisition of expensive, rare, and research items is co-ordinated in the best interests of each region.
5. Collections are better organized and administered, and hence service is better.
6. The libraries are more effective in integrating their work with the educational programs of the institutions.
7. Union catalogs and union lists make it possible for scholars to find printed materials more readily.
8. Because of concentrated collections, facilities, and funds, it is possible to hire superior library personnel who have specialized in certain subject or research fields. ${ }^{7 \pi}$

This summary of some of the major attempts to correlate collecting activities of libraries indicates clearly that specialization is a very practical problem. Why, then, has it been such a relatively slow process, regionally and nationally? What, on the basis of present evidence and activity, is the probable future of specialization?

## DIFFICULTIES IN THE WAY OF SPECLALIZATION

Educational, administrative, library, and personal variables stand in the way of expanding specialization rapidly. The extent to which they are minimized and controlled will determine the success with which libraries will secure the benefits which experience has demonstrated are resident in specialization. ${ }^{12}$

Educational factors.-The effects of the movement of faculty members from institution to institution may be observed in the static special collections which exist in a number of academic libraries. A
${ }^{71}$ Lowell, op. cit., pp. 135-36.
${ }^{72}$ Taube, op. cit.
faculty member who is book-conscious, often along the lines of a minute, special interest, builds up a collection and then is called to another institution. The collection he has left behind is frequently of little or no interest to his successor or to other members of the faculty, and, as a result, the library has on hand a mass of material which is no longer given attention. It is not unusual for the professor to start a new collection on his specialty at the new institution with which he has become associated.

Not infrequently a professor refuses to change his position unless the institution seeking his services is willing to grant him the privilege of assembling special library materials. Here, indeed, is a situation in which the president or dean should confer with the librarian as to the probable effect such a collection will have upon library policy. Will the new collection be in line with the educational program of the institution?

Another educational factor which affects a policy of specialization is a change of curriculum. Introduction of a new course or subject into the curriculum generally requires the library to obtain materials regardless of agreements to specialize in collecting.

Administrative factors.-A satisfactory program of specialization is necessarily affected by several factors which may be described as "administrative." These are: (1) financial instability in maintaining collections; (2) the effect of gifts; (3) the distances between libraries and the resultant difficulties of transportation; (4) restrictions on circulation and use of collections; (5) legal problems, particularly in the case of state institutions; and (6) lack of facilities for the reproduction of materials.

The responsibility for maintaining a special collection of materials entails continuous and adequate support. Unless there are earmarked endowments, it is obvious that libraries which have started special collections will find it difficult during critical financial periods to allot sufficient sums for acquisition and upkeep. Income from endowments may decrease or may disappear entirely. Any agreement to specialize, therefore, requires a careful consideration of possible future means for support.

Gifts to libraries present a definite obstacle in a bold program of specialization. In some institutions the attitude is held that an important collection offered as a gift must be accepted, regardless of whether or not it is related to the educational program of the institution. Adherence to such a policy would mean that a given library
would accept a gift collection even if it did not fall within the particular library's designated field of specialization. There is also the probability that a donor, who has selected a certain institution as the depository for his gift, will not be interested in having the materials transferred to a library within whose field of specialization the collection lies.

The spirit of specialization implies that a library having certain types of materials will permit, either through interlibrary lending or visit, full use of the materials by individuals who are not directly associated with the institution. Unless adequate transportation facilities are available, it may be impossible for certain nonstrategically located institutions to benefit from an extensive program of specialization although they are favorable to it.

Distance between libraries, however, is not the only factor which discourages some institutions from adopting plans to specialize. Institutional regulations which prevent generous interlibrary lending or use also serve as obstacles to specialization. It has been previously pointed out that some of the larger libraries complain of the demands made upon them by other institutions or individuals who are not in a position to reciprocate courtesies of interlibrary lending or use.

Stipulations of donors may hinder the free flow of materials from library to library under a plan of specialization. Moreover, state universities are confronted with certain difficulties peculiar to them when co-operative programs are considered. In the first place, there may be legal restrictions preventing the transfer of materials acquired by the state university. Another obstacle, more serious than the restriction on transfer of materials, is the difficulty of long-term planning in state university libraries. Even if a university administration is convinced of the merits of specialization and is willing to plan for the future, there is no assurance that the state legislature, the appropriating body, will recognize or provide for long-term planning.

The values of microfilming, photostating, and other methods of reproduction in making resources available to scholars have been noted. If institutions which participate in programs of specialization provide apparatus for reproducing special materials, obviously the effectiveness of the enterprise will be promoted accordingly.
Library factors.-Obstacles hindering specialization which involve libraries are important but not insurmountable. These obstacles include: (I) fear of losing prestige, (2) changes in specialization by dif-
ferent libraries, (3) failure to maintain special collections, (4) and difficulty in removing artificial barriers which exist between different types of libraries.

Size and quality of collections have always been distinguishing features of libraries. It is perhaps understandable that librarians, public library trustees, and university administrators would be reluctant either to place restrictions on size or type of materials to be collected or to transfer materials to other libraries. An effective program of specialization, however, requires that sacrifices of this character be made. An entirely new attitude is essential toward the idea of prestige emanating from size or ownership of special materials if progress in specialization is to be gained.

The difficulty of preventing libraries from changing fields of specialization is another factor that obstructs systematic collecting. So long as educational curriculums change, so long as libraries shift in their collecting policies, and so long as administrative factors prevent integration of collections, specialization will advance slowly.

Other factors which affect specialization adversely are the difficulty of securing from a library a continuing policy of maintaining special collections and curricular and budgetary changes, as well as changes in objective of institutions. These factors often make it difficult or impossible to follow a specified program of collecting.

Personal factors.-Under the heading of "personal factors" may be grouped such matters as the attitudes of individual librarians, university presidents and faculties, boards of trustees, and scholars and research workers. Each of these groups may have definite opinions regarding the limitation of collections in certain institutions. Li brary traditions must be minimized; institutional prestige should not be permitted to interfere with the program; and research workers should be willing to use collections carefully assembled according to a plan even though this involves the use of reproductions of materials owned by other libraries.

## THE FUTURE OF SPECIALIZATION

The difficulties associated with a progressive plan of specialization are not insurmountable if the attitudes which have previously prevailed are realistically modified and the values of specialization are carefully analyzed. There can be no doubt, as Paul Vanderbilt ${ }^{73}$ has clearly visualized, that librarians must be willing to abandon tradi-

[^265]tional ideas of book collecting and service if the libraries of the nation are to succeed in furnishing maximum service to the scholar.

## STORAGE LIBRARIES

University administrators and librarians confronted with the spectacular growth of book collections and the difficulties of providing space and funds for adequate, centrally located library buildings have given considerable attention in recent years to the potentialities of co-operative storage or reservoir libraries. They have been influenced, in part, by the example of the British Museum, the Bibliothèque nationale, and a number of public libraries in the United States, such as those of Cincinnati, Cleveland, Newark, and Providence, which have used individual storage libraries for some time.

Two major proposals have been considered since 1940. One, developed by 13 Midwest institutions, has not progressed beyond the planning stage. ${ }^{74}$ The other, initiated by a group of New England libraries, has been carried out, the New England Deposit Library having been opened in 1942.

The anticipated advantages to be derived from a co-operative storage plant, contributed to and supported by a number of libraries in a specified geographical area, are clearly discernible. They include: (1) reduction and delay of the need for new library structures; (2) elimination of the need for heating, lighting, and cleaning sections of stacks which house little-used books; (3) reduction of the cost of shelving per unit volume held by libraries; (4) elimination of the unnecessary duplication of titles in an area; (5) utilization of the benefits of co-operative cataloging; (6) acquisition of benefits which are likely to develop from a centralized pool of library resources; and (7) participation in the co-operative acquisition of books of an expensive nature needed for the occasional reader.

Although some librarians have been willing to admit the possibility of the advantages indicated, librarians as a group have shown little active interest in developing plans for storing little-used materials. Primary interest has come from university administrators, who do not share the librarian's opinion that every item must be within reach in three minutes or less. The main objections to the scheme offered by librarians center about two points: (1) the difficulty in selecting titles for storage and (2) the cost of removing titles for storage. Public librarians have devised effective criteria for selecting

[^266]materials for storage; and, despite differences in book stocks, it is reasonable to suggest that university librarians might do likewise. Some of the suggested types of materials which librarians might find it expedient to store are the following: duplicates; exchange materials; newspapers; old periodicals; government documents of some countries; publications of municipalities; publications of societies; multiple editions of books; duplicate copies of textbooks; old theology; old geology; old medicine; old books in fields such as poultry; trade catalogs; paper-backed books; worn books and books on poor paper; incomplete periodical runs; popular contemporary periodicals; conduct-of-life books; special collections of limited interest; reports of some antiquarian societies; genealogies; cult books; privately printed verse, memoirs, and essays; foreign and American theses; school publications and old catalogs; subjects not currently popular; seasonal books; oversize books; co-operatively owned publications; textbooks by nonaccredited authors; seldom used languages; and minor books in philosophy, psychology, sociology, business theory, and mathematics.

It is obvious that individual librarians must designate which materials are suitable for segregation on the basis of careful studies of the use made of them in their institutions. In some institutions a number of the items listed above may be live materials. The inability to check stack use of materials has been a difficult problem for librarians, but a stringent system of requiring used books to be left on carrell desks or trucks should aid in the determination of which books are used. It is primarily an administrative question.

The matter of cost of removing titles for storage has not been studied carefully. It is quite likely that librarians have tended to magnify this problem. While it may cost a certain amount of money to remove a title from the collection and the various catalog records, this fact should be considered in relation to the costs of building and maintaining an adequate, centrally located, and, therefore, costly library building. Libraries having membership in a storage system might plan to send many items, acquired primarily through gift and exchange, directly upon receipt to the storage library with a minimum of cataloging and classification, thereby greatly reducing the cost of handling such items.

One further question requires consideration. Should the university erect a storage structure removed from the site of the present library? Iowa State College and Ohio State University have answered the
question by making such provision. Such factors as size, location, and variability of collections may not make it possible for other institutions to find an arrangement of this kind satisfactory. In his investigation of the problem for the 13 midwestern institutions Fall found that all 13 libraries were crowded in varying degrees. The numerous makeshift provisions for housing are not so efficient as those which would be secured through a well-organized central storage system.

The New England Deposit Library, the first of its kind to be organized, began operations in 1942.75 The library was chartered as a corporation in 194I by the state of Massachusetts, with eight charter members: Harvard University, Massachusetts State Library, Boston Public Library, Boston Athenaeum, Boston College, Boston University, Massachusetts Historical Society, and Massachusetts Institute of Technology. Three other institutions-Radcliffe College, Simmons College, and Tufts College-later joined the corporation, making a total of eleven co-operating libraries. Harvard University erected a building which, after completion, was sold to the new corporation in return for a mortgage at a low rate of interest, the principal to be amortized over a period of forty years. The building, which consists of a brick shell with reinforced concrete floors and supporting pillars, is equipped to house 5,500 standard sections of stacks, or well over a million average-sized volumes. A reading room for twenty people, a receiving room, and lavatories are provided on the main floor, with work space and rooms for mechanical equipment in the basement.

The annual carrying charge on the building is $\$ 9,000$. Current operating and service charges have been estimated at $\$ 8,000$ for the first twelve months, making a total annual budget of $\$ 17,000$. This figure, it should be noted, does not include provisions either for amortizing the building debt or for depreciation reserves. To meet this annual budget, a total of 3,400 stack sections were rented to the cooperating libraries for the first year at $\$ 5.00$ per section. When more sections are rented, the surplus will be placed in reserve, used to reduce the charge per section, or set aside for additional building.

Since the possible significance of this experiment to research libraries of the future is fundamental and far-reaching, the university librarian should carefully follow its development. As problems arise
${ }^{15}$ The following data were taken from K. D. Metcalf, "The New England Deposit Library," Library Quarterly, XII (1942), 622-28.
and are solved and as benefits are realized, the co-operating librarians will accumulate a body of experience which will be of great value to librarians of other regions where similar storage libraries are contemplated.

Closely allied to the problem of storage is the question of discarding duplicate materials. ${ }^{76}$ It has been noted that university libraries are not so likely to discard materials as are college or nonresearch libraries. Large university libraries, however, acquire numerous duplicates from faculty members, organizations, and other agencies. In the past, no effective method of disposing of these materials has been followed in many libraries. Some librarians have questioned the economical results attained by setting up an elaborate system of duplicate exchange. In other institutions, however, systematic handling of duplicates through exchange has been beneficial not only in gaining desirable materials for the distributing library but in building up other libraries. The libraries of the universities of Minnesota and Illinois are examples of institutions which have been successful in this respect.

Probably the answer to the question of duplicates lies in a centralized agency which can handle the materials from a group of university libraries. Such an agency could set up a procedure for disposing of items by sale, exchange, or gift. ${ }^{77}$ Already the Bibliographical Center at Philadelphia ${ }^{8}{ }^{8}$ has set in motion a system for distributing materials to libraries which can use duplicates unwanted in other institutions. Lists from interested libraries which are submitted to the Center are compiled in a master list which is circulated to a number of institutions.

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[^267]${ }^{15}$ Bulletin of the Philadelphia Bibliographical Center, March, 1942.
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## CHAPTER XIV

## BUILDINGS AND EQUIPMENT

ONE of the most prominent buildings on many American university campuses is the library. This chapter is devoted to a consideration of this important unit of the physical plant of the university. Its major purposes are to describe the requirements for a satisfactory library building for a university, to discuss the various aspects of a building that will meet those requirements, and to consider the essential apparatus and equipment necessary for effective service. The material presented here is, in large measure, a synthesis of information on the subject, reflecting what appears to be best practice or currently accepted opinion. Consequently, the treatment lacks the detail which may be desired, since an entire volume would be required to present adequately all the matters involved. Moreover, there is reason to believe that the future university library building may follow a pattern which is quite different from that of present structures. The effects of the war upon educational programs and methods, the growth of storage libraries, the extension of co-operative enterprises in documentation and bibliography, the discovery of new uses of plastics and other materials, the increase in materials on film, the publication of books in new forms, and recent developments in technology and building design will probably influence the nature of new library buildings. The policy of erecting structures with permanent interiors, planned for a century or more, may possibly be discontinued.

Although there is no scientific basis for stating what the requirements of an adequate library building are, various standards or principles have been evolved from experience. In recent years considerable attention has been given to the formulation of criteria for college library buildings. Because of the size and complexity of university libraries, however, these standards are not usually applicable to larger institutions. Among the factors which distinguish the university from the college and which have a significant bearing on the character of the library building are: (1) large enrolment, (2) extensive and varied curricula, (3) relatively large numbers of graduate students, (4) emphasis on research, (5) existence of departmental or-
ganization, and (6) responsibility for the preservation of printed materials. Not only do these factors affect the library, but they influence the quantity and quality of the demands made upon its physical facilities.

The amount of recent literature pertinent to the subject of the American university library building is limited. ${ }^{x}$ J. T. Gerould's The College Library Building, lts Planning and Equipment, ${ }^{2}$ sets forth standards and principles applicable to the college library. Based on a wide acquaintance with problems of library planning and construction, it is designed to indicate the results of experience in a large number of institutions. E. R. Hanley's College and University Library Buildings ${ }^{3}$ is likewise an empirical and subjective treatment. It contains a collection of plans, with short descriptions and illustrations, of existing library buildings in some forty institutions of various types. Brief criticisms are offered in connection with the buildings described, and various essentials are outlined in an introductory chapter. In the volume Standards for College Buildings ${ }^{4}$ a list of requirements for library buildings is included. These requirements are also of a subjective nature. The "thirty-three points," or generally accepted principles of library planning, in Wheeler and Githens' The American Public Library Buildings are largely adaptable to the university library.

In the absence of objective studies of library buildings, such conclusions, regarding best practice, as those evolved in the above and similar volumes ${ }^{6}$ must suffice for practical purposes. Undoubtedly,

[^268]careful and extensive studies are necessary in order to provide a scientific basis for establishing or judging the characteristics of an adequate university library building.

Difficulties will obviously arise in any attempt to set up detailed building requirements which will apply uniformly to all university libraries. No less than the book collection or the staff, the physical plant should be adapted to the needs of the particular institution. A so-called "adequate" library building for one institution will not necessarily serve effectively the purposes of another.

There is no way of determining the extent to which the library building affects the efficiency of the library's contribution to the educational and research program of the university. There are many institutions-and some of high standing in the academic world -which house their libraries in buildings which would be considered unsatisfactory by almost any set of standards. This does not imply that the provision of adequate buildings would not improve the library service of those institutions. While the physical plant may not rank in importance with the book collection and with the staff, there seems to be little question that the building, carefully planned and adapted to the functions which the library is expected to perform, will increase the effectiveness of the library program of any institution.

The importance of the physical plant, as well as the inadequacy of a number of existing structures, has been impressed upon many librarians and other university administrators by recent changes in higher education. In many ways these changes have had far-reaching implications for libraries. Among the more important of these changes are: (1) the rapid growth in enrolments; (2) the expansion of the curricula, involving the addition of new specialized courses, teaching departments, and professional schools; (3) the introduction of new methods of teaching which have placed new responsibilities upon the library; and (4) the increased emphasis upon research. As a result of these developments, university libraries have been called upon to provide: housing for more extensive book collections, reading rooms for increased numbers of undergraduates, individual study and research facilities for more graduate students and faculty members, special apparatus and equipment for careful preservation and reproduction of materials, and additional work space and other accommodations for larger library staffs. The magnitude of these changes can be illustrated by referring to a single institution. In 1890 the Yale

University Library had space for 90 readers and 200,000 volumes. by 1931, when the new Sterling Library was completed, the university felt obliged to provide stack space in the tower unit alone for $4,000,000$ volumes; reading room accommodations for more than 700 readers; 330 cubicles for graduate students, research workers, and faculty members; and numerous special rooms for other purposes.

In the face of such new demands, it is not surprising that many university library buildings have proved inadequate. Among the more serious shortcomings of these buildings have been the lack of sufficient space for books, readers, and staff; unsatisfactory location; the absence of easy traffic channels; inadequacy in size to carry on all functions; inappropriate relations of space for related functions; the lack of provision for expansion; the lack of flexibility; the use of space for vested, nonlibrary activities; and inadequate lighting, heating, and ventilation. Failure to foresee the rapid growth of universities, insufficient preliminary planning, lack of funds, the inexperience of librarians and faculty members; or the desire of an architect or donor to create a monument rather than a functionally useful building have been the principal causes of these inadequacies. Whatever the cause, many institutions have been faced with the problem of correcting deficiencies in their library plants.

## PLANNING THE BUILDING

The most important requisite of a satisfactory library plant is careful planning. The necessity of detailed preliminary planning can scarcely be overestimated. ${ }^{\text {T }}$ The university library building is a complex, highly specialized structure. It is intended for particular purposes, and its success in meeting the requirements of the institution depends to a great extent upon how well it is adapted to the functions which it is expected to perform. As has been emphasized earlier, those functions are determined by the educational objectives of the institution and by the methods used to achieve them. A clear under-

[^269]standing of the place of the library in the educational pattern of the institution is fundamental to the success of any building program. To arrive at such an understanding is the first step in planning. An intelligent plan will insure that the library building is adapted to local needs and conditions.

The importance of careful planning has received increasing attention in recent years by librarians and architects. Functional design has been particularly emphasized. ${ }^{8}$ Prior to 1920 considerable weight was given to architectural effect in library construction and minor attention to functional requirements. Monumental buildings were constructed which were architecturally impressive, even if they were not well suited to their purposes as libraries. The difference between the old and the new ideas in library construction may be illustrated by referring to buildings on a single campus. On MorningsideHeights, in New York City, the two library buildings of Columbia University face each other across One Hundred and Sixteenth Street and a small area to the south. To the north is the Low Library, the most beautiful building on the campus, clearly reflecting, by its symmetry and balance, the triumph of the architect over the librarian. It is approached by climbing a high flight of stone steps, and within the building the rooms are laid out in a circular plan in such a way that the central reading room provides the means for their connection with one another. The balanced arrangement of the ground floor precluded the possibility of horizontal extension, and the dome placed limits upon growth vertically.

The newer building opposite, South Hall, is in marked contrast. Its rectangular shape, its ground-floor entrances, its rows of windows, and its terraced upper floors all suggest economical organization of what is relatively small space for a large institution: The interior arrangement, with the stack core surrounded by classrooms, reading rooms, and offices and work rooms, strengthens the impression. Architecturally, one might mistake the structure for a commercial building; actually, it is the largest university library building in the world. That there are a number of serious flaws in this building is beyond question. In many respects it is wasteful and inefficient in layout. The lighting has not been effective. Undoubtedly, it

[^270]is not the last word for planning for the future. Yet, in South Hall, as well as in the new library buildings of George Washington University, the University of Virginia, and the University of Oregon, among others, utility and convenience have become more important than monumental effect. A number of factors have been responsible for this change of attitude. Perhaps the most important have been the need for economy both in construction and in administration and the growing realization of the importance of flexibility and compactness in interior arrangement. From an architectural or aesthetic viewpoint, it is considered desirable that the library should be attractive and that it should harmonize with the prevailing type of architecture on the campus. Beyond that, however, architectural manifestations should be subordinated to the demands of functional utility.

Participants in planning program.-The planning of a university library building should be a co-operative enterprise. The faculty and other representatives of the institution, as well as the architect and the librarian, should participate. If a building committee is appointed, the librarian, the library committee, a representative of the trustees, the treasurer, and the superintendent of buildings and grounds would constitute a suitable personnel.9 In a number of instances a faculty committee has been given the responsibility for preliminary planning.

The function of the building committee is to make a thorough study of the library needs of the institution and to accumulate the data necessary for planning a suitable structure. With the objectives of the library clearly defined, the committee should determine the local needs systematically by consulting the representatives of all departments as to their needs and desires. The future educational plans of the university, so far as they can be ascertained, should be incorporated in the plan. The committee should draw upon the experiences of other libraries by studying plans of existing buildings, by consulting with librarians and building committees of other institutions, by visiting recently constructed libraries, and by making detailed studies of the needs of different units of the library in performing the services which the university may require of the library. These preliminary studies or memoranda should show the capacity

[^271]of the building, the different types of facilities needed, the allocation of space to meet their detailed requirements, and other items which should enable the architect to prepare his plans. ${ }^{10}$

The librarian has an important role in this preliminary planning. He should work closely with the building committee in preparing specifications and should pay particular attention to such matters as the functions of the various rooms, the relationships among them, the probable use of the building and its supervision, the flexibility of the interior, provisions for future expansion, and probable costs of operation. He should also be prepared to plan each room in detail, determining the desired layout and the appropriate equipment. With this information at hand the architect may design a structure which will meet the needs of the local institution and at the same time be aesthetically appealing and in harmony with the other buildings on the campus. ${ }^{11}$

A building carefully planned in this manner not only will fit the needs of the university for the present and insure effective library service but should permit alterations and additions to meet the demands of growth and changes in the future. Examples of library buildings which have been planned in this way are those of the following universities: Colorado, Columbia, Illinois, Minnesota, Ne braska, Southern California, Virginia, and Yale. Even though institutions may lack the funds necessary to construct buildings which meet all their requirements, their plans should be based on careful analyses of conditions. If funds are insufficient, a unit plan of construction, with temporary walls and partitions, is feasible. Such a plan, although generally more expensive ultimately, enables an institution to provide an adequate building over a period of years. The University of Illinois Library is an example of a large structure which is being erected on a unit plan.

The plans for new buildings at Princeton ${ }^{x 2}$ and Pennsylvania unquestionably take many matters into consideration which have previously not been given attention, and the importance of the uses to which the library should be put in helping implement the teaching and research program are further emphasized. There appears to be more effort directed at bringing into "the closest contact and asso-

[^272]ciation faculty, students and books, in agreeable surroundings and under conditions conducive to a maximum of results.' ${ }^{13}$ The buildings at Colorado and Nebraska have been definitely influenced by use rather than by tradition or predilections of librarians, and the plans for the buildings at Pennsylvania and Princeton repeat this influence still more. Plans for Pennsylvania will recognize the importance of documentation and extensive bibliographical service. ${ }^{14}$ The plans for Princeton reflect: (i) flexibility in internal arrangement, (2) co-ordination of research with the library, and (3) special quarters for undergraduate work. The Annex of the Library of Congress ${ }^{15}$ also contains a number of elements in design and internal organization which offer suggestions of value to the university librarian.

## THE BUILDING SITE

Where to locate the new building is an important question which must be decided early in planning a new physical plant. Many institutions have worked out general developmental plans in which they have determined the location of future buildings on the campus and have allocated an appropriate site for the library. ${ }^{16}$ Universities which lack such plans or which have progressed to such an extent that building locations are permanently established must choose the most desirable site which happens to be unoccupied.

Several factors should be considered in selecting a site. It should be large enough to accommodate the present building and permit future expansion. Expansion may be either horizontal or vertical, or both. Vertical expansion may be the only possible method where ground space is limited. The amount of such expansion possible, however, is limited by structural conditions. It is therefore essential that the original building plans indicate clearly the possibilities of future expansion and that no other buildings be placed in the space for the future expansion of the library.

A second factor to be considered in choosing a site is the relation of the library to other buildings on the campus. If possible, it should be close to the geographical center of the campus or to the buildings

[^273]which house heavy book-using departments and classrooms. Such accessibility is necessary for efficient library service. Frequently this is not possible. Even where such location is originally planned, expansion of the university campus and the construction of new units at a distance from the old center may alter it. A careful survey of the flow of traffic should aid in determining a suitable location for a new building.
A central location is frequently sought from an architectural, as well as from a functional, point of view. The library is usually a building of monumental character and of considerable size. Consequently, it may well occupy a central position. While placing the library in a central position may be strategic, it should not be surrounded on all sides by other buildings so that extension becomes impossible.

Other factors which should be taken into account are the surroundings and the physical orientation of the building. The surroundings should be quiet, in order to secure good working conditions in the building. Usually it is recommended that the building should face in such a way that the main reading rooms may have a northern or an eastern exposure. Since these rooms are often located in the front, this means that the building should face north or east. The libraries of the universities of Michigan and North Carolina have northern exposures, making it possible to take advantage of light which is relatively even throughout the year and which does not expose the readers to the direct rays of the sun. An exception to this rule is often made in the South, where southern exposure may. be necessary to benefit from the summer breezes, essential for comfort.

Three new trends in university librarianship should also be taken into consideration in determining the location and size of library buildings. These are the more extensive use of air-conditioning apparatus, the development of storage libraries, and the utilization of microphotography. Neither of the last two developments, however, has progressed sufficiently far to indicate how great a role they may play as space-savers. ${ }^{17}$

## CENTRALIZATION OF SERVICES

In chapter iv the question of centralization versus decentralization of library resources and services was considered. In the example of the University of Chicago it was pointed out that this question has been extensively considered and that it has affected building policy.

[^274]The solution of this problem must be decided before final plans can be drawn. In a particular institution it depends ultimately upon such variables as the size of the library, the amount of emphasis upon research, the funds available for library services and materials, the distance of the departmental buildings from the central library, and the philosophy of library service of the institution. Local traditions are also likely to influence the solution. A combination of the two plansgeneral centralization with limited decentralization-has worked to advantage in a number of institutions. As Walter ${ }^{28}$ suggests, there may be, in addition to the central library, several divisional libraries or branch libraries, with large book collections and competent staffs. These libraries, while providing more efficient service than the usual small departmental libraries, would be more economical to administer and more easily co-ordinated with the central administrative organization. In addition to these libraries, small laboratory collections of duplicates could be maintained by departments requiring such materials. Such a plan seems suitable for a large university library which emphasizes research.

## FUTURE EXPANSION

The importance of providing in the original plans for future expansion was stressed earlier in the discussion of the site. The congested condition of the storage facilities of many university libraries within one or two decades after their erection suggests that planning committees must give more attention to future needs, owing to the steady growth of university library collections. Provision should be made not only for a large site but also for a building which will provide for considerable growth before having to be enlarged. Just how much space should be allowed for expansion cannot be precisely known. Gerould's datar9 indicate that college library collections double in size about every twenty years. Rider found that the collections of ten universities ${ }^{20}$ whose collections dated from 1831 or earlier ${ }^{25}$ doubled in size every sixteen years. The collections of ten other in-

[^275]stitutions, ${ }^{22}$ founded in the last quarter of the nineteenth century, doubled in size every nine and one-half years. The past growth of a library, however, should aid in estimating probable future requirements. Walter ${ }^{23}$ suggests that provision for expansion should be made for not less than 50 per cent of present holdings. Since experience has demonstrated that a new building usually increases the use of the library and frequently attracts gifts from a larger circle of donors and friends, too much weight should not be given to statistics of use in the old building when estimating future needs.

## ADAPTABILITY

Provision for flexibility to permit adaptation to changing conditions is likewise of great importance. "It is not unreasonable to insist," writes Walter, ${ }^{24}$ "that elasticity of use and ease of modification of specific parts of the building to meet changes in university procedures and policies are perhaps the outstanding needs of a university library building that would serve the future as well as the present." Analysis of the demands made upon university libraries in recent years reveals that they not only have increased in volume but have also changed in character and emphasis. Moreover, it is likely that the present war and the movement toward co-operative storage libraries and consolidations ${ }^{25}$ will further affect library buildings of the future. Future variations in enrolment, in the number and variety of courses offered, and in the types of materials which must be preserved and made available for use will also probably have important implications for library buildings. Consequently, the library must be well adapted to meet changing needs.

## ESSENTIAL FACILITIES

The facilities required for effective university library service will depend upon the functions which the library must perform in the particular institution. ${ }^{26}$ It is the responsibility of the planning com-

[^276]mittee to determine what facilities will be required and to see that they are provided for in the building plans. Broadly speaking, it may be said that a building should be designed to supply adequate and efficient accommodations for materials, readers, and staff. It should provide for the preservation, shelving, and storing of books and other library materials; for the convenient use of those materials by undergraduate and graduate students, research workers, and faculty members; and for the work of the library personnel involved in acquiring and preparing books for use and in making them easily available to readers. A detailed study of the needs of a particular institution is fundamental to the provision of facilities that will be adequate for effective service.

## ACCOMMODATIONS FOR MATERIALS

Housing the enormous resources of the modern university library presents a difficult problem to the library administrator, which is usually solved by means of the book stacks. These constitute the great reservoir of the library. They must be large enough to accommodate present resources and future acquisitions, and they should be designed and equipped not only to house the collections but also to facilitate their use. Their location, layout, construction, and equipment must be carefully planned if they are to meet present and future requirements for housing and efficient service.

Location of stacks.-From the standpoint of both convenience and future expansion, the location of the stacks is an important element in the library building. The architectural style of the building will affect the position of the stacks to some extent; but it seems desirable that this position be more or less central, in order that the time and energy consumed in getting and replacing books be reduced to a minimum. The stacks should be constructed in such a way that rearrangement or extension, vertical or horizontal, can be accomplished without major structural changes. Experts recommend that the stacks be so located with relation to the building and to the plot of ground that either type of extension is possible. Horizontal extension is usually practical when the stack is erected in the rear of the building. Extension may be simplified if the rear wall of the stack room is so constructed that it can be removed, or retained as a partition, when additions are made. Vertical extension of the stack has proved satisfactory in such recent buildings as the Sterling Library of Yale University and the library of the University of Rochester. With or without the tower, this type of extension requires that strong foundations
be laid at the outset to carry the extra weight of additional stack floors. Provisions for future stack expansion should be shown clearly in the original building plans.

Dimensions of stack room.-Once the location of the stacks is determined, it is necessary to decide their dimensions and the number of volumes they are to house. Gerould ${ }^{27}$ suggested that the stack be planned to contain shelving for double the number of books contained in the collection when the building is opened. This margin for future growth represents the capacity of the initial building, not the capacity of additions to the building. Several formulas have been suggested for use in computing the size of the stacks necessary to house a given number of books. Hanley ${ }^{28}$ recommends the formula of io volumes per square foot area, which includes space occupied by aisles, stairways, and elevators. Randall and Goodrich ${ }^{29}$ suggest the formula of 6 volumes per linear foot of shelving. Henderson, ${ }^{30}$ who examined carefully questions relating to book sizes and storage space, developed the "cubook," a unit of measurement of stack capacity. This unit is defined as the "volume of space required to shelve the average book in a typical library." Allowances are made for shelf space left vacant. According to this formula, a single-faced section of stack, 3 feet long and $7 \frac{1}{2}$ feet high, has the following capacities: 100 cubooks ( 85 per cent octavos, 13 per cent quartos, and 2 per cent folios) may consist of 117 volumes ( 87 per cent octavos and 13 per cent quartos), or 132 volumes (octavos only), or 67 volumes (quartos only), or 12 volumes (folios only). A million cubooks would occupy 676,363 cubic feet, or 90,181 square feet. It has been estimated that is cubooks per square foot of floor area may be used for approximating the size of the stack. ${ }^{35}$ The dimensions of the aisles, tiers, ranges, shelves, carrells, and other elements of the stack have been fairly well standardized; and the volumes by Gerould and by Wheeler and Githens should aid considerably in planning for these needs.

Construction and equipment.-Once the location and the dimensions of the bookstack have been determined, there remains the diffi-

[^277]cult engineering problem of planning the layout and the construction of the stacks and equipment necessary to furnish it. To solve these technical problems, experts in bookstack construction should be called in to work with the general building architect.

The modern block type of stack now in general use is a self-supporting metal framework extending from basement to roof. This concentration of stacks within a stack chamber is preferable to a miscellaneous scattering of stacks throughout the building. In addition to planning the framework and the shelving, it is necessary to consider carefully such elements of the stack as deck floors; stairways, elevators; carrells; mechanical book-conveyors; pneumatic tubes or other communication systems between the stacks and the delivery desk; shelving for such special types of materials, as newspapers, microfilms, and oversize books; and the lighting, heating, and ventilating systems. Resistance to fire is also an important consideration, even in a building of fireproof construction. ${ }^{32}$ It should be possible to shut off the stack entirely from the remainder of the building; and metal doors should be provided, in addition to metal furnishings and fire-resistant equipment within the bookstack.

Carrell space.-Free access to the stacks is highly recommended from an educational standpoint and is suggested for college library buildings by almost all authorities. In large universities, however, and particularly in those located in metropolitan areas, the practical difficulties in the way of granting direct access are almost overwhelming. ${ }^{33}$ These difficulties have forced many of the larger libraries to keep their bookstacks closed to undergraduates. But, while the general student body may have to be excluded from the stacks, graduate students, research workers, and faculty members require facilities for study and work which are in close proximity to their materials. The university library building should be liberally supplied with carrells or study cubicles. These may be located along the window walls of the various stack levels, being open or partly closed off from the stack, as in earlier buildings, or separated from the stack with entirely closed partitions and corridors, as at Columbia and the Annex of the Library of Congress. The size of the carrell will depend upon

[^278]${ }^{33}$ Harvie Branscomb, Teaching with Books: A Study of College Libraries (Chicago: Association of American Colleges and American Library Association, 1940), pp. 104-14.
the type provided, ranging from approximately 20 square feet for the uninclosed to 35 square feet or more for the inclosed type. Installations in which the completely inclosed type is used are usually air conditioned, the stack being lighted entirely with artificial light. As a result of separation and air conditioning, temperature and humidity conditions can be adjusted to meet the differing requirements of book storage and student use. Equipment should include: desk, chair, bookshelves, and light. A few carrells may be equipped with acoustical walls and ceilings for workers who require typewriters.

## ACCOMMODATIONS FOR READERS

Reading rooms should be planned to suit the needs of different types of users. They include rooms for assigned readings in "reserved" books; for general reading, supplemented by the use of reference books; for casual reading or browsing; for reading periodicals and newspapers; for consulting maps; for using microfilms; for individual research; for seminars; and for divisional, professional, and graduate study. A small library may combine several of these different types of use in one large reading room, but in a university library they are generally separated because large rooms are required to house single activities or types of service.

The amount of space which should be devoted to reading rooms will vary from one library to another. How much space is allotted for reading purposes will depend on such factors as ( I ) the present and future enrolment; (2) the types of readers to be served; (3) the character of the curriculum and the amount of reading it requires; (4) the number of students who live off campus and commute daily; and (5) the presence on the campus of other facilities for study, such as departmental or dormitory libraries. The trend in library buildings has definitely been in the direction of providing reading room facilities for an increasingly larger proportion of the student body. Whereas provision for 10 per cent of the students was formerly considered liberal, libraries are now providing space for double or triple that percentage. ${ }^{34}$ Gerould mentions 30 per cent as a minimum standard, and Larson ${ }^{35}$ suggests 50 per cent. Such standards are met by relatively few large libraries. Once the proportion of students to be accommodated has been decided, the amount of floor space for reading purposes can be determined by allowing $25-30$ square feet per reader.

[^279]The number of reading rooms and the size of each can be ascertained only after careful consideration of the different types of use for which provision must be made. The total seating capacity should be divided among different types of reading rooms as local conditions and the educational program of the institution require. Both large and small reading rooms have their advantages and disadvantages. Large reading rooms have been advocated in the past for their architectural effect and for their economical supervision of large numbers of students. Small reading rooms, on the other hand, offer more congenial study conditions, with the possibility of closer supervision and improved service. In spite of the higher administrative costs involved there has been a noticeable movement in the direction of small reading rooms devoted to special fields of knowledge. At the universities of Colorado and Nebraska a number of divisional reading rooms have been substituted for the single large room so prevalent in other libraries. ${ }^{66}$ These rooms, each of which houses on open shelves the basic literature of a number of related fields, as well as reserved or assigned books, are patterned after the subject rooms developed by a few large public libraries. ${ }^{37}$ The increased cost of supervision under this arrangement is presumably offset by greater accessibility of books, attractive study conditions, improved service by trained sub-ject-specialist-librarians, and greater educational efficiency.

The reading rooms generally provided in a university library building are a main reading and reference room, a reserved book room, a periodical and newspaper room, seminar and consultation rooms, and individual research facilities, such as faculty studies and carrells. Some library buildings, particularly in the larger universities, provide other quarters, such as graduate or divisional reading rooms, film rooms, music rooms, map rooms, rare book rooms, and rooms for special collections. Two or more of these rooms may be combined.

General reading room.-The main reading room and the reserved book room are usually the largest reading rooms in the building. The purpose of the former is to provide space for general reading and study-both of library materials and of the students' own booksand for consultation of open-shelf reference works. The existence

[^280]${ }_{37}$ Wheeler and Githens, op. cit., pp. 102-32.
of other general reading rooms on the campus will directly influence the size of this room in the central library. In a number of recently erected buildings-Oregon, Tulane, Virginia, and Yale, for example -there has been a tendency to limit the size of the main reading room. The room itself should be centrally located. For architectural reasons and to take advantage of natural light, it is commonly situated on the second floor, across the front of the building. This location, or one on the first floor, has been found satisfactory.

Reserve book room.-A room for students doing assigned reading in current courses has been considered essential in most university libraries, although there has been some dissatisfaction with the "reserve system. ${ }^{38}$ The size of this room depends, of course, upon the extent to which the reserve procedure is used in the institution. In a number of institutions the capacity of the reserve book room is as great as that of the main reading room, and in some buildings it is greater. ${ }^{39}$ Because of the intensive use of materials placed on reserve, especially by undergraduate students, it has been recommended that the room be located on the first floor and as close to the entrance as possible. Examples of such locations may be observed in the plans of the libraries of the University of Southern California, Temple University, and the University of Illinois.

Reserve reading rooms may also be installed for special groups of students, such as the "Commerce Reserve" at Northwestern. Graduate reserve reading rooms, such as at Southern California, are likely to become more common in the future.

Periodical and newspaper rooms.-A separate reading room for periodicals and newspapers has been found to be an effective unit in a university library building. The location of this room may be determined by several factors. Since the periodical and newspaper collection is frequently used in reference work and since the reference department is sometimes responsible for administering the periodical room, this room may be placed adjacent to the main reading room. At the same time, it is convenient to have the periodical and newspaper room near the section of the stack where the bound files of these materials are shelved.

In a few institutions it has been found desirable to instal a separate

[^281]newspaper room. This is regularly a public library feature for the primary purpose of attracting transients away from the other rooms of the library. It may be useful, however, as at the University of Texas, to have reading quarters close to the newspaper stacks. The newspaper volumes are heavy, and reduced handling should help to preserve them.

Subject division and subject rooms.-In the new University of Colorado building a radical change was made from the usual single large reading room to the subject-division arrangement. In addition to a lower-division reading room, separate rooms were installed for the sciences, the social sciences, and the humanities. These rooms are similar in construction, containing reading space, open shelves, and offices for the subject-specialist-librarians. Similar provision is found in older buildings, such as the divisional reading rooms at Brown and the modern-language reading room at the University of Chicago.

More frequent is the provision in the central building for separate reading rooms for special subjects rather than for subject divisions. Thus, at Denver there is the Anthropology Room; at Temple, the Business Library; at Arizona, the Law Library; at North Carolina, the Rural Social Economics Reading Room; at Utah and Minnesota, the Medical Reading Room; and at Kansas, the Education Room. Architectural requirements for these rooms do not differ noticeably from those necessary for other types of reading rooms. Varying local conditions of curricular emphasis and methods of teaching are the primary determinants as to the need of such facilities, The librarian is faced with the responsibility of reducing administrative costs to a minimum; and, although it may be possible to offer a higher level of service in specialized quarters, the university may not be able to provide them. Educational efficiency may suffer in favor of minimum administrative cost.

Rooms for leisurely reading.-Recreational reading or browsing rooms, designed to encourage cultural reading, have come to be considered an essential provision in the modern college or university li-, brary building. The browsing rooms of Northwestern and Temple universities and of the universities of California, Minnesota, Oregon, and Rochester are particularly noteworthy. Frequently such rooms are associated with the names of donors or friends of the library. They usually provide carefully selected collections of circulating books, comfortable chairs, and attractive surroundings. Smoking is frequently permitted in them.

Outdoor reading courts.-In several of the newer buildings-at Arizona, Northwestern, Southern California, and Tulane, for ex-ample-outdoor reading courts have been provided. This corresponds somewhat to the roof reading rooms in some public libraries. Generally, such courts should be so constructed that supervision is kept at a minimum.

Graduate facilities.-Most of the rooms described above are used largely by undergraduate students. In the university library, provisions are required for advanced students, research workers, and faculty members in the form of graduate reading rooms, seminar and conference rooms, faculty studies, and stack carrells. A number of university libraries, such as those at Michigan, California, and Minnesota, provide reading rooms for graduate students. These rooms, each of which is devoted to a number of related fields of knowledge, are usually located on the upper floors of the building. More common are seminar and conference rooms for the use of small groups engaged in research and discussion. The number of these rooms needed will depend on the extent to which the seminar and conference methods of instruction are used. Obviously, the use of a single room for class meeting, conference, and book storage involves a certain amount of conflicting interests.

Small rooms should also be provided for the use of faculty members engaged in research. These rooms, as well as the rooms for advanced students, should be located close to the stacks. It is also recommended that they be placed on the upper floors of the building so that the reading rooms for undergraduate students may be concentrated on the lower levels.

The foregoing facilities, as well as the stack carrells, are designed specifically to meet the special needs of those users engaged in advanced study and research. In addition to these facilities, other quarters of the library are also used primarily by the graduate students and faculty members. These are the map room, film reading room, music room, rare book room, and other special collections rooms.
Map room.-As was indicated in chapter xi, map collections in university libraries represent a type of material that has become increasingly important in research. Most university libraries do not have a collection of maps that is so large that a separate room is necessary. A relatively small building like that of the University of Oregon, however, has made separate provisions for the handling and
use of maps. At the University of Virginia a combined map and film reading room has been included in the new Alderman Library.

Film reading room.-In addition to a photographic laboratory, which is discussed later in this chapter, university libraries have been faced with the problem of making accessible the materials which have been acquired in film form. For the most part, these films are of the microfilm variety, although in a number of institutions there are considerable collections of motion pictures and slides. In most libraries, facilities for reading film have not been separated from the various reading rooms. In these instances, projectors are provided in the reference room, the reserve room, or the periodical room. In the new buildings at Alabama, Tulane, and Virginia, however, separate reading rooms, equipped with projectors, have been installed. A number of other libraries, such as Chicago and Temple, have established separate film reading rooms.

Music room.-Separate facilities for the preserving and use of music are sometimes provided for in university libraries having large collections of recordings. The new University of Colorado building contains a large room for the exclusive use of students and faculty members who wish to listen to phonograph recordings. Special shelving is necessary for the storage of music and recordings.

Rare book room.-Practically every new building erected in recent years has made provisions for the special care and use of rare books. The rare-book facilities range from fireproof vaults, as at Temple University, to extensive treasure rooms. In other institutions, such as Michigan and Northwestern, sections of the stack have been partitioned off by grills for the protection of rare books.

Outstanding among the rare book or treasure rooms in recent new buildings are those of Yale University and the universities of Virginia and Texas. The Treasure Room of the new Joint University Libraries is a combined archive room, book arts room, and rare book room. Of simpler construction and less elaborately furnished are those of George Washington University and the University of Oregon.

In the past, librarians have often not taken proper care of rare items. It was generally thought that a safe or vault provided sufficient protection for such items; but experience has demonstrated that usually the dangers from mildew, insufficient ventilation, and improper lighting under such conditions of housing are great.

Whether rare books are placed in a room within the central library building or in a separate building, as in the new Houghton Library
of Harvard College, ${ }^{40}$ they require special care. This may involve special architectural treatment of the building. Theft of materials must be guarded against by means of control of entrances. Both the Clements Library of the University of Michigan and the McGregor Room of the University of Virginia Library have taken special precautions in the construction of windows. Moreover, in the Clements Library, reinforced concrete walls, ceiling, and floor have been installed. In the second place, special attention should be given to the ventilation of the rare book room. Protection against mildew is particularly necessary if the library is located in a damp climate. Temperatures should be maintained at approximately $70^{\circ} \mathrm{F}$. and humidity at 50 per cent. It is particularly important that water and steam pipes be so installed that no possibility of flooding exists. In the third place, it is important that special provisions be made for lighting. Outlets for special lamps and wiring to handle complex electric machines may be necessary. Such apparatus should be closely connected with small work rooms attached to the rare book room. The installation of suitable book shelves is also necessary in the rare book room. Shelves should be deep enough to take care of extra-sized volumes. They may be of steel or wood, as the occasion requires. The amount of dust, smoke, or chemicals in the air will determine whether or not the shelves should be inclosed in glass. Work rooms and consultation rooms adjoining the rare book room proper should be so located as to have good natural lighting, satisfactory artificial lighting, and proper ventilation. A soundproof typing room near by is also a useful adjunct to the rare book room. If these features are embodied in new buildings, the cost is relatively slight. It is likely to be much higher if alterations are made in old buildings, and the results are more likely to be unsatisfactory.

Extension room.-In several university libraries space is required for library extension service. At North Carolina and Virginia the rooms devoted to this service are of considerable size because they house extensive collections and a number of staff members. Since work of this kind is carried on with a fairly large collection of materials, sufficient shelving should be provided.

Documents, etc.- Other rooms for documents, archives, local col-

[^282]lections, collections of special materials, exhibits, museum objects, and other purposes are also usually included in the university library. Factors which determine whether they are provided are: rarity or cost of materials; size of the collections; type of equipment required for effective use; and whether provision for them involves special problems of construction, lighting, heating, ventilation, or other special conditions. The location of such rooms is determined largely by their nature and their relation to other collections.

Space for exhibits.-The modern library building usually contains adequate space for displaying books and exhibiting materials. Displays are designed to call attention to new publications and to aid the reader in his choice of books. Exhibits usually are concerned with specific subjects. In order that both displays and exhibits can be developed systematically, movable and fixed cork bulletin boards, recessed exhibit cases, and floor cases should be provided. Space in reading rooms and corridors should be utilized whenever possible. Special rooms, such as the one at Temple, make it possible to arrange elaborate exhibits. The rotunda of the Low Library at Columbia has been used for exhibition purposes since major library activities were moved to South Hall.

## ACCOMMODATIONS FOR ADMINISTRATIVE PURPOSES

Facilities for carrying on the work of the library constitute an essential element of the university library. These include a number of different types of rooms for administrative purposes. Among them are: a delivery hall for borrowing and returning books; work rooms for the acquisition and processing of books; offices for the librarians, departmental heads, and other officials; a receiving or shipping room; storage rooms; a bindery or repair room; a photography room; a printing room; and others.

Delivery hall.-The delivery hall is often referred to as the "functional center" of the library, the principal point at which the library and its patrons come together. Here are generally located the public card catalog and the central charging or loan desk. Here, too, is the main point of departure for reading rooms, work rooms, and stacks. The size of this area is an important consideration. Not only should it be planned to accommodate the loan desk and the card catalog, but it should also be arranged to handle without confusion the large amount of traffic which passes through it to the various parts of the building. More than this, it should be large enough to care for the
possible expansion of the card catalog and the loan desk. Unless unusual precautions are taken, the delivery hall cannot be enlarged without major structural changes in the building if it is located in the center of the building. The floor plans of the libraries of the universities of Oregon and Denver and of Temple University illustrate the possible difficulty with which these libraries may be confronted. Planning at the outset for the future expansion of this area is imperative. The central location of the delivery hall is also attended with problems of lighting and ventilation which have frequently led to the construction of skylights over. the loan desks or the introduction of fixed light wells. The skylight rarely proves a satisfactory source of light; it frequently adds to the heat of the delivery area in summer, and it often is difficult to control in periods of rain or snow. The disadvantages of this arrangement and the improvement of systems of artificial lighting have been so great that this type of construction is generally regarded as uneconomical and undesirable. A work room for the loan-desk staff is also desirable in this area.

The delivery hall just described has been of the traditional type usually found in university libraries. In several recent buildings, notably those at Colorado and Nebraska, the importance of the delivery hall as the principal place for the loan of books. has been greatly reduced by the provision of loan desks in the divisional reading rooms.

The location of the card catalog adds to the complication of planning the delivery hall. It should be near the loan desk, the reading rooms, the staff work rooms (particularly the order and catalog departments), and the bookstack. Since its expansion is inescapably related to the growth of the book collection, ample space for its expansion and use should be provided. Otherwise, the delivery area may become a bottleneck which will seriously limit the use of the library.

Acquisition and catalog rooms.-The most important staff work rooms are those which house the technical departments of the library. Here books are ordered, received, accessioned, classified and cataloged, and otherwise prepared for use. The important factor to consider in planning these rooms is that the various processes involved are interrelated and that the flow of work from the ordering of books to placing them on the shelves should be orderly, systematic, and efficient. Separation on different floors of the order department from the catalog department, as at Denver, splits operations which
should be closely correlated. Breaking the catalog department into several rooms, as it existed in Harper Library of the University of Chicago before alterations were made in 1944, limits efficiency and interferes with the supervision of processes.

In the technical rooms, sufficient space should be provided for accommodating desks, office equipment, catalogs, book shelves, aisles, and offices for the heads of units. It has been recommended that at least 100 square feet be allotted for each staff member, with additional space for expansion. This extra space should be allowed within the general area set aside for the work rooms rather than in another part of the building, since separation of processes generally entails loss in efficiency.

The staff work rooms should be located near the public catalog and have direct access to the stacks. The number and arrangement of rooms vary from one library to another. In some buildings the technical processes are grouped in one large room with double-faced bookcases for partitions. This arrangement often saves space, provides flexibility, and makes supervision relatively simple. In other buildings the order and catalog departments are in separate rooms, with a smaller bibliography room between them. This latter room is generally made accessible to students and faculty members, as well as to the library staff. The library of the University of Southern California has a desirable arrangement of this kind. The bibliography rooms at Harvard and Yale are accessible to both the public and the library staff. The bibliography room in the library of the University of Oregon is flanked on one side by the card catalog and on the other by the catalog and order departments. At North Carolina the catalog department is just across the corridor from the depository catalog and the bibliographical collection.

Offices for administrators.-Offices for the librarian, the assistant librarian, and the heads of departments constitute another important type of staff accommodation which must be provided. The location of the librarian's office may be determined on the basis of two factors: proximity to the staff work rooms and accessibility to the library's clientele. The latter may be of more importance than the former. The office should be so situated, however, that it may be reached without passing through other offices, work rooms, or reading rooms. Anterooms for the librarian's secretary or executive assistant and for official supplies are usually provided. The offices of
the assistant librarian and the departmental heads should be located near the work for which these executives are responsible.

Receiving and shipping room.-In order to handle efficiently the large amounts of materials coming into the library, it is necessary to provide a receiving room. This room, located on the ground floor, with easy access to the street and provided with an unloading dock, should be large enough to permit unpacking and sorting materials. Work tables and shelving should be provided. Connection with the processing rooms should be made possible by means of an elevator.

Storage rooms.-In any library of considerable size, storage rooms for materials awaiting processing are required. They may be placed in the basement or in out-of-the-way rooms whenever they can be secured. Shelving should be provided in order to facilitate the listing of duplicates or other types of material. A part of the stack may also be used for unprocessed books.

Bindery.-Few libraries have binderies of their own. Notable among the libraries maintaining separate binderies in the central buildings are those at Minnesota, Wesleyan, and Temple universities. In these units the great bulk, if not all, of the repairing, binding, and rebinding of books, serials, and pamphlets of the university libraries is done. Unless a library has a large amount of binding to do annually, it may be advisable to follow the procedure of most libraries in sending materials to commercial binders.

Photography department. ${ }^{43}$-A plan for a regional distribution of photographic laboratories in the United States was discussed in chapter xiii. On the basis of existing laboratories and the trends in technical developments, however, two kinds of photographic departments in university libraries may be described. The first is the small unit, with the minimum basic equipment necessary for producing negative and positive films and enlargement prints and perhaps photostats of ordinary books and manuscripts. For an investment of about $\$ 5,000$, a laboratory equipped to fill the ordinary demands of students and faculty members may be installed. Temple University Library spent $\$ 3,087$ to equip its photographic laboratory. This laboratory, established after the Sullivan Memorial Library had been completed, involved the expenditure of a considerable sum for ma-

[^283]sonry construction, lighting, and plumbing. ${ }^{12}$ The cost of installing a laboratory in an old building varies with the locality and the physical peculiarities of the structure. Costs are generally decreased when the department is made a part of a new building. The photographic laboratory in the Alderman Library at the University of Virginia was planned to occupy a strategic position on the first floor of the building, adjacent to the film reading room and the general rare-book section. This arrangement follows the recommended administrative practice of separating the consultation and reading of film from the production of it. The total cost of the units of the laboratory has been calculated at $\$ 4,08 \mathrm{r}$. ${ }^{43}$ Laboratories of this type usually find it difficult to photograph newspapers extensively, to make highquality positive contact prints, and to execute textual projects. This condition is due to the lack of major pieces of equipment, inadequate physical quarters, and untrained personnel. The photographic laboratory of Brown University is another example of the medium-sized unit. Established through a grant from the Rockefeller Foundation, ${ }^{44}$ this laboratory supplies, on microfilm or photoprint, copies of the full text of articles abstracted in the journal Mathematical Reviews. It also fills orders for negative or positive microfilm, projection prints, and lantern slides of material in the library collections of the university. Unlike the Temple and Virginia laboratories, which are located in their respective library buildings, the Brown photographic department has its quarters in the building in which the Mathematical Reviews is published. ${ }^{45}$

The second type of noncommercial laboratory, ${ }^{46}$ of which the University of Chicago, the Library of Congress, and the National Archives are examples, is designed to work extensively in newspaper and periodical filming, to produce duplicate copies of films, and to undertake major filming projects, in addition to executing individual

[^284]requests. It presupposes complete equipment and photographic apparatus, adequate physical facilities, and a highly trained personnel. This type of laboratory generally costs from $\$ 10,000$ to $\$ 25,000$ or $\$ 30,000$ to instal. A unit of this size is beyond the scope of most university libraries either to establish or to operate.

## ROOMS FOR THE PUBLIC AND STAFF

The rooms mentioned above do not exhaust the list of quarters to be provided in a university library building. Public toilets, conveniently located coat rooms, janitors' quarters, and such facilities for staff comfort as rest rooms, locker rooms, lavatories, kitchenette, and lunch room must also be provided.

Once the general layout and the different types of accommodations for books, readers, and staff have been decided, the question of equipment should receive consideration. In a building as specialized as a university library, adequate equipment is especially important; and the task of planning is one that calls for expert judgment. Separate consideration must be given to each room in order that its equipment may be suited to its particular function. The advice of the librarian should be helpful in determining the various types of equipment needed, but the services of engineers and experts should be employed from the beginning. Among the most important items which must be provided are systems of lighting, air conditioning, heating and ventilating, acoustical treatment, floor coverings, furniture, and mechanical devices. These matters may now be considered.

## lighting

The problem of providing satisfactory lighting for the reading rooms and other units of the building has always been a difficult one for librarians. As Kraehenbuehl ${ }^{47}$ has pointed out, the lighting must be quantitatively sufficient, as represented by foot-candles, and still meet exacting requirements of quality. Moreover, the librarian needs to consider not only the cost of the original installation but also the cost of maintenance. The question of lighting is one which should be reviewed from time to time by the librarian, as new developments are constantly being made.

The minimum amount of light recommended for school lighting is 15 foot-candles, although general office lighting is said to require 25

[^285]foot-candles. ${ }^{48}$ Kraehenbuehl suggests that library lighting might well be 30 foot-candles, or double the minimum recommended for school lighting. In any new library construction, wiring provisions should be made for increasing the amount of light without altering the basic illuminating system.

In so far as quality of lighting is concerned, it is important to eliminate either direct or reflected glare which may be due to improper illumination and reflection from the surfaces of tables, windows, walls, ceilings, and books. The surroundings of the room, therefore, need to be considered in any lighting system.

The nearer illumination approximates daylight the better suited it is to the requirements of library users. Artificial lighting seldom reaches the intensity of daylight. On a bright day, a student seated near a clean window has the light equivalent of 200 foot-candles. Furthermore, the light is dispersed evenly over the whole portion of the material being used. Such intensity, of course, is not necessary, for too much light may be as disturbing as too little. In addition, as a reader moves away from the windows in a large room, the benefits of natural light decrease rapidly. It is important, however, for the library to provide shades or blinds to shut off the glare from windows. The placement of tables and chairs so that the readers and workers do not face exposed windows is a practice uniformly followed in reading rooms and offices.

Indirect illumination has been developed to minimize the effect of glare of exposed lamps. The University of Virginia Library, which has 15 -foot ceilings in the reading rooms, has used indirect lighting al- . most exclusively. In a few rooms, such as the Virginia Browsing Room and Memorial Hall, the fixtures are modeled so as to conform to the requirements of period and style. Careful study indicated that the illumination from the indirect ceiling fixtures would produce a satisfactory reading plane without further assistance of table lamps. Most librarians have endeavored to avoid table lamps, which were often present in the older buildings. They are usually unattractive and add to the difficulty of supervising the rooms. They may be necessary, however, when other lights fail to give adequate illumination. ${ }^{49}$

[^286]A trend, recently noted, to avoid high or vaulted ceilings in reading rooms has a direct relationship to lighting. Indirect lighting apparently is more practical in a room in which the ceilings are low. The library of Northwestern University, with its high ceilings, was forced to utilize conduction rods extending from the ceiling to the tables in order to provide proper lighting. In its general reading room, Columbia has combined indirect general illumination, emanating from lights inserted in the tops of book cases, and direct lighting from recessed lights in the ceiling. A similar type of recessed ceiling lighting is used in the combined Periodical Room and Business Library of Temple University. In the installation of fluorescent lights, care should be taken to instal them in short units, since long units, unless built so that vibrations are removed, are likely to be noisy. Indirect lighting usually requires the use of wall and ceiling paints which retain their original reflective values. Heat, dust, and natural light have a tendency to change the original colors.

The lighting of the reading room has probably been given greater attention than that of any other part of the library. However, the lighting of the work rooms of the librarians, the offices, special exhibit rooms and cases, the catalog cases, carrells, stackrooms, washrooms, and other areas is just as important if good service is to be uniformly rendered by the library. A good direct or semidirect lighting system which affords proper brightness contrast should be provided throughout the building. Machines or surfaces with high specular reflection should be eliminated. ${ }^{50}$ Exhibit rooms likewise require careful attention if sufficient lighting and the proper atmosphere is to be provided. Exhibit cases should be carefully lighted and ventilated to prevent overheating. The card catalogs usually can be satisfactorily illuminated by the general lighting system. However, some libraries use various types of lighting systems along the tops of the catalog cases to illuminate the cards. Generally, a light of 25 footcandles is sufficient. Carrells require as much light as is usually provided at a reading table, and they should be protected from glare

[^287]from stack lights. The lighting of the stacks themselves should be such that books may be quickly and easily observed. An illumination of from to to 15 foot-candles is sufficient for these purposes. The stack lights of the University of Virginia Library contain reflective devices in the fixtures which protect the eye and at the same time disperse ample and uniform illumination through the whole height of the stack compartments. An illumination of 10 foot-candles is satisfactory for washrooms, locker rooms, and reception rooms, while corridors, aisles, stairways, and other passageways should be provided with an illumination of 5 foot-candles.

## AIR CONDITIONING

Air conditioning, in the language of the engineer, is something more than keeping a building cool during the heat waves of summer. The American Society of Heating and Ventilating Engineers defines "air conditioning" as "the simultaneous control of all or at least the first three of those factors affecting both the physical and chemical conditions of the atmosphere within any structure. These factors include: temperature, humidity, motion, distribution, dust, bacteria, odors, toxic gases, and ionization, most of which affect in greater or lesser degree human health or comfort." The engineer also distinguishes among installations for winter air conditioning, summer air conditioning, and year-round air conditioning. The important advantages which a library may expect to derive from air conditioning are: ( I ) aid in the preservation of materials and equipment; (2) ideal working conditions for the staff and readers; (3) reduction of dust; (4) the elimination of the cost and noise of electric fans; and (5) the provision of humidity in winter and control of excessive humidity in summer.

In general, the three main problems to be considered in air conditioning a library building are: ( 1 ) the preservation of printed material and manuscripts; (2) the comfort of readers and staff; and (3) the elimination of dust. Studies have been made by the United States Bureau of Standards to determine under what conditions paper and binding can best be preserved. Tests have shown that sunlight, extreme heat, dryness, dampness, and sulphur dioxide are injurious to paper and leather; therefore, libraries must provide atmospheric conditions which will keep these factors under control. Changes in paper are nearly zero at a temperature of $65^{\circ} \mathrm{F}$. and a relative humidity of 60 per cent. For human comfort the temperature range in winter should be about $70^{\circ} \mathrm{F}$., and the relative humidity from 20 to 50 per
cent; in summer, from $76^{\circ}$ to $82^{\circ} \mathrm{F}$., with a relative humidity ranging from 40 to 70 per cent. At the Huntington Library the bookstacks are kept at a constant year-round temperature of $70^{\circ} \mathrm{F}$. and a relative humidity of 50 per cent. For protection against dust the air should be filtered, washed, and treated with chemicals so that any acidic fumes arising from fuel may be eliminated.

An increasing number of libraries have found air conditioning desirable. In Europe the British Museum and the Bibliothèque nationale have added the necessary equipment. In this country the Hill Memorial Library at St. Paul, Minnesota, the Rundel Memorial Library at Rochester, the Huntington Library in California, the Annex Building of the Library of Congress, the Joint Libraries of Nashville, and the Fondern Library of Southern Methodist University have provided such installations in recent years.

## NOISE PREVENTION

The prevention of noise in libraries is of importance as an aid to effective use by students and as an essential to the comfort and conservation of the energy of staff workers. ${ }^{5 x}$

The quiet required for concentrated study or research in libraries is frequently disturbed by noises which arise from outside or from within the building. Outside, or "background," noises generally cannot be controlled by the librarian; but noise developing within the building, owing to conversation, electric fans, walking, and the use of telephones, typewriters, and other types of equipment, may be minimized or eliminated by rather simple procedures. This is true even though the noise is due to corridors or stairways which concentrate traffic near entrances to reading rooms or to the use of building materials and equipment which reflect sound. Procedures which may be employed to prevent noise include the use of acoustical plaster for walls and ceilings in corridors, reading rooms, and work rooms; of soundproofing materials, such as Celotex, for the walls of the bindery or other rooms in which heavy machinery is in operation; of padding which contains insulating material for doors; and of cork carpet or specially treated linoleum as floor coverings. Wood is the least desirable of all types of material used for flooring, from the point of view of noise. ${ }^{52}$

[^288]In the case of a new building, it is desirable to locate the library structure on a relatively quiet site. It is often impossible to do this if it means placing the library away from the center of instructional and research activities. The use of air conditioning has made it possible to relieve the library of much background noise, however; and it is likely that this technique will be employed more for this purpose in the future. McDiarmid and Tatum ${ }^{53}$ make the proposal that library reading rooms may be more strategically placed at the center of the building than on the outside. Attention should also be directed to the equipment and furniture used. Before being purchased, electric fans, typewriters, chairs, book trucks, catalog trays, and binding and photographic equipment should be examined for noise production as well as for other features.

## EQUIPMENT

To increase efficiency, to reduce errors, and to release the professional personnel from routine duties, some librarians have installed a number of machines and special types of equipment which have proved successful in business and industry. Among these are communication systems, such as telautographs, teletypewriters, and pneumatic tubes; stenographic equipment, including typewriters, dictaphones, and ediphones; and machines for handling departmental accounts, pay rolls, fines, circulation statistics, and other library records. These include various types of calculating machines, Hollrith and Power punched-card machines, electric typewriters, duplicating machines, electric erasers, and other devices used in usual library processes. ${ }^{54}$

## APPARATUS FOR SPECIAL USES

Special apparatus is frequently employed for purposes not common to all libraries.

Binding department.-Since binding must be either done or directed by skilled artisans, only the more important items are listed.
${ }^{53} \mathrm{Op}$. cit., pp. 208-9.
54 For information concerning mechanical aids in libraries see the following: "Economies by Mechanization in Public Libraries in War-Time," Librarian and Book World, XXIX (1940), 238-40, 260-262; E. M. Fair, "Equipment and Mechanical Devices Adapted to Use in Libraries," Bulletin of the American Library Association, XXXIV (1940), 455-57; R. H. Parker, "The Punched Card Method in Circulation Work," Library Yournal, LXI (1936), 903-5; E. C. Pratt, "International Business Machines' Use in Circulation Department, University of Florida Library," Library fournal, LXVII (1942), 302-3; M. C. Quigley, "Library Facts from International Business Machine Cards," Library Journal, LXVI (1941), 1065-67; M. E. Scott, "For Catalog Card Reproduction Is Always with Us," Library fournal, LXVI (1941), 199; D. Waugh, "Business Machines in the Public Library," Wilson Library Bulletin, XVI (1942), 366-67.

These are electric glue pots, electric paper-cutters, board-cutters, book sewing machines, backers, book presses and vises, eyelet machines, perforators, and electric punch and drill machines.

Fumigation.-In some libraries, particularly those in warm climates where insects breed rapidly, fumigating equipment has been required. The University of Virginia Library has installed special equipment for removing roaches, silverfish, and other book pests. A vacuum fumigator, modeled after that of the National Archives, though on a much smaller scale, is used to destroy insect eggs and live pests.
It is used to fumigate materials coming into the building on exchange and gift, particularly from foreign countries. Materials acquired by the library-manuscripts, archives, documents, family books and papers, etc.-which have been stored in places susceptible to the ravages of pests are also fumigated before they are sent to the order department for incorporation into the collections.

Microphotography department.-The equipment needed for microphotographic work demands an ever increasing technical knowledge for operation. For that reason, little can be said here about the machinery needed for photographic reproduction. A few of the more important items will be mentioned, but only those that would be used in a medium-sized photographic laboratory. ${ }^{55}$ Space is required primarily for an office for records and administration, a camera room, an enlarging room, and a darkroom. The major pieces of equipment needed for these rooms are cameras, book cradles, enlargers, checking and splicing equipment, trimming and printing equipment, a sink, a cabinet for chemicals, a mixing table, a paper-dryer, a film-dryer, and a film-washer. This is by no means all the equipment needed for microphotography. ${ }^{56}$

Public service departments.-Several devices have been developed for the use of the circulation department in transmitting messages to the stacks, in bringing books from the stack to the desk for circulation, and in handling various circulation records. Among these are various types of book lifts and book conveyors for bringing books from the stacks to the circulation desk quickly. Pneumatic tubes for carrying books have already been mentioned. The electric book lift,

[^289]a modern development of the hand-operated dumb-waiter, is probably used more commonly in libraries than any other book-conveying device. It can be used both to carry a message to the pages in the stacks and to bring the books requested to the circulation desk. More recently, endless chain, or endless belt, book conveyors have become common. Many of these can be set to deliver the book from the carrier at any desired receiving station. In their latest form such book carriers are capable of both horizontal and vertical book conveying. All operate on the principle of the industrial conveyor belt.

Simpler gravity conveyors are useful at the circulation desk itself for books that have been returned. These consist either of a chute or of a series of rollers that deliver books into a bin set at a lower level. To prevent injury to the books by a drop from the end of the conveyor into the bin, bins have been equipped with movable bottoms that depress gradually as books accumulate on them.

Devices for announcing the receipt of requested books at the circulation desk are used by some university libraries. These annunciators commonly consist of a series of numbered glass disks or squares that are visible from all parts of the delivery hall. The person requesting a book is given a numbered slip, and the same number is written on his call slip. When the book or a report on it arrives at the circulation desk, the number is lighted by means of a bulb behind the numbered glass disk.

Probably the most complicated machines that have been adapted for circulation work are the punched-card machines developed by the International Business Machine Corporation. Their use, as reported by the libraries of the universities of Texas, Virginia, and Florida, and the Montclair, New Jersey, Public Library, ${ }^{\text {s7 }}$ has resulted in simplification and a speeding-up of circulation routines and has made possible the quick tabulation of other information of importance concerning books and readers.

Either the circulation department or the reference department should be equipped with machines for the reading of microfilm. Other devices frequently used are the time stamp and visible files. The latter may also be used in handling registration files and interlibrary loan and serial records.

## REARRANGING, ALTERING, AND ENLARGING LIBRARY BUILDINGS

Instead of erecting a new structure, the librarian sometimes is faced with the necessity of rearranging, altering, or enlarging the ex-

[^290]isting building in order to provide adequate space for readers, staff members, and book storage. The effect of lack of space for book storage is just as serious as inadequate space for service areas, since it is not possible to give quick and efficient service when parts of the book collection have to be stored in some out-of-the-way space in boxes or when books are piled upon one another on the shelves.

Primary among the factors that tend to render a university library building inadequate are: (1) growth in the number of faculty members and students, (2) changes in methods of teaching, (3) the rapid increase in materials, and (4) original faulty planning. It was the first of these factors that made necessary the remodeling and enlargement of the library of the City College of New York. ${ }^{58}$. The library was built when there were only 2,500 students. At the time the remodeling was begun (1938), there were 16,000 students. It is evident that simple remodeling was not enough; there also had to be a considerable increase in the size of the building. The third factor was responsible for the new addition to the stacks of the University of Illinois. Because the library building was planned so that it might be extended almost indefinitely, the addition was relatively inexpensive. The stacks themselves were used for the framework; and as a result the walls are a mere shell, to act as a covering, since they do not have to support the weight of stacks and books. ${ }^{59}$

The libraries of the University of Illinois and the University of Michigan furnish examples of buildings in which allowances for expansion were made in the original plans. Other universities have tried to make the building large enough at the outset to care for many years of additions to the library collection. It has not been unusual to find that the highest estimates of growth were exceeded in fewer years than were allowed. Need for remodeling and alteration may, in such cases, be attributed to poor original planning. Having made the highest estimates for growth of which they could conceive, the planners made no provision for additions to the building or for simple expansion, like that at Illinois. The effects of poor planning may also be seen in the way the interiors of library buildings are cut up into small sections with heavy, supporting walls between them. Removing these separating sections to provide for service under different conditions requires a major operation ${ }^{\circ}$ which approximates the construction of a new building. The planners may

[^291]have conceived of growth accurately enough in some respects but have been unaware of it in others. For example, while providing ample space for growth of the book collection, the fact that the card catalog grows faster, proportionately, than the book collection may have been ignored, resulting in a small room for the catalog without possibilities for enlarging it.

A decision to remodel a university library building should be made only after careful consideration. Frequently the decision to alter the present building is based on costs, assuming that the cost of remodeling will be considerably less than that of a new building. Wheeler and Githens warn that "remodelling requires greater ingenuity than building afresh," and they recommend the comparison of the plans and estimates for alterations with the corresponding items for a new building. When this is done, it may be discovered that the costs of remodeling so nearly approach those of a new structure that waiting until more funds are available for a new building will be justified. ${ }^{60}$ Wheeler and Githens give three rules for alterations and additions:

1. List the spaces needed for an efficient library as though starting anew, then alter and add to the old building to accommodate these needs.
2. Alter as little as possible, add as much as possible, for addition is cheaper than alteration.
3. Tear down and start afresh if alteration will cost nearly as much as a new building; for remodel ing is a compromise, and repair and maintenance costs are higher than for a new building. ${ }^{6}$

The foregoing indicates the ways in which the library may gain more space-by alterations and reorganization or by additions to the existing building. Alteration of the building involves remodeling of the interior of the building. It involves partitioning of large vestibules and corridors; installation of mezzanines in two-story rooms; removal of partitions that cut the building into small rooms; and, as a part of the reorganization accompanying alteration, the utilization of waste spaces, such as portions of the basement and corridors.

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60 Wheeler and Githens, op. cif., p. 355.
${ }_{6}{ }^{6}$ Ibid.

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## CHAPTER XV

## OFF-CAMPUS RELATIONS OF THE LIBRARIAN

IN CHAPTER ii the relations of the university librarian to other officers and members of the university community were discussed. They were shown to constitute an important part of his professional activities, but they were only one part. In chapter xiii, which deals with the integration of resources for research, another aspect of the professional work of the librarian is revealed. His participation in the work of organizations not specifically related to the university community is shown, as well as the nature of the major undertakings in which he and representatives of the organizations engage. These activities, even though they may not be understood by other members of the university, are also important. In fact, they add greatly to the importance of the librarian's work, and through them the librarian is enabled to contribute directly and significantly to the advancement of librarianship and scholarship.
In the present chapter further and more specific consideration will be given to these off-campus relationships. Some of the organizations with which the librarian usually works will be listed; the nature of some of the enterprises in which he has engaged will be indicated; and by means of case histories it will be shown how several university librarians have actually worked with various organizations or combinations of organizations in carrying out specific undertakings.

## associations and organizations

Obviously, it will be impossible to list all the associations and organizations with which the university librarian, at one time or another, has worked. There are five groups of organizations, however, with one or more of which it has usually been customary for him to collaborate in special undertakings. These are: (1) library associations (local, state, regional, national, and international); (2) educational associations (in the same categories); (3) government offices and departments; (4) educational foundations; and (5) learned societies. These by no means exhaust the list, but they may well serve as illustrations.

Each of these groups, in turn, will be found to contain from half a dozen to a score or more associations or organizations which the librarian or the prospective university librarian can overlook only at the peril of himself and his library. Some of the most important in each category are the following:

Library associations.-American Association of Law Libraries, American Library Association (especially its Boards on Education for Librarianship, International Relations, Publications, and Resources of American Libraries and its Committees on Archives and Libraries, Bibliography, Indexing and Abstracting in the Major Fields of Research, Photographic Reproduction of Materials, and Public Documents); Association of American Library Schools; Association of College and Reference Libraries; Association of Research Libraries; Catholic Library Association; Inter-American Bibliographical and Library Association; International Federation of Library Associations; Medical Library Association; Music Library Association; National Association of State Libraries; Pacific Northwest, Southeastern, and Southwestern Library Associations; Special Libraries Association; and Theater Library Association. Closely related to these are: the American Documentation Institute, American Library Institute, Bibliographical Society of America, and Society of American Archivists.

Educational associations.-American Association of University Professors, American Association of University Women, Association of American Colleges, Association of American Universities, Association of Land-Grant Colleges and Universities, Institute of International Education, National Association of State Universities, National Catholic Educational Association, National Education Association, and North Central and Southern Associations of Colleges and Secondary Schools.

Governmental offices and agencies.-Library of Congress, National Archives, Office of the Superintendent of Documents, Smithsonian Institution, U.S. Department of Agriculture, U.S. Office of Education, and U.S. Office of the Surgeon General. ${ }^{\text {X }}$

Learned societies.-American Council on Education; American Council of Learned Societies (including twenty-three organizations, such as the American Antiquarian Society, American Philosophical Association, Bibliographical Society of America, and Modern Lan-

[^292]guage Association of America); National Academy of Science; National Research Council; and Social Science Research Council (including seven organizations, such as American Historical Association, American Political Science Association, and American Sociological Association).

Educational foundations.-Carnegie Corporation of New York, Carnegie Endowment for International Peace, Carnegie Foundation for the Advancement of Teaching, Carnegie Institution of Washington, General Education Board, Julius Rosenwald Fund, and Rockefeller Foundation.

These organizations have varied interests, many of which coincide with those of the university librarian; their personnel and resources are extensive; and the opportunities which they present the librarian for effective co-operation in significant enterprises are many and challenging.

## NATURE OF ACTIVITIES

The type of activity in which these organizations engage is indicated in part by their titles. Those enterprises in which they have participated and which have most appealed to the university librarian include: ( 1 ) the cultivation of international cultural relations; (2) the compilation and publication of major catalogs and union lists; (3) the establishment of regional union catalogs and bibliographical centers; (4) the description of the holdings of individual libraries and groups of libraries; (5) the improvement of college and university library book collections; (6) the improvement and support of education for librarianship; (7) the development of laboratories for the photographic reproduction of materials; (8) the reduction of the costs of library technical processes; (9) the study of scientific aids to learning; and (ro) the carrying-out of other undertakings-all of which are intended to contribute to the advancement of librarianship and scholarship.

The annual reports and proceedings of these organizations describe in detail the character and extent of many activities which the organizations carry on and constitute one of the most important parts of the university librarian's professional literature. They furnish, probably better than many of the publications devoted exclusively to the consideration of library problems, background and perspective essential to an understanding of the educational objectives which universities, educational foundations, learned societies, and related organizations are attempting to achieve.

## ACTIVITIES OF UNIVERSITY LIBRARIANS

The principal emphasis of the present chapter, however, will be devoted to the presentation of the case histories of a few university librarians, which may illustrate how librarians and representatives of other organizations work together and thereby contribute to the advancement of scholarship and research. The examples cited are not, in any sense, intended to be exhaustive or to describe all of the interests or activities of the individuals concerned but are illustrative of specific fields of interest or activity.

Fustin Winsor and Melvil Dewey.-For the purposes of this section the careers of Justin Winsor and Melvil Dewey, among the founders of the American Library Association, may be bracketed. Winsor's interest in the organization and development of libraries began to manifest itself early, when, as a Freshman at Harvard in 1849, he published A History of the Town of Duxbury. He did not complete his undergraduate work but went to Europe in his Senior year and spent two years studying literatures and languages and preparing for the role of a man of letters. Fifteen years later, however, he was awarded his degree as of the class of 1853 . In 1866, at the age of thirty-five, he became a member of the board of trustees of the Boston Public Library and wrote a noteworthy report on its activities in 1867. The next year he was elected superintendent or librarian of that library, and in 1877 he became librarian of Harvard University. His interest in librarianship expressed itself in many ways during his first presidency of the American Library Association (1876-85). He was one of the founders of the association and of the Library fournal (1876), and he participated in various activities of the association and related organizations. As president of the American Library Association, he attended the organization meeting of the British Library Association in 1877; and he was re-elected president of the American Library Association in 1897, to represent it at an international conference of librarians in England and to extend the relations of American libraries with the libraries of Europe. He was a member of the New England Historic Genealogical Society and the American Antiquarian Society and was chairman of the organization meeting of the American Historical Association when it was founded in 1884. He was the third president of the last-named association in 1887 and delivered a notable presidential address in that year entitled "Manuscript Sources of American History-the Conspicuous Collections

Extant." In the publication of his The Memorial History of Boston and his Narrative and Critical History he associated with himself a great many contributors who were members of these and other associations. In these and later publications he emphasized the importance of bibliography and cartography to a greater degree than previous historians had done-an importance which has been increasingly recognized in the field of historical writing. Through his knowledge of these subjects, gained in part through his work as librarian, he contributed to a significant aspect of American scholarship.

Melvil Dewey, librarian at Amherst when he developed his decimal classification in 1876 and librarian at Columbia University when he became the head of the first library school in the United States in 1887 (moved to the New York State Library, 1889), was the most active of the founding fathers of the American Library Association; and, as secretary of the association ( $1876-90$ ) and president ( $1890-$ 91), and later as librarian of Columbia University and of the State Library of New York, he participated in the establishment and direction of an amazingly large number of library and related organizations. He became the first editor of the Library fournal and organized and directed the first establishment to concern itself with the provision of library furniture and supplies, later the Library Bureau. He assisted in the organization of the British Library Association and was the projector of the organization of the American Library Institute and of the National Association of State Libraries; and, as secretary of the board of regents of the University of the State of New York and state librarian of New York, he organized the extension service of the latter institution. The founding and direction of the Lake Placid Club and the Lake Placid Club Education Foundation extended further his range of interests and relations in the United States, as did the development of the Classification decimale at Brussels in Europe. ${ }^{2}$

Both Winsor and Dewey had the rare opportunity of helping establish new organizations and of exploring new fields. That they succeeded in doing so, however, was due in large measure to their ability to win the co-operation of others engaged in related activities and thereby contribute to the development of librarianship and through it to the development of scholarship as well.

[^293]E. C. Richardson.-E. C. Richardson, librarian and associate professor of bibliology of Hartford Theological Seminary, 1880-90; librarian of Princeton University, 1890-1920; director, 1920-23; and honorary director and research professor of bibliography, 1923-25; and honorary consultant in bibliography at the Library of Congress from 1925 until his death in 1939, represented a somewhat later period of library development than did Winsor and Dewey. Basic organization was not so much the order of Richardson's day as interest in the provision of bibliographical apparatus, the building-up of resources for research, and the extension of library co-operation through co-operative purchase. A frequent visitor to Europe, he extended his knowledge of library co-operation abroad and participated in many of the conferences which centered their attention upon bibliographical problems. His membership in organizations, both American and foreign, such as the Preussische Akadamie, the Società ligure di Storia Patria, the Bibliographical Society of America, the American Historical Association, and the American Society of Church History reflect his varied interests. He served as president of the American Library Association in 1904-5 and of the American Library Institute from 1916 to 1919. As chairman of the American Library Association Committee on Bibliography and as president of the American Library Institute, he urged the establishment of the Union Cata$\log$ of the Library of Congress and later had the great satisfaction of directing the project. As consultant at the Library of Congress, while participating directly in the significant expansion of the resources of that institution and directing the formation of the Union Catalog, he established contacts with libraries in all parts of the country which possessed special collections, and he provided for the inclusion of their holdings in the Union Catalog.
C. C. Jewett, assistant secretary and librarian of the Smithsonian Institution in 1853, had proposed at the conference of librarians in New York in that year the establishment of a union catalog, a plan for co-operative cataloging, and the building-up of the library of the Smithsonian Institution as the national library of the United States. These recommendations were not favorably received by his superior, and Jewett went to Boston and later became the librarian of the Boston Public Library. The printing of cards for its own collection was begun in 1898 by the Library of Congress, and the sale of its cards to other libraries was provided for in 1901 . It remained for Richardson, in his capacity as consultant, under the general direction
of Putnam, to carry the first of the Jewett proposals into effect. In the discussions of European librarians and bibliographers the proposal to organize a world union catalog had frequently been made. Richardson thought of the Union Catalog of the Library of Congress as America's contribution to that undertaking; and, although the idea of the world catalog was never carried out, this important section of what might have become a world catalog was carried forward (under Richardson's direction and through a grant of $\$ 250,000$ from John D. Rockefeller, Jr., in 1927) to a degree of completion which made its continuance a matter of normal routine.

The record of Richardson's work as consultant in building up the resources of the Library of Congress was also important. On visits to Europe in behalf of the Library he was constantly on the lookout for manuscripts and books essential to American scholarship which were not to be found in American libraries. He was well aware that there were several million such volumes which should ultimately find their way into American libraries, and he perfected an arrangement with several of the eastern university libraries by which any important book in this category secured by him would be taken by one of the co-operating institutions. Many of the procedures employed in cooperative purchase and in the development of union catalogs as they are known and practiced by American libraries today were initiated by him, and the work begun by him in these fields is increasing in significance constantly. In addition to his work in library associations, he served for a number of years as chairman of the Committee on Bibliography of the American Historical Association; and in 1902, with A. E. Morse, he edited the first volume of the publications issued by that association, under the title Writings of American History.

From the ranks of librarians recently retired, four may be cited whose off-campus activities have centered, for the purposes of this discussion, around the problems of international relations, the publication of union lists, the dramatization of the role of microphotography in libraries, and the professional training of librarians.
W. W. Bishop.-The foundations for the work of W. W. Bishop and for his services in the field of international library relations were laid during his stay in Rome in 1898-99 as a fellow in the American School of Classical Studies and during his membership on the staffs of the library of Princeton University, 1902-7, and the Library of Congress, 1907-1 5. In Rome he learned the importance of the mas-
tery of foreign languages in international communication; and at Princeton, under Richardson, and in Washington, under Putnam, he came to a fine appreciation of the international character of the materials of scholarship. Rome was the meeting place of both ancient and modern civilizations and was rich in the monuments and arts of each. Washington, in the early days of World War I, was quickening its tempo of world leadership. Both capitals, consequently, gave him an excellent opportunity of sensing the importance of international contacts and understandings.

The off-campus service for which Bishop is probably best known in the United States is that which he rendered the Carnegie Corporation of New York in more than a decade as chairman of the various advisory committees appointed by the corporation to improve the book collections of American, Canadian, and Near Eastern colleges. Under his direction, approximately $\$ 1,900,000$ was made available to colleges and institutions of different kinds. However, the activities of Bishop which were of greatest importance in their international aspects were: ( 1 ) participation in the organization and administration of the International Federation of Library Associations, (2) direction of the reorganization of the Vatican Library, and (3) assistance to Oxford and Cambridge universities and the League of Nations in projecting plans for library buildings.

The groundwork for the organization of the International Federation of Library Associations was laid by Bishop in 1924, when he was sent by the American Library Association and the Carnegie Endowment for International Cooperation to extend invitations to European librarians to attend the fiftieth anniversary meeting of the American Library Association. To his efforts was due in large measure the attendance of thirty-three representatives from foreign countries at the meetings at Atlantic City and Philadelphia in 1926 and the postconference visit of many of the delegates to libraries in other cities. As chairman of the Association's Committee on International Relations, he presided at the meeting at which the formation of an international committee was proposed; and he represented the association at the organization meeting of the International Committee in England at the fiftieth anniversary of the British Library Association in 1927. He was elected a member of the committee and in that capacity attended its meeting in Rome in 1928 to prepare for the first meeting, held in 1929 at Rome-Venice, of the World Congress of Libraries and Bibliography, now the International Federation
of Library Associations. In 1931, at the meeting of the International Committee at Cheltenham, England, he was elected president of the federation and in that capacity served for a period of five years. Upon his retirement in 1936 he was elected an honorary president.

During his presidency the second conference of the International Federation of Library Associations was held in 1935 at Madrid-Seville-Barcelona. In close touch with all of the activities of the committee and the federation, Bishop was particularly concerned with the formulation of agreements concerning interlibrary loans and the exchange of librarians. He also helped arrange for the attendance of foreign librarians at the American Library Association meeting in Chicago in 1933.

The mission which took Bishop to Rome in 1927, to consider the reorganization of the Vatican Library, was assigned him by the Carnegie Endowment for International Peace through its president, Nicholas Murray Butler, of Columbia University. After a visit to Rome in the spring of 1927 , Bishop submitted recommendations and set in train the series of operations which resulted, in the course of a few years, in the adoption of a classification scheme and catalog code for the handling of the manuscripts and books of the library; the training of a number of Europeans in American library schools to carry on the work after the reorganization had been successfully begun; the presentation, by the Library of Congress, through the cooperation of Putnam, of a depository set of cards; the installation of a new steel stack of American manufacture; and the beginning of the publication and distribution of cards by the Vatican Library,

The relations maintained by Bishop with the older English universities and the League of Nations concerned the erection of suitable library buildings. The foundation involved in this instance was the Rockefeller Foundation, which made large grants to all three institutions. Bishop met with the committees charged with the planning, and in the case of the commission of Oxford University he arranged for the inspection tour which it made of American and $\mathrm{Ca}-$ nadian libraries. He also recommended that a similar tour be made to important European libraries. Through frequent visits to Europe, Bishop maintained direct contact with the commission charged with the erection of the League of Nations Library. He also served as a member of the committee of library experts who advised the International Institute of Intellectual Cooperation of the League-a body which, in addition to advising concerning library matters in
general, has issued important treatises on the training of librarians in various countries ${ }^{3}$ and popular libraries for workers. ${ }^{4}$ In 1937 Bishop accepted an invitation from the Chinese Library Association to visit the libraries of China, but the mission could not be undertaken on account of the beginning of the war with Japan.

Apart from his official connection with these undertakings, Bishop has assisted in the training of many foreign librarians enrolled in the library department of the University of Michigan and has conferred informally with hundreds of library visitors from foreign countries concerning many aspects of library development. His contacts with directors of various foundations and learned societies also afforded opportunity for the informal consideration of problems of significance to the advancement of libraries and scholarship.

Fames T. Gerould.-Aid to scholars by James T. Gerould, who served in the libraries of Columbia University (1897-1900), the University of Missouri (1900-1906), the University of Minnesota (190620 ), and Princeton University ( $1920-38$ ), was rendered primarily through the provision of union lists, which expedited the consultation and use of important collections of journals, transactions of learned societies, manuscripts, newspapers, and documents. The first of these notable indexes was The Union List of Serials in Libraries of the United States and Canada, edited by Winifred Gregory and published by the H.W. Wilson Company in 1927. ${ }^{\text {S }}$ The preparation of this monumental index involved the co-operation of forty libraries, which checked their holdings for inclusion and aided in underwriting the costs of the publication. A subsidy was received from the Laura Spelman Rockefeller Memorial to be used in listing the holdings of federal libraries in Washington. The work was undertaken by a committee of the American Library Association of which H. M. Lydenberg, C. W. Andrews, Willard Austen, A. E. Bostwick, J. T. Gerould, and Nathan Van Patten were members. Lydenberg was chairman of the committee; but some time before the work was completed much of the task of directing and carrying out the

[^294]undertaking was turned over to Gerould. The publication of supplements, issued later and involving additional libraries, was also under the direction of the committee, with Lydenberg as chairman and Gabrielle E. Malikoff as editor. Two other lists followed in rapid succession. The List of Serial Publications of Foreign Governments, 18151931, appeared in 1933, with Miss Gregory as editor, Gerould as chairman of the American Library Association committee, and the H.W. Wilson Company as publisher. The American Library Association, the American Council of Learned Societies, and the National Research Council sponsored the undertaking; and assistance in carrying it out was given by the Laura Spelman Rockefeller Memorial and the Rockefeller Foundation. In 1937 American Newspapers, 18211936, was issued, the project having been sponsored by the Bibliographical Society of America. Gerould was chairman of the committee, with Lydenberg and Henry Spaulding Parsons as members. The Census of Medieval and Renaissance Manuscripts in the United States and Canada, edited by Seymour De Ricci, with the assistance of W. J. Wilson, was issued through the H. W. Wilson Company in 1935-37. The American Council of Learned Societies had proposed this publication in 1925 through a committee of which Professor Karl Young of Yale was chairman. He was succeeded by Gerould, and a grant was made in 1929 by the General Education Board to the Library of Congress, the proposal to be carried out through its Division of Manuscripts.

The importance of these indexes to scholars cannot be overemphasized. Their preparation involved the co-operation of hundreds of libraries, the assistance of numerous professional and learned societies, and the wise support of a number of educational foundations. Through his nearness to New York, his contacts with individuals and organizations engaged in research and publication, and his practical knowledge of publishing, he greatly increased the usefulness of these great categories of resources for research to American scholars.

Gerould was also mainly responsible for the organization of the Association of Research Libraries in 1932. He was impressed with the importance of providing a medium through which the problems of research libraries could be considered effectively without involving a large, heterogeneous membership. As a result of the organization of the association, the members have been able to give sustained consideration to many proposals, some of which, such as American News-
papers, 1821-1936, and the printing of the depository catalog of the Library of Congress in book form, have been carried through or inaugurated successfully.
M. L. Raney.-The focusing of attention upon microphotography through libraries as an aid to scholars, the development of appropriate apparatus designed to meet the requirements of libraries, and the installation of special laboratories to facilitate the production and use of microfilm have engaged the attention of a large number of librarians, manufacturers, and workers in related fields. Science Service, the National Archives, the Library of Congress, the New York Public Library, and the libraries of Harvard, Yale, and the University of Chicago, as well as several of the manufacturers of photographic equipment, were among the first organizations to participate in experimentation and development in the field. The dramatization of library interest in the development of microphotography, however, was directed largely by M. Llewellyn Raney (Johns Hopkins, 1903-27, and Chicago, 1927-42.)

Raney became impressed with the importance of this means of increasing resources for research on a trip to eastern libraries in the autumn of 1935. Upon his return to Chicago he began the preparation of an exhibit of apparatus for the approaching mid-winter meeting of the American Library Association. This exhibit was followed with an all-day symposium on the subject by the leaders in the field and a major exhibit of apparatus at the Richmond conference of the Association in 1936. The papers presented at the symposium were published, with Raney as editor, under the title Microphotography for Libraries. ${ }^{6}$ During the same conference the Committee on Resources of American Libraries was changed to a board by the American Library Association Council; and the Committee on Photographic Reproduction of Library Materials, with Raney as chairman, was established by the executive board. During the autumn of the same year the Rockefeller Foundation made a grant to the University of Chicago to equip a laboratory adequate to produce materials of a high quality and to demonstrate the value of such materials when produced in quantity for more than one library. Herman H. Fussler was placed in charge of the department and began the installation of apparatus.

While the plans for the laboratory were being carried into effect,

[^295]the American Committee on Intellectual Cooperation received an invitation to participate in the Paris International Exposition in 1937. The Committee, of which James T. Shotwell of Columbia University was chairman, decided to demonstrate the possibilities of microphotography as a means of promoting international intellectual co-operation. The American Library Association and the University of Chicago were asked to serve as joint sponsors of the exhibit, under the direction of Raney. A grant was made by the Rockefeller Foundation for the demonstration, and Raney and Fussler carried the program out in the spring of 1937. The demonstration was unusual in that it was not merely an exhibit of equipment; in addition, the considerable parts of thirty files of journals of the period of the French Revolution which were not available in American libraries were filmed, the original files having been located in the Bibliothèque nationale.

As chairman of the Američan Library Association committee, Raney arranged a second symposium and exhibit of equipment for the New York conference of the American Library Association in 1937. The proceedings of this meeting, with supplements, were edited by him and published under the title Microphotography for Libraries (1937). Other exhibits were arranged by him at the mid-winter meeting in 1936 and at the San Francisco conference in 1939. The Fournal of Documentary Reproduction, projected under the editorial management of Charles E. Rush, chairman of the committee in 1937-38, was the logical successor to the two earlier publications. Raney was also responsible for arranging an exhibit of microphotographic materials for the Tenth International Conference of Chemistry in Rome in 1938 and for the provision of American papers for the sessions of the International Federation for Documentation at Oxford (1938) and at Zurich (1939). He also extended the range of his interests in the subject through an exhibit and a paper before the Inter-American Bibliographical and Library Association at its meeting in Washington in 1940 and through numerous articles in professional journals. One of the most distinctive outgrowths of this interest has been the development of the laboratory at the University of Chicago through Fussler and the publication of his Photographic Reproduction for Libraries; A Study in Administrative Problems, ${ }^{7}$ for the guidance of university library administrators in dealing with problems in the field.

[^296]C. C. Williamson.-C. C. Williamson, dean of the School of Library Service of Columbia University and director of libraries of Columbia from 1926 to 1943, spent the earlier part of his library career in activities that were somewhat removed from the special field of education for librarianship for which he is possibly best known by members of the library profession. He served as chief of the division of economics of the New York Public Library during 1911-14, and 1919-21; as librarian of the New York Municipal Reference Branch during 1914-18; as statistician of the Americanization studies of the Carnegie Corporation of New York during 1918-19; and as director of Information Service of the Rockefeller Foundation during 1921-26. While librarian of the Municipal Reference Branch, he served as a member of the advisory board responsible for the publication of the Bulletin of Public Affairs Information Service; and, as chief of the advisory board in 1918 , he effected certain changes which have remained as permanent features of the service. The usefulness to scholars of this service, dealing with pamphlets, documents, and other ephemeral materials, has long been recognized as being of the highest order.

Another publication of somewhat similar nature for which Williamson was responsible was The Minutes of the Common Council of the City of New York, 1784-1831. Williamson had noticed that scholars and city officials were constantly going through the many bulky and more or less illegible volumes housed in the city clerk's office. He secured appropriations for editing the records, which were issued in 1917 in nineteen volumes and for a two-volume index, issued in 1930.

In the Americanization studies, published under the direction of Allen T. Burns (by Harper, in ten volumes), Williamson recruited a small staff of trained librarians to assist the research workers engaged in carrying out the studies. Although his work was anonymous, he participated in the preparation of the entire work and compiled the greater part of the material for the volume Americans by Choice, by John Palmer Gavit. During his connection with the Municipal Reference Library and the economics division of the Public Library, Williamson had also been associate editor of the National Municipal Review and a departmentai editor of the American Political Science Review. From 1921 to 1926 he occupied the newly created post of director of Information Service at the Rockefeller Foundation. The extensive library of the Foundation was placed in his department,
and he was charged with the foundation's publicity and the compilation, editing, and publication of its reports.

The relationship of these activities to the later service of Williamson, both as librarian and as dean, are apparent. He fully understood the needs of the scholars of a great university and the importance of training and investigation in librarianship if American librarians were to meet the exacting demands made upon them in teaching, research, and industry.

The study of library schools begun by Williamson in 1919 for the Carnegie Corporation of New York and published in 1923 requires little comment, since its significance was widely discussed at the time the report was issued and many of the principles set forth in it have been generally applied to education for librarianship. It should be noted, however, that the paper read by Williamson at the Asbury Park conference of the American Library Association in July, 1919, which preceded the investigation and report, contained the suggestion that probably brought into being the Board of Education for Li brarianship. In the later, full-length published report he urged that library schools be connected with universities; that their staffs contain a high percentage of full-time instructors chosen for distinction in training and ability; that the first year of study be general and basic; that specialization be reserved for the second and third years; and that a national examining board be created to formulate requirements concerning library training in general and to pass upon the credentials of library school graduates. The recommendation in the Asbury Park paper, providing for the establishment of a national examining board (similar to that of the British Library Association), charged with the setting-up of minimurn standards, the organization of a plan of study, the holding of examinations, and the issuing of credentials, was not carried out in the form contemplated; but the Board of Education for Librarianship, established in 1924, has performed many of the functions suggested in Williamson's recommendation. It dealt with standards and curriculums and became an accrediting body of schools rather than of individuals; and it continues to concern itself with the changing conditions of library service broadly conceived.

The merging of the library schools of the New York State Library and the New York Public Library in 1926 under Williamson's direction, the reorganization of the curriculum of the School of Library Service, the publication of syllabi for the various courses offered by
the school, the development of extensive apparatus and procedures for examinations, experimentation in the development of tests applicable to prospective librarians, the establishment of a series of "Studies in Library Service," the development of a plan of parttime employment of students of the schools of New York and other libraries, and the securing of endowment for the Melvil Dewey Professorship by the Carnegie Corporation represent other aspects of Williamson's interest in education for librarianship.

Two other activities of Williamson merit comment. Soon after he went to Columbia he found that the publication of the highly important catalog of the Bibliothèque nationale was dragging on interminably. He went to Paris to discuss the matter with the director, Roland Marcel, and secured a grant from the Rockefeller Foundation for Marcel to come to America to consider the matter further. An agreement was worked out with American subscribers to speed up the rate of publication, and a grant was received from the Rockefeller Foundation to supplement library support. As a result of this activity the French government agreed to increase its appropriation for the catalog. In recognition of his interest and the aid secured for the undertaking through him, Williamson was made a Chevalier de la Légion d'Honneur in 1929.

The publication of Who's Who in Library Service in 1933 and of the revised edition in 1943 has been of particular significance to librarians. Through the two editions librarians have been able to secure data concerning members of the profession about whom information would otherwise not be so easily available.

Other librarians.-The list of librarians who have engaged in activities similar to those already described might be continued at length, but this is unnecessary for the purposes of illustration. The work of certain other librarians, however, which has emphasized additional aspects of library service, may be mentioned briefly. Charles W. Smith (Washington) and Malcolm G. Wyer (Denver) have contributed to the development of regional union catalogs and bibliographical centers in regions far removed from the concentration of libraries in the Middle West and East. Both centers have received financial support from the Carnegie Corporation and have involved the co-operation of large numbers of libraries.

At Nashville, A. F. Kuhlman (Joint University Libraries) has aided the faculties of three institutions in reorganizing their curriculums to reduce competition and thus release money for gradu-
ate instruction. He has also aided the institutions in developing what may be styled a "library holding company" or board for the co-operative administration of the Joint University Libraries, which represents a novel conception of library organization in the United States. As chairman of the American Library Association Committee on Documents, he carried to completion the work begun by a committee of the Social Science Research Council in establishing document centers in the United States and prepared the programs and edited the papers published as separates by the association under the title Public Documents for 1933, 1935, and $1936 .{ }^{8} \mathrm{He}$ took a leading part in organizing the Association of College, and Reference Libraries; edited, in 1938, the papers presented before the University and Reference Libraries Round, Table of the American Library Association under the title College and University Library Service: Trends, Standards, Appraisal, Problems, and became the first editor of College and Research Libraries, in 1939. He edited, with an Introduction, The Development of University Centers in the South, which contained the papers presented at the dedication of the Joint University Libraries on December 5 and 6, 1941, and directed a survey of the University of Mississippi Library, published by the university in 194I. With P. G. Davidson, Dean of the Senior College and Graduate School of Vanderbilt University, he edited The Development of Library Resources and Graduate Work in the Cooperative University Centers of the South, the proceedings of a conference of graduate deans and librarians held in 1944.
R. B. Downs (University of Illinois) has emphasized the description of resources for research and library specialization. His first work in this field was in collaboration with Louis R. Wilson in the preparation of Special Collections for the Study of History and Literature in the Southeast, published by the Bibliographical Society of America in 1934. As a member of a subcommittee of the American Library Association Board on Resources, he edited, with the aid of collaborators, Resources of Southern Libraries, a Survey of Facilities for Research (1938); and, as chairman, he edited Library Specialization (1941), and Union Catalogs of the United States and The Resources of New York City Libraries (1942). He also participated in preparing a plan for co-operation between the University of North Carolina and

[^297]Duke University in duplicating their catalogs and dividing the field for the acquisition of documents and other materials. The General Education Board and the Carnegie Corporation provided financial assistance for several of these undertakings, for which various boards and committees of the American Library Association, the American Council of Learned Societies, the Social Science Research Council, and other organizations were sponsors. Downs also served as chairman of a special committee of the American Library Association and the Special Libraries Association which was charged with the responsibility of describing the resources of American libraries useful in defense, and in 1942 he became chairman of a joint committee of the American Library Association and the Association of Research Libraries on the Union Catalog of the Library of Congress. As the chairman of that committee, he undertook to secure the co-operation of approximately one hundred of the major research libraries to check the new Library of Congress printed catalog as it appeared and to report to the Union Catalog any titles which were not included in it.

Charles E. Rush (North Carolina) served for two years, 1934-36, as informal adviser on library services for the Carnegie Corporation, including educational and professional investigation in the United States, Canada, Newfoundland, and on the Continent. In 1936 he conducted a survey of photographic and microphotographic facilities then available in educational institutions in six European countries. He was chairman of the editorial board which established the Fournal of Documentary Reproduction; and, with the aid of another member of the Yale faculty, he organized, developed, and obtained a grant-in-aid for the establishment of the general-studies division in the Graduate School of Yale University.

Charles H. Brown (Iowa State College), by negotiating with certain German publishers of scientific journals, secured a reduction in subscription charges which libraries found it difficult to meet in the early I930's; and, as chairman of the Committee on Reorganization of the American Library Association, he carried through the revision and adoption of the constitution of the association in 1941. Brown served as president of the association in 1941-42, was chairman of its War Committee, and represented the association in its relations with libraries in China.

In 1941 Keyes D. Metcalf (Harvard) served as chairman of the American Library Association Committee on Co-operative Cataloging and the Board of Education for Librarianship, and in 1942-43 he
was president of the association. For five years he was executive secretary of the association of Research Libraries, and he promoted the organization of the New England Deposit Library. As a member of the Librarian's Council of the Library of Congress, he was a joint author of a proposal for acquiring materials for research.
H. M. Lydenberg and Herbert Putnam.-Lydenberg and Putnam were not university librarians. They were, however, the librarians of the nation's largest public library (the New York Public Library) and of the Library of Congress, which, under Putnam, became the national library of the United States. Located in cities in which many learned societies, educational foundations, and governmental agencies had their official headquarters, both men were constantly in consultation with librarians and members of these organizations and with individuals and associations in America and abroad interested in aiding scholars through libraries. Lydenberg, in New York, was always at hand to aid in the formulation of plans such as those which eventuated in the completion of Sabin's Dictionary of Books Relating to America, in the publication of the various union lists previously mentioned, and in the study of union catalogs, the durability of papers and films, microphotography, foreign importations in times of war, and many other subjects. As consultant and sponsor, his interest ranged over many fields and involved many organizations and agencies. Through the administrative organization of the library under his direction and the experts he utilized in staffing its services, he gave an illustration of the best in administrative planning and practice in American libraries. ${ }^{9}$ His service as librarian of the Benjamin Franklin Library in Mexico City, after his retirement in New York, represented still another aspect of his interests. Through this library, established by the American Library Association and the Rockefeller Foundation, he interpreted the institutions of culture in the United States to the people of Mexico; and since his appointment as director of the International Office of the Board on International Relations of the American Library Association in 1943, he has extended his services to all parts of the world.

The work of Putnam at the Library of Congress has been fully described in the Festschrift published in his honor in 1929 and in the Fortress of Freedom: The Story of the Library of Congress, by Salamanca, published in 1942. His direction of the war service of the

[^298]American Library Association in 1917-19 and his assistance to other libraries-through the printing of catalog cards and the publication of classification schedules, the provision of depository catalogs, the development of the Union Catalog, the provision of consultant and bibliographical service for scholars, and his participation in conferences of a national and international nature-were characteristic of his entire administration. The availability, for conference and consultation, of both Lydenberg and Putnam to all interested inquirers and the concern which they evidenced in all problems in which library service to scholars was involved splendidly illustrated the variety and scope of interest which it is the privilege of American university librarians to manifest, both within and without the university, in the advancement of teaching and research.

These case histories of the activities of individual librarians might well be supplemented by those of librarians and representatives of other organizations working in groups. The work of the bibliographical centers at Denver, Philadelphia, and Seattle; of the staff of the Library of Congress; and of the Assóciation of Research Libraries, to mention only a few groups, would, if described in a similar manner, evidence a concern in all these aspects of librarianship and would emphasize a like concern in the solution of the problems of co-operation, specialization, bibliography, and documentation which confront librarianship universally. The elimination of wasteful duplication and effort in building up greater resources for research workers, the discovery of means of processing various types of materials more speedily and in a less costly manner, and the extension of this co-operation and understanding to librarians everywhere may well constitute major goals of the university librarian in the future.

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## CHAPTER XVI

## EVALUATION: RECORDS, REPORTS AND SURVEYS

EARLIER chapters have shown that the problems of university librarianship in the United States are extensive and complex. New academic relationships, enormous book collections, relatively large budgets, diverse services in huge buildings, and enlarged and trained staffs are characteristic of the university library, administratively and educationally. Since this is true, it is necessary for the university library to maintain such records and to make such analyses of its operation as to provide facts for determining how effectively it serves its clientele. ${ }^{\text {. This chapter, therefore, will }}$ discuss the nature and purposes of library records, reports, and surveys.

## RECORDS AND REPORTS

Whether in business, industry, educational institution, governmental unit, or university library, presumably every record and report is gathered for the purpose of describing situations. Most large units of business or of an educational institution are required to submit reports of their work at regular intervals. These reports-annual, semiannual, or monthly-describe achievements, failures, and elements of strength and weakness. In addition to the regular report, the librarian is sometimes called upon to prepare special reports on projects or other activities of the library. The preparation of such reports is generally regarded as one of the important duties of the administrator, since it involves a careful review and an analysis of the year's activities or of a special project: The reports are usually accompanied by recommendations or plans for future development.

Records.-In order to describe the performance and measure the success of his organization, it is necessary for the librarian to have available significant and complete records of resources and services.

[^299]Such records serve to show the accomplishments of the library, the costs of its services, and the shortcomings in its organization.

The various records kept by the university library may be conveniently grouped under three categories: (I) service records, (2) cost records, and (3) records of desiderata. The types of service records which libraries might keep may be summarized as follows: (a) circulation records, which may be gross or classified; (b) records of use of periodicals; (c) records of reference work; (d) records of interlibrary loans; (e) records of the use of bibliographical apparatus; and (f) records of other or special types of use.

Gross circulation records indicate in a general way the success of faculty and students in using the library. Some libraries further break down circulation figures by types of users or of use, to show how the service is distributed, and how it changes from year to year. A fair indication of the work done in a library by its clientele may be gathered from data concerning ( 1 ) circulation of books from the general library, departmental libraries, and special collections; (2) re-serve-book circulation; (3) use of reference and open-shelf books; (4) use of periodicals, newspapers, microfilms, maps, and other nonbook materials; (5) use of extension materials; (6) use of books through interlibrary loan; and (7) use of bibliographical tools. It is conceivable that, through a controlled study, data on stack use-an important type of use in the university library-can also be collected.

The importance of keeping records of periodical use was indicated in chapter x. Funds for periodicals and serials comprise a large portion of the annual budget; and, unless adequate records are kept of their use, it is likely that expenditures for them may be wasteful and unproductive.

Difficulties in keeping an accurate check of reference service have been discussed at length in library literature. Quantitative data concerning reference service give little information bearing on the qualitative nature of the service. It has been suggested that studies of reference service on the basis of elementary, intermediate, and advanced levels be made so as to enable the librarian to determine whether or not the staff members are qualified to aid patrons effectively at these levels and to discover wherein the book collections are deficient in meeting the demands. ${ }^{2}$ Records of interlibrary loans

[^300]likewise not only should indicate to the administrator the amount of time necessary for this type of service but should reflect the nature of the materials which his library lacks.

Library expenditures for catalogs and other bibliographical apparatus represent large annual outlays. Few libraries, however, have attempted to keep careful records of the use of such tools. Unless some idea is had of the ways students and faculty use catalogs, for example, unnecessary and even misleading practices may be instituted and perpetuated.

Records of the use of materials by alumni and other special groups are kept to show the extent of extension service. It is useful to the librarian to know, for instance, whether services to nonstudent and nonfaculty groups require more time than should be spared from the more essential functions of the library.

Two types of cost records may be kept by the librarian. The first type-gross costs-includes total costs of the library's operation, staff salaries, and, generally, cost of supplies and equipment. This type of record provides both the librarian and the university administration with a means of determining the relative emphasis placed upon the library and other units of the institution.

In recent years more attention has been given to the second type of cost records-unit-cost records. Such records reveal the expenditures for specific library operations, such as cataloging, binding, circulation work, or reference service. These data enable the librarian to prepare his budget more intelligently. - Without such information the administrator's pleas for funds are based on guesses rather than on specific knowledge of the cost of operations.

Records of book needs are accumulated through suggestions made by students and recommendations made by faculty members and library staff. Since the advent of microphotography and other reproductive techniques, the university librarian is now in a position to obtain cheaply copies of materials which would otherwise be unavailable.

Shortcomings of the library may be discovered by careful analyses of its equipment and services. Records of such studies should be available if the opportunity arises for instituting new services or for obtaining additional equipment. A complete inventory of existing equipment and supplies is essential to avoid unnecessary purchasing and to make it possible to locate apparatus and materials quickly.

Reports.-As an official stocktaking device, the annual report is the record which the responsible administrator submits to his superior officer. It is the tangible review of the manner in which the library has operated. It serves the librarian and the staff as an instrument of evaluation by giving them the opportunity to examine the achievements of the year and to learn, by implication, wherein the library is falling short.

Reports are part of the permanent record of the library. Experiments, additions to the staff, and changes in organization and methods should be recorded. Events which seem of small importance at one time may later prove significant, if only to save the librarian from repeating errors.

Information concerning the work done should be included in the report, to clarify and reinforce the library's request for support. Librarians should not assume that university administrative officials are so familiar with processes and services that they can accept without question requests for increases in the budget; a precise statement of conditions and needs is necessary.

It should also be evident that the report of each university librarian becomes a part of the source material of university librarianship. Together with staff manuals, carefully prepared reports should provide a fruitful source of information to practicing librarians and students of library problems. Such materials, if available for several years, should make it unnecessary for librarians and students to write for data on current operations and practices.

The library is always in competition with other units of the institution for support. The report can be one of the most effective methods of presenting the case for the library to administrative officers, legislators, faculty, alumni, prospective donors, and the general public. A well-prepared report may thus be used to enlist interest in library problems, to present data effectively in support of desired increases in budget allowances, and to encourage gifts.

The following aspects of the library are usually included in an effective report: (I) state of the book collection, (2) use of the library, (3) statistics of the preparational processes, (4) personnel matters, (5) information regarding income and expenditures, (6) descriptions of improvements made in the building or of equipment added, (7) special problems of administration and organization, (8) description of attempts to increase the usefulness of the library, (9) notes of spe-
cial progress, (io) work of the separate departments or divisions, and (II) recommendations for the future. ${ }^{3}$

## SURVEYS

Facts reported in regular reports and casual surveys usually fail to present comprehensively all that may be desired unless they are related to a program of orientation, action, and systematic planning. The university library, although it differs from a business enterprise in that it is not required to show a profit, requires periodic checks of its facilities and services for the purpose of measuring efficiency. The annual report, while useful as a check on the routines and activities, may lack the perspective and breadth of view that are frequently found in a thorough review or survey of conditions by expert, impartial observers.

The authorization for a survey generally comes from an individual or group within the institution-from the librarian, the faculty library committee, the president, or the board of trustees. Less frequently, it may come from outside the institution-from an interested supporting constituency of the university, an educational or philanthropic foundation, or an accrediting association. A few libraries have found periodic surveys, at five-, ten-, twenty-, or twenty-five-year intervals, useful for planning purposes. Surveys of this type, which may be self-surveys rather than evaluations by outside experts, have been made by the libraries of Iowa State College, the University of North Carolina, the University of Chicago, and, less frequently, of Harvard University and the University of Michigan.

## PURPOSES OF THE SURVEX

While the specific purposes may differ from survey to survey, common motives have been found and may be considered from national, regional, university, and library points of view. These motives may be summarized as follows:
A. National level -

1. To discover how well the library meets the standards of such national accrediting organizations as the American Library Association, the Association of Research Libraries, etc.
2. To determine specifically how the library may co-operate in a national plan of integrating library resources through participating $n$ union catalogs, specialization in collecting, etc.

[^301]B. Regional level

1. To help bring about a greater degree of co-ordination and co-operation among libraries within a particular area
2. To minimize the expenditures of individual libraries by concentrating book resources and special services
3. To estimate how effectively the library fits into a pattern of regional service For a state institution, to estimate its service to other institutional libraries of the state
4. To discover how closely the library meets the standards of state or regional accrediting agencies
C. University level
5. To determine how effectively the library can support the program of instruction and research
6. To co-ordinate the library services on a campus
7. To serve as a basis for action by the university, the state legislature, or other bodies
D. Library level
8. To determine the status of the library in its academic setting
9. To consider factors that limit or contribute to the efficiency of the university library in performing its services
10. To help the library clarify its aims and functions
11. To assist the library staff in solving unusual problems of immediate importance
12. To aid the library in formulating a long-range policy in acquisition and service
13. To suggest means for improving book and periodical collections, personnel, administrative organization, financial support, and use of materials

As already stated, library surveys have benefited university libraries in general as well as the specific libraries surveyed. They have suggested standards of efficiency based on good practice in gènerally recognized libraries; contributed to the clarification of many problems in university library administration; stimulated interest in university libraries as a group as well as in specific libraries; helped to make the university librarian more conscious of his activities and responsibilities; indicated the need for constant reappraisal of procedures and routines; and provided methods and techniques for describing, measuring, and evaluating university library operations and resources. In fact, by supplying data concerning activities and procedures which may be isolated, analyzed, and subjected to improvement, these studies have helped in charting a way through vague areas of university library administration.

## METHODOLOGY OF SURVEYS

A library survey may be undertaken by the librarian, the faculty, the administration, or all of them in combination. Or it may be made by an outside surveyor. In fact, there is much to be said for the sur-
vey by an outsider who brings with him a knowledge of successful practice elsewhere and who may suggest innovations or solutions which have been applied satisfactorily to problems in other libraries.

An examination of surveys ${ }^{4}$ made to date reveals that the principal method of evaluating libraries has been by comparison. This method has taken various forms: ( I ) the present condition of the library is compared with its condition in preceding years; (2) the library is compared with other aspects of the university; (3) it is compared with libraries of similar institutions; and (4) it is compared with external standards, some of which have been devised by methods which may be questioned.

The procedure of reviewing the library's progress is helpful in revealing long-term trends. Such elements as the book collections, the budget, book use, and professional qualifications and salaries of staff members are analyzed for variations from year to year. ${ }^{5}$
Certain aspects of the library may be examined in relation to comparable aspects in the university as a whole. For example, the variations of library expenditures from year to year may be compared with annual institutional expenditures. It should be observed that this type of comparison is significant only as a real relationship between them can be shown.

The method of comparing the surveyed library with similar libraries has been used in many recent surveys. Such factors as book collections and expenditures are compared. This procedure has been facilitated since Works's survey ${ }^{6}$ of 1927 , in which it was extensively applied and the data made readily available. Since that time, comparable data from an increasing number of university libraries have been recorded. ${ }^{7}$ Nevertheless, interinstitutional comparisons are dif-

[^302]ficult because a number of university libraries do not furnish data concerning their activities; or, if they do, they report so infrequently as to make accurate comparisons all but impossible. When comparisons between institutions are made, one should be certain that data are actually comparable. Thus, a record of expenditures which includes janitorial service or student assistance should not be compared directly with one which does not. This requires precise definitions and consistent methods of collecting data.

Probably the most effective way of measuring the work of a library is to examine it in relation to a set of standards. The major difficulty in developing such standards is that universities vary in their objectives. Consequently, the university which tries to adjust its services to the specific needs of the institution for which it exists differs somewhat from all other university libraries. The quantitative results which surveying agencies such as the American Library Association, the North Central Association, and the U.S. Office of Education have arrived at are sometimes reduced to averages and referred to as standards. Actually, they are reports of current practice. However, some aspects of the university library may be evaluated in relation to standards. For example, the plan of government and the administrative organization of the library, as shown in chapters ii and iv, may be appraised in the light of standards evolved in such fields as business or government. ${ }^{8}$ Eventually the proper basis for standards should be unit costs for specific services or facilities required. Some attempts have already been made to determine unit cost measurements of library activities. ${ }^{9}$ Without such exact units

[^303]of measurement it will not be possible for the administrator to meet adverse criticisms and to justify the support of the library. Until they are devised, evaluation must continue to be based upon comparisons and averages which, at best, can never be altogether satisfactory. Ideally, the true evaluation of a library should be arrived at by a study of the success of its patrons accomplishing their purposes. ${ }^{10}$

## AREAS COVERED IN AN EVALUATION

A composite view of the topics treated in various surveys ${ }^{11}$ shows that the areas covered include the following: (1) history and background of the university; (2) essentials in a university library program; (3) government of the library; (4) integration of the library with the university, the state, and the region; (5) financial support of the library; (6) organization and administration; (7) use of the library; (8) book and other resources; (9) personnel; (10) buildings and equipment; and (11) education for librarianship (in institutions having or planning training schools).

In order to evaluate any of these areas, it is useful to employ certain methods and devices. An examination of a group of university library surveys makes it possible to isolate these instruments of measurement. Table 33 shows the methods and devices used in surveying adequacy of support; Table 34, holdings; and Table 35, personnel. In several of the surveys the area of use was studied through questionnaires. ${ }^{12}$

It is possible to discuss at length the advantages and disadvantages of any of these methods and devices, but it is unlikely that such discussion would add much to the solution of the general problem of measurement. The methods and devices represent a definite effort on the part of experienced librarians to examine the results of their work. It is not suggested that all these methods and devices be used in any given survey, since local conditions will determine in part the specific measures which should be employed.

## SUMMARY

The functions of the university library were outlined in chapter i. In the present chapter it has been suggested that it is often necessary
${ }^{10}$ G. F. Purdy, "The Evaluation of University Library Service," Library 2uarterly, XII (1942), 638-44.
"See surveys listed in bibliography at end of chapter.
${ }^{12}$ See D. Coney, H. H. Henkle, and G. F. Purdy, "Report of a Survey of the Indiana University Library for the Indiana University, February-July, 1940" (Chicago: American Library Association, 1940), p. 72 (miméographed).

TABLE 33
Methods and Devices Used in Surveying the Adequacy of Financial Support of University Libraries

| Methods and Devices | Surveys** |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Georgia | North Carolina | Florida | Indiana | Mis- sissippi |
| I. Finances for the library as a whole: |  |  |  |  |  |
| Comparison of growth of the library budget with growth of budget of the institution as a whole. | X |  | X | $\times$ | X |
| Percentage that the library budget is of the total budget for university........................... | X |  | $x$ |  | $x$ |
| Comparison with standards. | X |  | X |  | X |
| American Library Association... | X |  |  | $x$ |  |
| - Comparison with other institutions. . . . . . |  |  |  | $x$ |  |
| Comparison of finances with that of other libraries. | X |  |  | X | $x$ |
| Comparison at separated dates: <br> Internal (the library with itself): |  |  |  |  |  |
| Internal (the library with itself): <br> Increase or decrease in total expenditures. |  |  |  |  |  |
| - Increase or decrease in expenditures by class of expenditure. |  | $x$ |  |  |  |
|  |  | X | . . . . . |  | . $\cdot .$. |
| Increase or decrease in receipts for the library: <br> Total. |  | X | . . $\cdot$ |  |  |
| Each of the various sources. |  | X |  |  |  |
| Comparison with the increase or decrease in the total university income. |  | X | . . . . |  | . . . . |
| Comparison of library support with support for departments: |  |  | Y |  |  |
| Comparison of library finances with expenditures of two departments. |  |  | X |  | . . . . $\cdot$ |
| Comparison of library finances with English department expenditures. . . . . . . . . . . . . . . . . . . . . . . . | X |  |  |  |  |
| Comparison of library finances with chemistry department expenditures. . . . . . . . . . . . . . . . . . . . . . . | X |  |  |  | . . . . |
| Comparison of library finances with the law school library: <br> Per student expenditures. |  |  | $\times$ |  |  |
| Per faculty member expenditures. |  |  | X |  |  |
| Comparison of the library finances with support of autonomous schools: |  |  |  |  |  |
| Law school library-per student expenditures. |  |  |  |  | X |
| School of medicine library-per student expenditures. |  |  |  |  | X |

- For titlee of eurveys, see bibliography at end of chapter.


## TABLE 33-Continued

Methods and Devices Used in Surveying the adequacy of Financial Support of University Libraries


## TABLE 33-Continued

Methods and Devices Used in Surveying the Adequacy of Financial Support of University Libraries


## TABLE 34

## Methods and Devices Used in Surveying the Personnel of University Libraries

| Methods and Devices | Sunvers* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Georgia | $\begin{aligned} & \text { North } \\ & \text { Caro- } \\ & \text { lina } \end{aligned}$ | Florida | Indi- <br> ana | $\begin{array}{\|l\|} \text { (issippi } \\ \text { sisi } \end{array}$ |
| Size of the staff: <br> Comparison of the number of staff members with other institutions <br> Comparison of growth of size of staff with other institutions. <br> Comparison of the number of professional staff in major departments with other institutions................... <br> Comparison of staff, enrolment, and volumes accessioned and cataloged with other institutions. . <br> Comparison at separate dates: <br> Internal (comparison of the library with itself): |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Increase or decrease of the library staff with increase or decrease of the faculty. |  | $\times$ |  |  |  |
| Increase or decrease of ratio of librarians to students |  |  |  |  |  |
| Ratio of staff members to students. | $\times$ |  | $x$ | $\times$ | $\ldots$ |
| Ratio of staff to faculty .................................. |  |  |  |  |  |
| Amount of overtime as a test of adequacy of the number of staff |  |  | $\times$ | $\times$ |  |
| Staff salaries: <br> Average salary of staff <br> Salary range of staff. <br> Average appointing salary <br> Comparison of the minimum and maximum of certain positions with other institutions Comparison with American Library Association salary standards. Comparison of library salaries with "equivalent" faculty positions. . |  |  |  |  |  |
|  | $\times$ |  |  | $\times$ |  |
|  |  |  |  |  | $\times$ |
|  |  |  | $\times$ | $\times$ |  |
|  |  |  |  | $\times$ |  |
|  |  |  |  |  |  |
|  | $\stackrel{\times}{\times}$ |  |  | + |  |
| Other: |  |  |  |  |  |
| Education of the staff |  |  |  |  |  |
| Experience of the staff. | $\times$ |  | $\times$ | $\times$ | $\times$ |
| Average age of the staff. | $\times$ |  |  | $\times$ |  |
| Professional activities of the staff. | $\times$ |  | $\times$ | $\times$ | $\times$ |
| Status of the staff in comparison with the faculty | $\times$ |  | $\times$ | $\times$ |  |

- For titles of surveys, zee bibliography at end of chapter.

| Methods and Devices | Surveys* |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chicago (1933) | Harvard (1934) | Georgia $(1939)$ | North Carolina (1939) | Florida $(1940)$ | Indiana (1940) | Mississippi (1940) | Penn-sylvania (1940) |
| I. Total resources: |  |  |  |  |  |  |  |  |
| Comparison of total volumes with other institutions. . . . . . . . . . . . . . . . . . . . . |  |  | $x$ |  | $x$ |  |  | . . . . ${ }^{\text {a }}$ |
| Comparison of rate of growth of total volumes with other institutions. . . . . . . . |  |  | X |  | X | $\times$ | X | . |
| Comparison at separated dates: <br> a) Internal (the library with itself at different dates): <br> Increase or decrease in total volumes held. . . . . . . . . . . . . . . . . . . . . . . . . . |  | . |  | $x$ |  |  |  |  |
| Subdivided by kinds of materials. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  | - |  |  |  |  |
| b) External (the library with other libraries): <br> Increase or decrease in total volumes held. |  |  |  | X |  |  |  |  |
| Record of number of volumes in the library. . . . . |  | $\times$ |  |  |  |  |  |  |
| Number of volumes in each class in the college library |  | X |  |  |  |  |  |  |
| Survey of library materials by subject. . . . . . . . . . . . | X |  |  |  |  |  |  | X |
| Checking of books against selected subject bibliographies. . . . . . . . . . . . . . . . . . . | X |  | . . . . . |  |  |  |  |  |
| Questionnaire: |  |  |  |  | - |  |  |  |
| Faculty evaluation of resources. |  |  |  |  |  | $\times$ | X |  |
| Student reports of failure to obtain materials. |  |  |  |  |  | X |  |  |
| Checking against standard bibliographies: |  |  |  |  |  |  |  |  |
| Shaw, List of Books for College Libraries . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |  | $\times$ |  | $x$ |  |
| Mohrhardt, List of Books for Junior College Libraries. . . . . . . . . . . . . . . . . . . . . . . . . . |  |  |  |  | X |  | X |  |
| II. Reference books: |  |  |  |  |  |  |  |  |
| Checking against standard bibliographies: |  |  |  |  |  |  |  |  |
| Shores, Basic Reference Books (i939), "Core Collection". . . . . . . . . . . . . . . . . . . |  |  |  |  |  |  | X |  |
| Southern Association of Colleges and Secondary Schools, Preliminary List of Reference Books (1939). |  |  | X |  | $x$ |  | X |  |

[^304]TABLE 35-Continucd
Methods and Devices Used in Surveying the Holdings of University Libraries

|  |  |
| :--- | :--- |

Methods and Devices Used in Surveying the Holdings of University Libraries

| Methods and Devices | Supvers* |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Chi- } \\ \text { cago } \\ (1933) \end{gathered}$ | $\begin{gathered} \text { Har- } \\ \text { vard } \\ (1934) \end{gathered}$ | $\left\|\begin{array}{c} \text { Georgia } \\ (1939) \end{array}\right\|$ | North Carolina (1939) | $\begin{aligned} & \text { Florida } \\ & (1940) \end{aligned}$ | $\begin{gathered} \text { Indi- } \\ \text { ana } \\ \text { (1940) } \end{gathered}$ | Mississippi (1940) | Penn-sylvania (1940) |
| VI. Periodicals-Continued <br> Checking against lists of periodicals: <br> Art Index. <br> Chemical periodicals listed in Science, 66:385-89, 1929. <br> Education Index. <br> Lyle-Trumper, Classified List of Periodicals for College Library. <br> North Central Association, Checklist of Periodicals (1934). <br> Public Affairs Information Service. <br> Southern Association of Colleges and Secondary Schools, Checklist of Periodicals "Union List of Biological Periodicals in the Libraries of Duke University, North Carolina State College, University of North Carolina, and the Woman's College". |  |  |  |  |  |  |  |  |
|  |  |  |  |  | X |  |  |  |
|  |  |  |  |  | $x$ |  |  |  |
|  |  |  | $\times$ |  |  | $\times$ |  |  |
|  |  |  | $\times$ |  | $\times$ |  | $\times$ |  |
|  | $\times$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  | $\times$ |  |  |
|  |  |  |  |  |  | $\times$ |  |  |
|  |  |  | $\times$ |  |  |  |  |  |
|  |  |  | - |  |  |  |  |  |
| VII. Departmental and school libraries: |  |  |  |  |  |  |  |  |
| Number of volumes and descriptions in house and departmental libraries....... |  | $\times$ |  |  |  |  |  |  |
| - Comparative growth of libraries in law, medical, and dental schools. . . . . . . . . . . |  |  |  |  |  | X |  |  |
| Comparison of the size of the law library with the size of the libraries in the mem-ber-institutions of the American Association of Law Schools. Comparison of the size of the law library with the libraries of the institutions of the American Bar Association survey of approved schools. |  |  |  |  | $\cdots$ $\times$ | $\times$ | $\times$ $\times$ |  |
| Total. | 4 | 4 | 9 | 6 | 6 | 17 | 10 | I |

- For tities of surveya, see bibliography at end of chapter.
for the librarian or outside experts to review the library's resources and activities in an effort to observe how effectively these functions are being performed. Although, in the past, surveys have generally been instituted in order to effect improvement in administrative procedure, it may be expected in the future that systematic and regular evaluations of the university library's service will be more common. In making such evaluations it is important that the surveyors should measure the library largely in the light of the objectives of the institution of which it is a part. Recognized norms are useful for comparative purposes, but the educational and research aims of the university should determine the scope of the survey and influence the recommendations which may be made. Moreover, the financial ability of the institution should be considered in relation to any suggestions for expansion of service. The size and character of the student body and faculty, the nature of instructional methods, and the amount and variety of research are factors which should be closely observed in any attempt to establish a library program. Finally, it should be noted that the university library differs from other types of libraries. Since one of the important functions of the university is the conservation of knowledge, it is clear that this function of the university library should be given full consideration.


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## CHAPTER XVII

## FUTURE DEVELOPMENT OF UNIVERSITY LIBRARIES

THE development of a program for research into problems of peculiar importance to university librarianship is essential if the present haphazard type of investigation is to be controlled. Such a program requires the co-ordinated efforts of university librarians, directors of library schools, teachers, and students. Particularly necessary is the development of methods and procedures, the use of studies which have already been made as bases for other studies, and the assembling of fundamental data which are basic for future studies. ${ }^{\text { }}$
In the preceding chapters attention was called to problems in the field of university librarianship which merited systematic study. It is the purpose of this chapter to bring some of these together and to suggest additional problems which appear to be amenable to study and research, as well as to relate them to available data. These problems may be conveniently grouped under six headings: (I) the history of university libraries, (2) problems related to organization and administration, (3) problems related to personnel, (4) problems related to the book collections, (5) problems related to library co-operation and specialization, and (6) problems related to buildings and equipment.

## HISTORY OF UNIVERSITY LIBRARIES

No comprehensive study of the history of university libraries in the United States is available at the present time. The study of Colonial college libraries by Shores covers the period 1638-1800 for nine libraries. ${ }^{2}$ Here are discussed the rise, growth, and administration of the college library during the Colonial or pre-Revolutionary period.

[^305]Its contribution to Colonial higher education is analyzed, and the indebtedness of the modern college library to its predecessor in matters of organization, administration, and use is indicated. Despite its serious shortcomings, ${ }^{3}$ the volume is significant in that the author attempts to describe the part which the library played in the beginnings of higher education in America. He has also brought together in convenient form a body of material which can be used for further study. In addition to consulting obvious sources-Colonial general histories - the author made personal visits and examined such sources as trustee and faculty minutes, various administrative records, presidents' correspondence, library catalogs, old charging books, speeches and addresses, biographical sketches, and miscellaneous material, in order to obtain an accurate description of the origin and growth of these early libraries-Harvard, William and Mary, Yale, ${ }^{39}$ Princeton, Columbia, Pennsylvania, Brown, Rutgers, and Dartmouth. As Shera points out, however, the volume is weak in that it fails "to synthesize its array of material and come to grips with the basic problem" of the content and nature of the book collections and how they were used in the various libraries.

Despite the difficulties that may be encountered in assembling documentary data relating to the history of university libraries, a comprehensive study would fill in a significant gap in American educational history. While data needed to fill in gaps may not always be easily assembled, there are probably enough to show the various ways in which university libraries have been woven into the fabric of higher education. For example, the relation of the college society library to the college library is but one aspect of the subject. ${ }^{4}$

Comprehensive studies of academic libraries of a region or of individual libraries are few in number. An example of a study of a group of libraries is that by Satterfield. ${ }^{5}$ Individual libraries which have been studied from a historical point of view include George Peabody

[^306]College, ${ }^{6}$ the University of Illinois, ${ }^{7}$ Fisk University, ${ }^{8}$ the University of California, ${ }^{9}$ and the University of Minnesota. ${ }^{10}$ Intensive histories of special departments ${ }^{\text {ri }}$ or practices ${ }^{12}$ of individual libraries have received limited attention.

Only through a series of histories of individual libraries will it be possible to write a comprehensive chronicle of American university libraries and of their role in higher education. Careful historical studies, based upon sound scholarship and keen insight, should go a long way in producing a body of data needed to prepare a definitive study of the American university library. Methodology and procedures are suggested by such works as those of Johnston, ${ }^{13}$

[^307][^308]
## FUTURE DEVELOPMENT OF UNIVERSITY LIBRARIES

Lydenberg, ${ }^{14}$ Spencer, ${ }^{\text {,5 }}$ and the librarians of the University of Gottingen. ${ }^{6}$

## ORGANIZATION AND ADMINISTRATION

The controversies which center about certain types of administrative organization of libraries will not be settled until systematic studies are made of the efficiency of existing patterns. For example, personal opinion and surmise, rather than objective data supplied by precise studies, have been largely responsible for building up departmental library systems on many campuses.

The University of Chicago study of 1924 has been the most complete study of the question of departmentalization. ${ }^{57}$ Yet, it should be repeated here that this study was based on personal opinions of faculty members and not on a systematic investigation of actual use. Thus far, decisions regarding the locations of books on the campus have been influenced more by administrative convenience than by an understanding of what may be important in student reading or research. ${ }^{18}$ Evidence is therefore needed on the question of the relation of reading and research use to the location of books on a campus. If reading and research are not impeded by location, then administrative convenience and economy should prevail. If one system directly increases or measurably facilitates use, then this condition should be weighed against administrative questions.
Divisional organization.-Objective data are lacking in regard to the general administrative structure of the university library. Which types of university libraries are best suited to the divisional plan which now exists at Colorado and Brown? Precise studies of library organizations of this type should provide objective data which might serve to guide university and library officials.

Combining operations.-No special study has been made of the effectiveness of combining technical operations of a library under one

[^309]head, although recommendations for this type of internal organization were made by the surveyors of the Chicago Public Library, Indiana University Library, and the Library of Congress. The lastmentioned library has recently put into effect this recommendation, and a careful study of the benefits derived from the consolidation of units should be of interest to all administrators of large libraries. Similarly, a precise study of the unifying of services other than technical operations under one supervision should be made.

Special materials.-As was pointed out in the discussion of departmental organization in chapters $v$ and $v i$, little is actually known of the administrative efficiency or the effects upon use of segregating certain types of materials. Gable's work provides some basic data for the handling of serials, but it does not contain criteria for setting up a program of activity. ${ }^{19}$

Librarians are also still uncertain of the most effective ways of making documents easily accessible to students and faculty. Careful cost and service studies of the documents departments in a few of the libraries which have them should provide reliable guides for other institutions which are comparable in purpose, size, and conditions of work. Questions which need solution involve the general administrative organization of handling documents, as well as the type of cataloging and classification to be applied to them. The problem of prompt and complete indexing as opposed to cataloging requires consideration. Similarly, little research has been done on the question of organizing rare books, pamphlets, maps, and manuscripts. A careful study of the problem of films has recently been prepared by Fussler. ${ }^{20}$ Continued experimentation in microprinting, however, is necessary.

Financial administration.-The increase in library budgets of universities warrants careful attention to the problems relating to receipt of funds, purchasing, budgeting, accounting, and reporting. A thorough study of present financial problems and practices in large university libraries is necessary to fill in the gaps which are apparent in the discussion of financial administration in chapter iii. Such a study would compare practices with recommendations and practices in other fields and would evaluate them in relation to the organization of the business functions of the university library in order to

[^310]arrive at a set of principles. ${ }^{2 x}$ The basic problem is to discover how certain financial administrative practices make for more effective library management.

Distribution of book funds.-The question of the division of funds for books has been considered by several students recently. ${ }^{22}$ The studies reveal the difficulties of establishing a satisfactory distribution of departmental book funds. The techniques of Coney and Ellsworth, however, suggest procedures with which other investigators might experiment. Further studies in this field might yield a method of book-fund distribution which would be generally applicable to university libraries.

Book selection.-Danton's study ${ }^{23}$ of college library book selection offers a procedure which might well be employed by students interested in similar questions for university libraries. Particularly desirable, perhaps, is a study of book selection in the departmental libraries of the university. Another study of book selection might be concerned with the reasons of faculty members for choosing certain books and the methods and sources they use in the process. The present questioning of the past policy of university libraries in regard to placing no limit on the amount of materials they acquire likewise requires the attention of students.

Cataloging and classification.-Considerable attention has been given to various aspects of cataloging and classification. Miller ${ }^{24}$ has provided a technique for determining the labor costs of acquisition and cataloging. Akers ${ }^{25}$ has given a basis for distinguishing between professional and clerical activities in cataloging, but further research on this matter is needed.

Attention has been given to the special problems of cataloging

[^311]${ }^{22}$ See chap. iii.
${ }^{23}$ J. P. Danton, "The Selection of Books for College Libraries: An Examination of Certain Factors Which Affect Excellence of Selection," Library Quarterly, V (1935), 419-56.

[^312][^313]anonymous works, ${ }^{26}$ serials, ${ }^{27}$ manuscripts, ${ }^{28}$ Japanese books, ${ }^{29}$ Chinese books, ${ }^{30}$ corporate publications, ${ }^{3 x}$ pseudonymous works, ${ }^{32}$ and music. ${ }^{33}$ Similarly, some investigation has been made of subject headings, ${ }^{34}$ classification, ${ }^{35}$ and types of catalogs. ${ }^{36}$ It may be said,

[^314] Clements Library" (unpublished Master's thesis, University of Michigan, 1937).
${ }^{19}$ N. Fukuda, "Some Problems in Cataloging Japanese Books for American Libraries" (unpublished Master's thesis, University of Michigan, 1940).
${ }^{30}$ Chih-Ber Kwei, "Bibliographical and Administrative Problems Arising from the Incorporation of Chinese Books in American Libraries" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1931).
${ }^{31}$ M. Oldfather, "A Study of Author Entries for United States Government Publications Based upon Library of Congress Cards" (unpublished Master's thesis, University of Illinois, 1932); D. G. Martin, "A Comparison of Corporate Entry for Societies, Institutions and Miscellaneous Bodies in the Catalog Codes of the United States and Europe" (unpublished Master's thesis, Graduate Library School, University of Chicago, 1931).
${ }^{3}$ M. C. Terry, "A Study of English and American Pseudonyms from the Point of View of Cataloging" (unpublished Master's thesis, Columbia University, 1938):
${ }^{33}$ A. H. Heyer, "Policies of Cataloging and Classification in Self-contained Music Libraries" (unpublished Master's thesis, Columbia University, 1939). See also American Library Association, Catalog Code Revision Committee, A.L.A. Catalog Rules, Author and Title Entries (Preliminary American 2d ed.; Chicago: American Library Association; 1941), for a standard code of rules for handling various types of materials.
${ }^{34}$ E.g., J. E. Hitchcock, "The Coverage of Material under the Subject Entries of the Dictionary Catalog in American University Libraries" (unpublished Master's theșis, Graduate Library School, University of Chicago, 1938); L. Colvin, "Subject Headings for Irish Literature, with Library of Congress Headings Defined and Correlated" (unpublished Master's thesis, University of Michigan, 1938); M. L. Hall, "Chemistry Subject Headings-a Comparative Study" (unpublished Master's thesis, University of Michigan, 1933); P. B. Knapp, "The Subject Catalog in the College Library: An Investigation of Terminology" (unpublished Master's thesis, Graduate Library School, University of Chicago, 1943). R. C. Swank, "Subject Catalogs, Classifications, or Bibliographies? A Review of Critical Discussions, 18761942," Library 2uarterly, XIV (1944), 316-32.
${ }^{35}$ E.g.,G.O. Kelley, The Classification of Books: An Inquiry into Its Usefulness to the Reader (New York: H. W. Wilson Co., 1937); S. M. Haskins, "A Classification of German Literature" (unpublished Master's thesis, University of Michigan, 1937); A. H. Trotier, "Contemporary Educational Literature, Its Place in the Dewey Decimal Classification" (unpublished Master's thesis, University of Illinois, 1932); M. F. Tauber, "Reclassification and Recataloging in College and University Libraries" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1941).
${ }^{36}$ E.g., F. B. Morgan, "The Contents and Usefulness of the Official Catalog for the Large Public Library" (unpublished Master's thesis, Columbia University, 1936); R. B. Downs (ed.), Union Catalogs in the United States (Chicago: American Library Association, 1942).
in summary of these studies, that they have been concerned primarily with the technical aspects of cataloging and classification. There has been relatively little concern about basic questions of objectives, costs, and use. ${ }^{37}$ It is in these three areas of the technical operations that research is necessary if administrators are to have objective data regarding the results of technical processes. Cataloging and classification are expensive operations of the library; and, unless fundamental investigations are made, it is not unlikely that ill-considered arbitrary alterations of present practices will be necessary. Some practical plan needs to be devised for eliminating the duplicated cataloging work among the many libraries of the country. ${ }^{38}$

Conservation of materials.-The preservation of materials used in bookmaking and bookbinding has been extensively studied in both Europe and America. The chronicle of bookbinding in America ${ }^{39}$ clearly shows the progressive steps that have been made from handwork to edition binding. It is unnecessary to trace the story here, since it has been told admirably by French and Rogers. ${ }^{40}$ The changes in the composition of the book, however, are of extreme importance to the university librarian, who usually has collections of expensive and rare materials under his direction.

Such reviews of modern library bookbinding as those by Leighton ${ }^{4 x}$ and Rogers ${ }^{42}$ afford the university librarian the background for a consideration of the problems involved in the construction of the book. Questions concerning paper, foldings, endpapers, plates, linings, joints, sewings, forwarding, adhesives, casing, cloths, leathers,
${ }^{37}$ W. M. Randall, "The Technical Processes and Library Service," in his The Acquisition and Cataloging of Books . . . . (Chicago: University of Chicago Press, 1940), pp. 1-29.
${ }^{38}$ Colorado College and Head Librarians Conference, "First Report of the Special Committee, Centralized 'Technical Processes and Bookbuying'" ([Fort Collins, Colo.], 1942) (mimeographed); F. Rider, "Real Co-operative Cataloging-the Concrete Approach," Library Quarzerly, XIII (1943), 99-112; V. J. Osborn, "A History of Cooperative Cataloging in the United States" (unpublished Master's paper, Graduate Library School, University of Chicago, 1944); B. Altmann, "Centralized Cataloging: Its Principles and Organization in the United States and in Germany" (unpublished Master's thesis, Graduate Library School, University of Chicago, 1944); H. H. Henkle, "Library of Congress Conferences on Cataloging, October 13November 13, 1943," in Catalogers' and Classifiers' Yearbook, XI (1945), 68-84.
${ }^{39}$ H. I ehmann-Haupt (ed.), Bookbinding in America: Three Essays (Portland, Me.: South-worth-Anthoensen Press, 1941): "Early American Bookbinding by Hand," by H. D. French; "The Rise of American Edition Binding," by J. W. Rogers; "On the Rebinding of Old Books," by H. Lehmann-Haupt.
${ }^{10}$ Ibid.
${ }^{41}$ D. Leighton, Modern Bookbinding: A Survey and a Prospect (London: J. H. Dent \& Sons, 1935).
${ }^{12}$ Lehmann-Haupt, op. cit.
and letterings are considered by the authors, as well as the values and limitations of handwork and machine work.

The Care and Repair of Books by Lydenberg and Archer, studies on book and photographic materials by the U.S. National Bureau of Standards and the National Archives, the investigation of materials and bindings by the Library Binding Institute, and special studies by individuals ${ }^{43}$ and libraries, especially the New York Public Library, ${ }^{44}$ have provided librarians a considerable body of data on which to make decisions concerning the subjects which the investigators have studied.

Despite these studies of materials, the need for continued research is evident. Concentrated studies on specific problems should clarify the situation in regard to the development of better materials for the conservation of records. Analytical studies of materials used today might suggest that traditional methods are not the best. ${ }^{45}$ The effects of dust, contaminated air, sunlight, humidity, dryness, heat, dampness, and chemicals have been studied to some extent; but further researches are needed. ${ }^{46}$

The suggestion has been made that the study of such problems as materials, fabrics, lettering, sizing, paper preservation, reproductive techniques, preservation from mildew, extermination of insects and vermin, and leather preservation, as well as other technical matters of modern-day librarianship, should be investigated by a technical research laboratory, supported co-operatively by major university, public, and reference libraries. ${ }^{47}$ It has also been suggested that each large library should have an individual on its staff who would serve as a general research assistant to investigate technical problems of conservation. In those university libraries which have binderies, this arrangement exists to some extent.

Few studies have been made of problems in the field of conserva-

[^315]tion that have been of particular value to the library administrator. Studies within the field which might be of value to him include: unit expenditures for binding, repairing, and other conservation practices. Basic to all studies is the formulation of criteria for selecting items to bind and rebind. ${ }^{88}$ The examination of administrative questions of rebinding, involving such matters as timing so as to provide continuous service to users, seems desirable. Except for a few superficial articles, no study has been made of the problems and procedures in operating a university library bindery. A systematic study of university library binding, whether done by outside binders or within the library, seems also an essential need to administrators. Other studies in this field of conservation might well be concerned with the preservation of fugitive materials, which are frequently more valuable to research than books or periodicals; with the variety of abuses to which library materials are subjected; and with the type of training that librarians are given in library schools on the problems in bookbinding and related matters.

Service units.-The technical aspects of circulation work, including that in reserve book rooms and departmental libraries, and of reference work have been fairly well outlined in the literature.49 Present practices, however, are not fixed; and continued study of their effectiveness is necessary. Particularly desirable are studies of the use of business machines and other equipment in circulation work. The formulation of criteria for evaluating reference service is also worthy of the attention of serious students. A critical study of circulation and reference service to the general public through extension departments of both private and state university libraries should eliminate the considerable amount of uncertainty and guesswork which exists at present in this area of work. Particular attention should be given to co-ordinating the extension work of all state agencies.

## PERSONNEL

It was evident from the discussion of staff matters in chapters vii and viii that little or no study has been made of important personnel issues. ${ }^{\text {so }}$ First among these problems is job analysis. Although the

[^316]efforts of the American Library Association Board on Salaries, Staff and Tenure have been directed at job analysis, actually little has been accomplished in this area. The evidence indicates that thorough job analyses are basic for any policy which seeks to apply accepted administrative- principles to library organization and management. They are necessary for any system of personnel classification or pay plan, and they are useful for determining the types of training needed by certain groups of workers.

University librarianship as a career.-An editorial in the Boston Herald of June 10, 1939, contained the following statement: "Indeed, the non-career librarians have perhaps made more enduring contributions to library administration and upbuilding than the career menand the story is the same in American diplomacy. The list of such librarians is most impressive."st This sweeping statement is indicative of the layman's attitude toward librarianship and suggests a systematic study of the facts involved. The analysis of the careers of federal administrators by MacMahon and Millett ${ }^{52}$ involves a biographical technique that might well be applied to the careers of librarians. Library literature is deficient in thorough biographical studies.

It is clearly apparent that the postwar period will bring great responsibilities to universities, for educating those students whose college careers were interrupted by the war. They will need training for peacetime jobs and will include the discharged men and women from the services, the displaced war workers, and the war-disabled. In order to meet the needs of changes in the instructional and research programs, it will be necessary for librarians and library school directors to consider carefully the curriculums of library schools. The increased research resulting from the war will undoubtedly affect the group of science libraries attached to universities. Attention should be directed at specialized training for librarians dealing with the sciences and technical subjects.

Turnover of.staff.-Another study relating to personnel involves the question of turnover, or mobility of staff. Turnover has very definite relations to librarianship as a career and to efficiency of library service. At the present time there is not available any body of data relating to the trends, patterns, and norms of turnover among library workers generally or among university librarians specifically.

[^317]Such a study should prove useful for purposes of counseling in regard to librarianship, for assisting administrators in estimating the effects of too great or too low turnover upon the efficiency of their libraries, and for aiding placement officers in making vocational adjustments. The causes of mobility and its effects upon library management and upon the library staff members themselves should be considered. ${ }^{\text {s3 }}$

Other personnel problems.-In addition to mobility of staff members, other problems relating to university library personnel require systematic study. Of special importance is the formulation of criteria for determining the correct size of the staff. Academic status, welfare programs, and problems of morale are among the important issues which students of university librarianship may well investigate dispassionately and objectively.

## BOOK COLLECTIONS AND USE OF MATERIALS

A thorough study of the recreational, or noncurricular, reading of students has never been made. Librarians have assumed that browsing rooms, special shelves of books, and other devices stimulate reading of good materials. Perhaps librarians have been too much concerned with this problem, to the neglect of other more important matters of service. It may also be true that librarians have, because of the lack of data, not given the correct direction to reading in browsing rooms, dormitory libraries, house libraries, and the like. Are the recreational reading lists which have been devised really helpful in assisting the student in his reading program? What relation does recreational reading have to a liberal education? How much of this type of reading is essential to supplement the formal curriculum? As Danton has pointed out, "the acquisition of reading materials of this sort is highly haphazard, and little, if any, attention is paid to their use or to an objective analysis of their real value." ${ }^{5} 4$ The successful use of cheaply printed books in the armed services raises a considerable number of questions concerning certain collecting policies of libraries.

The question of the use of other materials-rare books, maps, manuscripts, and music-likewise has been neglected in professional literature. It may be true that librarians have assumed, without basis, that certain materials are essential for instruction and research.

[^318]In the discussion of book collections it was noted that university libraries as a group have been considered the repositories of all types of graphic and nongraphic materials. In the past, little attention has been given to either the type or the quantity of material which might properly be acquired by the university library. This policy has created a considerable number of problems for the university library administrator, the most important of which concern housing and handling. The situation requires careful consideration of present policies, with specific recognition of co-operative projects.

The Association of Research Libraries has been especially concerned with the various co-operative enterprises which have been discussed earlier. In 1941 a committee of the association made a critical study of the H. W. Wilson's Company's system of pricefixing. ${ }^{\text {ss }}$ This particular system has been criticized as discriminatory by some librarians of large institutions. The results of the examination clearly show that the whole question of bibliography and documentation requires the earnest attention of scholars and librarians. The role of the Library of Congress as a national bibliographical center deserves reconsideration. ${ }^{56}$

In March, 1944, the Association of Research Libraries met in New York to discuss a number of problems relating to the resources and future development of research libraries. At that time Rider ${ }^{57}$ presented his proposal for meeting the problem of growth of libraries. His solution by the use of microcards represents an interesting and provocative idea that might well have far-reaching effects upon the contents of libraries and the procedures of handling materials.

## BUILDINGS AND EQUIPMENT

Directly related to questions of library co-operation-particularly to those concerned with directed specialization, storage libraries, consolidations, and filming projects-are problems related to library buildings. The solution of these problems should definitely indicate steps which librarians of the future may take in regard to building programs.

Already some attention has been given to erecting structures on

[^319]the basis of functional needs. Studies of the effectiveness of such buildings should prove useful to librarians, who have been bound by traditional concepts. Although several volumes describing library buildings have been written, there have been no scientific studies of the essential needs of a library building. The time has now arrived for a critical appraisal of library structures in order to provide criteria for a future policy.

Although Fussler has dealt with the major problems of microphotography, there are other aspects which merit further study. Rider, for example, has been working on the idea of reproducing an entire thesis on the back of a catalog card. The thesis may then be disposed of, thereby obviating such problems as binding and shelving. That is, he suggests that, for certain types of material, the present procedures which involve building space, binding, and replacements can be eliminated by means of great reduction or microprint and that the entire body of such materials can be housed in the catalog.

## LIBRARY CO-OPERATION AND SPECIALIZATION

Mention has been made of the various attempts to unify and coordinate the efforts of all libraries to serve scholarly interests. The organization of the Division of Library Co-operation at the Library of Congress was a step forward in this direction. ${ }^{58}$ The study on union catalogs by Berthold, Merritt, Schwegmann, and Stone ${ }^{59}$ contributes to an understanding of the resources of American scholarly libraries, as well as to an understanding of the potential services of union catalogs and bibliographical centers. Much of the data supplied in this area is of a quantitative nature. Qualitative studies are necessary if librarians are to be able to introduce definite programs of action. ${ }^{60}$ Such information is essential if existing projects are to receive the support they require.

Further progress in the area of library co-operation and specialization should include careful self-surveys of many libraries. ${ }^{67}$ These are necessary for any aggressive plan of co-operative action. Such studies

[^320]should aid in formulating definite policies of acquisition so as to eliminate or reduce wasteful competition and duplicate purchasing. Attention is necessary to such problems as the allocation of responsibility for collecting in special fields by groups of libraries, co-operative book selection and book buying, ${ }^{6{ }^{6}}$ co-operative cataloging and classification, co-operation in compilation of bibliographies and in documentation, co-operative storage of books and little-used materials, co-operative filming, co-operative development of interlibrary lending, maintenance and increase of union catalogues and bibliographical centers, and co-operation of libraries with learned societies and other organizations.

The evidence clearly indicates that librarians have not given as much attention to the utilization of mechanical appliances as they might. More studies of the use of the Hollerith machine, for example, should be made in order to show conclusively that it is an efficient device for acquisitional, circulation, and other kinds of work.

## SUMMARY

Only a relatively small number of university library problems which require investigation have been suggested in the preceding pages. They should indicate, however, that the field is wide open for study. Librarians in the past have not been keenly introspective and have been too willing to accept the status quo or the opinions of the leaders in the profession. It is true, of course, that librarians are busy people, as their many functions as outlined in this volume clearly demonstrate. They have had practical problems to solve in order to meet the diverse demands of an increasing number of users, and in a considerable number of instances they have been eminently successful in doing this. Yet, after a period of rapid progress in handling geometrically increasing book collections; in building new libraries, and in developing larger and more varied staffs, librarians have reached the point where they must reconsider and appraise their activities. Critics suggest that traditional assumptions regarding present library service have outlived their usefulness and have been responsible, to a high degree, for the impasse librarians have reached in certain areas of their work. Regardless of the truth or falsity of

[^321]this criticism, librarians generally, and university librarians in particular, should carefully and systematically examine the foundations of their activity. There is much reason to believe that library service to the university community will in the end be benefited by such investigation.

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[^0]:    : The actual figures and statistics quoted in this chapter have been taken from such authoritative sources as International Yearbook; School and Society; reports of the U.S. Commissioner of Education; Americana Annual; Clarence S. Marsh (ed.), American Colleges and Universities (4th ed.; Washington: American Council on Education, 1940); and "Statistics of College and University Libraries" (Princeton University Library) (mimeographed).

[^1]:    a E. A. Henry (ed.), Doctoral Dissertations Accepted by American Universities, 1940-4r (New York: H. W. Wilson Co., 1941), p. xiii.

[^2]:    ${ }^{1}$ Clarence S. Marsh (ed.), American Colleges and Universities (4th ed.; Washington: American Council on Education, 1940), p. 54.
    ${ }^{2}$ The College Charts Its Course: Historical Concepts and Current Proposals (New York: McGraw-Hill Book Co., 1939).

    Robert M. Hutchins has recently stated that "the particular doctrine that the purpose of the University is the pursuit of truth by freely determined teaching and research is true if it is understood" (The Organization and Purpose of the Unitersity [Chicago, 1944], p. 8). Although directing his remarks specifically to the University of Chicago, Mr. Hutchins' statements, particularly in connection with the possible future organization of the institution, are provocative. He writes: "In the moral, intellectual, and spiritual conflict which 1 foresee the University may take whichever side it pleases.It may endorse the scale of values by which our society lives; or it may join in the effort to reverse them. The only thing it cannot do, as it seems to me, is to stand apart from the conflict on the theory that its function places it above it. This is to doom the University to sterility. It is to renounce the task of intellectual leadership. It is to deny at a great crisis in history our responsibility to mankind" (ibid., p. 12).

[^3]:    ${ }^{3}$ The Place of American Unioersity Presses in Publishing [Chicago, 1942].

[^4]:    . Chicago: American Library Association, 1939.
    s Teaching with Books: A Study of College Libraries (Chicago: Association of American Colleges, American Library Association, 1940).

[^5]:    ${ }^{6}$ Mrs. Mildred H. Lowell, College and University Library Consolidations (Eugene: Oregon State System of Higher Education, 1942); Herbert A. Kellar, "Memoranda on Library Cooper-

[^6]:    ation," No. 1, September, 1941 (Washington: Library of Congress, 1941) (mimeographed); A. F. Kuhlman (ed.), The Development of Unidersity Centers in the South: Papers Presented at the Dedication of the Joint University Library, December Fifth and Sixth, 1941 (Nashville, Tenn.: Peabody Press and Vanderbilt University Press, 1942).

[^7]:    ${ }^{2}$ M. M. Chambers, "Higher Education and the Courts in $\mathrm{I}_{940} \mathrm{~T}^{1}$," Educational Record, XXIII (1942), 58-82.
    ${ }^{2}$ For a detailed discussion of the status of universities as independent agencies of the state government, see Alexander Brody, The American State and Higher Education (Washington: American Council on Education, 1935), pp. 165-225. For the special constitutional status of the University of Michigan and court decisions concerning it, see University of Michigan, The University of Michigan, An Encyclopedic Survey (Ann Arbor: University of Michigan, 1941), I, 116-39.

[^8]:    ${ }^{3}$ University of Illinois Statutes, March, 1936. Section 19, on the Library, reads as follows:
    "a) The Library includes all such books, pamphlets, periodicals, maps, music scores, photographs, prints, manuscripts, and other materials as are commonly preserved and used in libraries, purchased or acquired in any manner by the Universitp to aid students and investigators.

[^9]:    "b) The Library shall be in charge of the Director of the Library, who shall be responsible for its arrangement and care and for the organization of the library staff; in the purchase of books and similar material, he shall act in accordance with business methods approved by the Comptroller. He shall make to the President an annual report on the condition and needs of the Library and on the work of the staff. With the approval of the President, the Director of the Library may establish branch libraries within the University when in their opinion efficiency in cataloguing, ordering, and other matters of library administration, and the general welfare of a particular college, school or department will thereby be promoted, and when action has been taken, the Director may delegate appropriate powers to the assistants in charge of such branches.
    "c) The Director shall be elected biennially by the Board of Trustees, on the nomination of the President of the University. On the occasion of each such election, the President shall have the advice of the Senate Library Committee, to which for this purpose he shall add two members of the Library staff.
    " $d$ ) Members of the Library staff shall be appointed by the Board of Trustees on the recommendation of the Director of the Library as approved by the President, and may be given appropriate academic rank.
    "c) A standing committee of the Senate on the Library shall apportion the library book funds, and shall advise with the Director in matters pertaining to the Library. The Director shall be ex-officio a member of the Committee."

    It should be pointed out, however, that the regulation in section (c) concerning tenure of the librarian seems to place him at a disadvantage as compared with the professorial group and that the assistance given the librarian by the library committee in allocating book funds, as described in section (e), should be of an advisory, rather than of an administrative, character.

[^10]:    4 Louis R. Wilson et al., "Report of a Survey of the University of Florida Library for the University of Florida, February-May, 1940" (Chicago: American Library Association, 1940), pp. 17-19. (Mimeographed.)

[^11]:    s For further consideration of this subject, see chap. vi.

[^12]:    ${ }^{6}$ For an extended discussion of the administrative advantages and disadvantages of joint direction of library and library school and of the educational implications of such direction, see Keyes D. Metcalf et al., The Program of Instruction in Library Schools (Urbana: University of Illinois Press, 1943), pp. 109-11.

[^13]:    'Chicago: American Library Association, 1942.

[^14]:    ${ }^{8}$ R. B. Downs (ed.), Union Catalogs in the United States (Chicago: American Library Association, 1942); Bibliographical Planning Committee of Philadelphia, Philadelphia Libraries, A Survey of Facilities, Needs, and Opportunities (Philadelphia: University of Pennsylvania Press, 1942).

[^15]:    9 J. D. Russell, "Organization and Administration of Colleges and Universities" (2d ed.; Chicago: Distributed by the University of Chicago Bookstore, 1937), pp. 76-77 (mimeographed).

[^16]:    ${ }^{10}$ F. J. Kelly and J. H. McNeely, The State and Higher Education: Phases of Their Relationship (New York: Carnegie Foundation for the Advancement of Teaching, 1933).

[^17]:    "I See American Library Association, Board on Salaries, Staff and Tenure, "Classification and Pay Plans for Libraries in Institutions of Higher Education" (Chicago: American Library Association, 1943). (Mimeographed.)

[^18]:    ${ }^{12}$ W. E. Pearce, "Books and Colleges," Publishers' Weekly, CXVIII (1930), 1030-33.

[^19]:    x "Statistics of University Libraries, 1939-40" (mimeographed). In addition to their expenditures for salaries, 10 libraries spent from $\$ 108,168$ to $\$ 266,515$ for books, periodicals, and bindings in the same year.

[^20]:    - See chap. ii.

[^21]:    ${ }^{3}$ Lloyd Morey, University and College Accounting (New York: John Wiley \& Sons, 1930), p. 71.

[^22]:    4 In his study, Efficiency in College Management (Bloomington, Ind.: Bureau of Cooperative Research, Indiana University, 1931), J. D. Russell found that many colleges failed to pay their bills promptly enough to earn discounts (p. 55). This condition, of course, may arise from the procedures of the business office rather than from those of the library.

[^23]:    - Data from board of directors of the Chicago Public Library, regular meeting, Chicago, January 15, 1941, in Official Record 1941, p. 198.
    $\dagger$ Data from Gretchen J. Garrison, "Cooperative Bookbuying," Pacific Northwess Library Association Quartecly, IV (1940), 41-47.
    © Based on information from a group of 38 university libraries.
    $\$$ This figure is increased for quantity purchases of same title.

[^24]:    ${ }^{5}$ Board of directors of the Chicago Public Library, regular meeting, Chicago, Monday; January 13, 1941, in Official Record, 1941, p. 196.

    - Bulletin of the American Library Association, XXXV (1941), 104.

[^25]:    ${ }^{7}$ For a discussion of discounts see articles by Bishop, Garrison, and Orman in the Bibliography at the end of the chapter.
    ${ }^{3}$ At the Oklahoma Agriculture and Mechanical College the library handles no cash. A $\$ 1.00$ fine deposit is collected from each student when he pays his other fees at the beginning of the semester. Coupon books are used to take care of transactions. It should be pointed out that the procedure has the limitation of minimizing the main idea of fines-punishment. At the University of California bills for fines are sent to the comptroller for collection. In this case, no deposit is required from the student.

[^26]:    - Columbia University, Report of the Director of Libraries for the Academic Year Ending fune 30, 1939 (New York: Columbia University, 1939), pp. 9-10.
    ${ }^{20}$ Trends in university library expenditures have been discussed recently by Ellsworth (see "Trends in University Expenditures for Library Resources and for Total Educational Purposes, 192I-41," Library 2uarterly, XIV (1944), 1-8. His conclusions were as follows: "(I) Book and total educational expenditures reflect closely the economic conditions of the country, though they both respond somewhat slowly to prosperity and depression. (2) Since the last depression, universities have not raised their rate of expenditures for books so rapidly or so high as they have raised the rate for all educational purposes. (3) Small universities have increased their rate of book expenditures faster than have the medium-sized universities, and the medium-sized universities faster than the large universities." Ellsworth also indicated that statistics on university libraries are incomplete and not uniform.
    ${ }^{11}$ Until 1943 these figures were published in the February issues of the Bulletin of the American Library Association. See "College and University Library Statistics," College and Research Libraries, IV (1943), 153.

[^27]:    *Source: "College and Univernity Library General and Salary Statiatica," published annually in the Bulletin of the American Libpary Association, Volt. XXVI-XXXV (1932-41). Title varies

[^28]:    - Data adapted from "College and University Library General and Salary Statiatica," Bulletia of the $A$ merican Librery Association, XXXV (1941), 105.

[^29]:    " C. S. Marsh (ed.), (4th ed.; Washington: American Council on Education, 1940), passim.
    ${ }^{4}$ U.S. Office of Education, Survey of Land-Grant Colleges and Universities (Bulletin [1930], No. 9) (Washington: Government Printing Office, 1930), I, 709-10.

[^30]:    * Data adapted from "College and University Library General and Salary Statistics," Bulletin of the American Library Association, XXXV (194I), 105.

[^31]:    ${ }^{34}$ John Dale Russell, "The Financial Administration of Institutions in Higher Education"

[^32]:    is U.S. Office of Education, op. cit.
    ${ }^{16}$ For an example of how one university library solved this problem, see Chauncey $S$. Boucher, The Chicago College Plan, revised and enlarged after ten years' operation of the

[^33]:    ${ }^{18}$ In cases of non-university patrons it may be necessary, in order not to diminish service to regular students and faculty, to institute a fee system. See Columbia University Libraries, Library Fees (New York, 1942). The fees required are of two kinds: (1) a general-use fee, $\$ 3.00$, for each three-month period or fraction thereof (not applied to holders of degrees from Columbia); and (2) temporary borrowing, 3 cents per day, with three-day minimum of ten cents, and continuous borrowing, $\$ 3.00$, for each three-month period or fraction thereof.
    ${ }^{19}$ During the year $1940-41$ Princeton University Library collected $\$ 138.82$ for the sale of publications, and $\$ 466.50$ for subscriptions to and contributions for the Chronicle. See Princeton University, Annual Report of the Librarian for the Year Ending fune 30, 1941 (Princeton, N.J.; Princeton University Library, 1941), p. 10.

[^34]:    so "Report to the Director of Libraries on the Operation of the Libraries' Department of Photographic Reproduction, July 1, 1940-June 30, 1941" (Chicago: University of Chicago Libraries, 1941), p. 1 (typewritten).
    ${ }^{200}$ "Lending Service Library, Columbia University, Annual Report, July 1, 1943-June 30, 1944," p. 15 (typewritten).
    ${ }^{21}$ Harvey Cain, "Budgets for Institutions of Higher Education," Proccedings of the Tenth Annual Meeting of the Southern Association of College and Unioersity Business Officers, April 29-30, 1938, p. 19.

[^35]:    ${ }^{32}$ Morey, op. cit., pp. 16-19, contains sample forms.

[^36]:    ${ }^{23}$ American Library Association, Board on Salaries, Staff and Tenure, "Classification and Pay Plans for Libraries of Institutions of Higher Education" (Chicago: American Library Association, 1943) (mimeographed).
    ${ }^{24}$ Fremont Rider, "Library Cost Accounting," Library 2uerterly, VI (1936), 331-81.
    ${ }^{25}$ R. A. Miller, "Cost Accounting for Libraries: Acquisition and Cataloging," Library 2uarterly, VII (1937), 511-36.

[^37]:    ${ }^{26}$ See Bibliography.
    ${ }^{27}$ Donald Coney et al., "Report of a Survey of the Indiana University Library for the Indiana University, February-July 1940" (Chicago: American Library Association, 1940), pp. 34-35. The II state universities were: Texas, Michigan, Washington, Illinois, Iowa, North Carolina, Louisiana, Oklahoma, Kansas, Indiana, and Nebraska.
    ${ }^{28}$ Ibid, p. 35 .
    ${ }^{29}$ College and University Library General and Salary Statistics," American Library Association Bulletin, XXXV (1941), 104.

[^38]:    ${ }^{30}$ Floyd W. Reeves and John D. Russell, The Measurement of College Excellence (Bulletin of the Bureau of School Service, Vol. I, No. 4 LLexington, Kentucky: University of Kentucky, 1929]), pp. 33-34.
    "John D. Russell and Floyd W. Reeves, The Eoaluation of Higher Institutions, Vol. VII: Finance (Chicago: University of Chicago Press, 1935), p. 33-
    ${ }^{3}$ Douglas Waples ef al., The Eoaluation of Higher Institutions, Vol. IV: The Library (Chicago: University of Chicago Press, 1936), p. 35.

[^39]:    ${ }^{33}$ Ralph E. Ellsworth, "Summary of Current Practices of Colleges and Universities with Respect to the Management of Book Funds," College and Research Libraries, III (1942), 252-55.

    34 Ibid.

[^40]:    is See Bibliography.
    *Ralph E. Ellsworth, "Some Aspects of the Problem of Allocating Book Funds among Departments in Universities," Library 2uarterly, XII (1942), 487-88.

[^41]:    ${ }^{37}$ Donald Coney, "An Experimental Index for Apportioning Departmental Book Funds for a University Library," Library 2uarterly, XII (1942), 422-28.
    ${ }^{38}$ Ibid., p. 424.

[^42]:    s" Robert M. Trent, "Financial Records for College Libraries" (unpublished M.S. thesis, Columbia University, 1939), p. 21.

    40 Ibid, p. 30.

[^43]:    ${ }^{41}$ The source of the material in this and the following two sections is "A Report on Certain Problems of the Libraries and School of Library Service of Columbia University," by Louis R. Wilson, Keyes D. Metcalf, and Donald Coney (typewritten, 1944), Pp. 42-46, chap. iv, "Accounting and Fiscal Records" (Coney).

[^44]:    ——. "Report of a Survey of the University of Georgia Library for the University of Georgia, September-December, 1938." Chicago: American Library Association, 1939. (Mimeographed.)
    Works, G. A. College and University Library Problems. Chicago: American Library Association, 1927.

[^45]:    - Henri Fayol, Industrial and General Administration (London: Isaac Pitman \& Sons, 1930).

[^46]:    ${ }^{2}$ L. H. Gulick and L. Urwick (eds.), Papers on the Science of Administration (New York: Institute of Public Administration, Columbia University, 1937).
    ${ }^{3}$ E.g., F. L. Reeves, "Some General Principles of Administrative Organization," in C. B. Joeckel (ed.), Current Issues in Library Administration (Chicago: University of Chicago Press, 1939), pp. 1-21.
    ${ }^{4}$ J. P. Danton, "University Librarianship-Notes on Its Philosophy," College and Research Librarians, II (1941), 195-204.

[^47]:    s Donald Coney, "The Administration of Technical Processes," in C. B. Joeckel, op. cit., pp. 163-8o.

[^48]:    ${ }^{6}$ The alternative titles "chief librarian" and "director" are suggested in American Library Association, Board on Salaries, Staff and Tenure, "Classification and Pay Plans for Libraries in Institutions of Higher Education" (Rev. ed., Chicago: American Library Association, 1943) (mimeographed).

[^49]:    * Does not include secretaries, who may have adminiatrative duties. All libraries considered have secretaries on the staffs.

[^50]:    ${ }^{7}$ For a detailed discussion of this type, see Mildred H. Lowell, College and Unioersity Library Consolidations (Eugene: Oregon State System of Higher Education, 1942).

[^51]:    ${ }^{8}$ See "Discussion" by R. E. Ellsworth, College and Research Libraries, I (1939), 50-56, 96; also R. E. Ellsworth, "The Significance of the Divisional Room Plan for University Libraries," University of Colorado Studies, Ser. A. (general) XXVI, No. 4 (1941), 33-39.
    , Ellsworth, op. cit., p. 38. The Colorado building also provides cubicles for students and studies for faculty members in the stacks. A general reference room, a documents room, and a music room likewise offer facilities for study and research by students and faculty members.

[^52]:    xo University of Chicago, Commission on the Future Policy of the University Libraries, Tentarive Report, January, 1924 (Chicago: University of Chicago Press, 1924).
    ${ }^{\text {" }}$ A recent paper summarizing the background and historical development of departmental libraries is Lawrence Thompson's "The Historical Background of Departmental and Collegiate Libraries," Library Quarterly, XII (1942), 49-74. See also J. C. M. Hanson, "Central versus Departmental Libraries," Library Quarterly, XIII (1943), 132-35.

[^53]:    ${ }^{{ }^{2}}$ See Walter Hausdorfer, "Professional School and Departmental Libraries Survey" ([New York: Special Libraries Association], 1938), pp. 6-8 (mimeographed). This summary by Hausdorfer considers the administrative organization, quarters and equipment, personnel, financial administration, preparatory processes, service to the clientele, and public relations of professional school and departmental libraries. See also George A. Works, College and University Library Problems (Chicago: American Library Association, 1927), pp. 68-73.
    ${ }^{13}$ Op. cit., pp. 65-66.

[^54]:    ${ }^{14} \mathrm{Op}$. cit. In this discussion, the reader should bear in mind that the Report was made in 1924. Many changes have occurred in the development of the University of Chicago and of its libraries since that year. Likewise, the collecting and use of materials in other university libraries have undergone change during the period from 1924 to the present.

[^55]:    ${ }^{1 s}$ For a description of subsequent developments at the University of Chicago Libraries and several suggested plans for the improvement of conditions, see the comments by M. L. Raney, "A Ceiling," Courier (University of Chicago Friends of the Library), No. 20 (April, 1941), and "The Board Votes," ibid., No. 23 (December, 1941). In the latter issue Raney discusses a series of relief measures and presents plans of a proposed addition to Harper and of a Map Library and Department of Geography building.
    ${ }^{16}$ Robert A. Miller, "Centralization versus Decentralization," Bulletin of the American Library Association, XXXIII (1939), 75-79, 134-35. Miller considers arguments pro and con accessibility, cost, efficiency, adequacy, use of books, interrelation of subject fields, and, educational significance. He concludes: "The cause of the central library is favored by the conclusions drawn from the arguments on cost, interrelationship, efficiency, and educational significance. The arguments on efficiency and educational significance, however, can be made to serve the decentralist provided the institution has a budget which will afford good service for both general and separate libraries and the maintenance of a general collection of books for the correlation of the library needs of the collegiate departments." No definite conclusions can be drawn on the questions of adequacy and use until precise studies are made.
    "University of Chicago Commission on the Future Policy of the University Libraries, op. cit., p. 55.

    11 Ibid., p. 56.

[^56]:    19 Works, op. cit., pp. 63-79; William M. Randall and F. L. D. Goodrich, Principles of College Library Administration (2d ed., Chicago: American Library Association and the University of Chicago Press, 1941), pp. 195-213; Jackson E. Towne, "Separately Shelved CollegeLibrary Collections," Library Quarterly, V (1935), 323-40; Harvie Branscomb, Teaching with Books: A Study of College Libraries (Chicago: Association of American Colleges and the American Library Association, 1940), pp. 132-46.

[^57]:    ${ }^{* 0}$ Op. cit., p. 195.

[^58]:    ${ }^{22}$ Op. cit., pp. 60-66.

[^59]:    - W. M. Randall and F. L. D. Goodrich, Principles of College Library Administration (2d ed.; Chicago: American Library Association and University of Chicago Press, 1941), pp. 78-79.

[^60]:    4 K. D. Metcalf, "The Essentials of an Acquisition Program," in W. M. Randall (ed.), The Acquisition and Cataloging of Books (Chicago: University of Chicago Press, 1940), pp. 8586.
    ${ }^{5}$ C. B. Joeckel and Leon Carnovsky, A Metropolitan Library in Action: A Survey of the Chicago Public Library (Chicago: University of Chicago Press, 1940), p. 131.

[^61]:    ${ }^{6} \mathrm{~K}$. M. Ruckman, "Gifts and Exchanges in the University of Illinois Library" (unpublished Master's thesis, University of Illinois, 1936), p. 29.

    I W. W. Wright "Two Years of Books by Barter," Haroard University Library Notes, IV (1941), 29.
    ${ }^{8}$ Ivander MacIver, "The Exchange of Publications as a Medium for the Development of the Book Collection,"'Library 2uarterly, VIII (1938), 492.

[^62]:    -1 Ibid., p. 494.
    "I Ibid., p. 492. See also R. F. Lane, "The Place of American University Presses in Publishing" (unpublished Ph.D. dissertation, University of Chicago, 1939).
    ${ }^{\text {is }}$ M. L. Raney, Unioersity of Chicago Suroey, Vol. VII: The Unioersity Libraries (Chicago: University of Chicago Press, 1933), pp. 17-18.

[^63]:    ${ }^{13}$ MacIver, op. cit., pp. 492-93. ${ }^{44}$ Ruckman, op. cit., pp. 36-37.
    ${ }^{25}$ E.g., Illinois, Pennsylvania, Chicago, Temple.
    ${ }^{16}$ In determining the extensiveness of published dissertations, see T. R. Palfrey and H. E. Coleman, Guide to Bibliographies of Theses, United States and Canada (2d ed.; Chicago: American Library Association, 1940).
    ${ }^{17}$ T. P. Fleming, "Developing Library Resources with Limited Funds," Library fournal, LXIII (1938), 139.

[^64]:    ${ }^{18}$ E. M. Loacker, "Streamlining the Exchange of Duplicates," Library Journal, LXVI (1941), 381-83.
    ${ }^{19}$ MacIver, op. cit., pp. 497-98.

[^65]:    ${ }^{20}$ N. C. Van Deusen, "Periodical Exchange," Library 7ournal, LXV (1940), 131 1-32.
    ${ }^{21}$ N. C. Van Deusen, "Periodical Exchange Union," ibid., LXVI (194I), 318-19.

[^66]:    ${ }^{22}$ The New York Public Library has a very diplomatic circular describing its policy with reference to the receipt of gifts.

[^67]:    ${ }^{23}$ See Fremont Rider, "The Possibility of Discarding the Card Catalog," Library 2uarterly, VIII (1938), 329-45; also his "Alternatives for the Present Dictionary Card Catalog," in W. M. Randall (ed.), The Acquisition and Cataloging of Books, pp. 133-62.

[^68]:    ${ }^{34}$ Margaret Mann, Introduction to Cataloging and the Classification of Books (2d ed., Chicago: American Library Association, 1943).
    ${ }^{\text {is }}$ H. L. Leupp, "Probable Trends in University Libraries," College and Research Libraries, I (1939), 60-6I.
    *Amy Wood, "California Divides Its Catalog," Library Yournal, LXIII (1938), 723-26.

[^69]:    ${ }^{27}$ Raynard C. Swank, "The Organization of Library Materials for Research in English Literature" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1944). See also his "Subject Catalogs, Classifications, or Bibliographies? A Review of Critical Discussions," Library Quarterly, XIV (1944), 316-32.

[^70]:    26. A Survey of Libraries in the United States (Chicago: American Library Association, 1926), IV, 68.
    ${ }^{20}$ F. B. Morgan, "The Official Catalog for the Large Public Library," Library Quarterly, VIII (1938), 211.
[^71]:    "A Catalog of Books Represented by Library of Congress Printed Cards Issued to Fuly ',', 1942 (Ann Arbor: Edwards Bros., 1942 -).
    " ${ }^{2}$ Fremont Rider, "Library Cost Accounting," Library Quarterly, VI (1936), 361.

[^72]:    ${ }^{33}$ Donald Coney, "The Administration of Technical Processes," in C. B. Joeckel (ed.), Current Issues in Library Administration (Chicago: University of Chicago Press, 1939), p. 163.

[^73]:    ${ }^{34}$ A Metropolitan Library in Action, p. 155.
    ${ }^{3 s}$ It should be observed that in some instances it may be more efficient to permit cataloging in separate locations, such as in law and medical libraries. Centralized control, however, is advisable.

[^74]:    36 "Symposium on the Division of Professional Activities in the Catalog Department," Catalogers' and Classifiers' Yearbook, V (1936), 39-40.
    ${ }^{31}$ This is the present arrangement in the processing department of the Library of Congress. Harvard University Library catalog department has a descriptive-cataloging unit.
    ${ }^{38}$ Donald Coney et. al:, "Report of a Survey of the Indiana University Library for the Indiana University, February-July, 1940" (Chicago: American Library Association, 1940) (mimeographed).
    ${ }^{3}$ Information from questionnaires received by Mr. Coney.

[^75]:    to See chap. iv.

[^76]:    ${ }^{42}$ American Library Association, Board on Salaries, Tenure and Staff, "Classification and Pay Plans for Libraries in Institutions of Higher Education" (rev. ed.; Chicago: American Library Association, 1943) (mimeographed).
    ${ }^{42}$ U.S. Congress, House, Committee on Appropriations, "Legislative Establishment Appropriation Bill for 1937," Hearings before the House Subcommittee of the House Committee for

[^77]:    Appropriations, 74th Cong., 2d sess. (Washington: Government Printing Office, 1936), pp. 199-258.

    43 S. G. Akers, "Relation between Theory and Practice of Cataloging" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1932).

[^78]:    * Prepared by Ruby Egbert and Lucile Speer (Missoula, Mont: 1938) (mimeographed).

[^79]:    ${ }^{45}$ L. Q. Mumford, "Account of the Reorganization of the Processing Department at the Library of Congress," Catalogers' and Classifiers' Yearbook, X (1941), 45-56; J. W. Cronin, "The Effect of Reorganization at the Library of Congress on the Card Division," Catalogers' and Classifiers' Yearbook, X (1941), 57-65; Archibald MacLeish, "The Reorganization of the Library of Congress, 1939-44," Library 2uarterly, XIV (1944), 277-315.

[^80]:    *L. R. Wilson et al., "Report of a Survey of the University of Georgia Library for the University of Georgia, September-December, 1938" (Chicago: American Library Association, 1939), pp. 43-44 (mimeographed).

[^81]:    ${ }^{47}$ M. F. Tauber, "Reclassification and Recataloging of Materials in College and University Libraries," in W. M. Randall (ed.), The Acquisition and Cataloging of Books, pp. 187-219.
    ${ }^{18}$ M. F. Tauber, "Classification of Books in College and University Libraries: Historical Aspects," Library Quarterly, XII (1942), 706-24.

[^82]:    *Source: Robert A. Miller, "Cost Accounting for Librarier: A Technique for Determining the Labor Costa of Acquisition and Cataloging Work" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1936).

[^83]:    ${ }^{51}$ T. F. Currier, "Buying, Listing, and Finding Boọks," Catalogers' and Classifiers' Yearbook, IV (1934), 106-7.
    ${ }^{53}$ Amy F. Wood and Evelyn Holcomb, "Symposium concerning Union Catalogs," Library Fournal, LXI (1936), 92.

[^84]:    ${ }^{\text {ss }}$ L. C. Merritt, "The Administrative, Fiscal and Quantitative Aspects of the Regional Union Catalog," in R. B. Downs (ed.), Union Catalogs in the United States (Chicago: American Library Association, 1942), p. 38.
    sc Op. cit., p. 135.
    ss Discussed in chap. xiii.

[^85]:    ${ }^{56}$ L. R. McColvin, Libraries and the Public (London: George Allen \& Unwin, 1937), p. 50.
    ${ }^{\text {st }}$ G. O. Kelley, The Classification of Books: An Inquiry into Its Usefulness to the Reader (New York: H. W. Wilson, 1937), p. 125.
    ${ }^{58}$ R. A. Miller, "On the Use of the Card Catalog," Library 2uarterly, XII (1942), 629-37.

[^86]:    s? It should be pointed out that an undergraduate library in a university library system would find it difficult to permit application of Miller's findings on use.
    ${ }^{60}$ P. B. Knapp, "The Subject Catalog in the College Library: An Investigation of Terminology" (unpublished Master's thesis, Graduate Library School, University of Chicago, 1943).
    ${ }^{62} \mathrm{Op}$. cit.

[^87]:    ${ }^{62}$ J. E. Hitchcock, "The Coverage of Material under the Subject Entries of the Dictionary Catalog in American University Libraries" (unpublished Master's thesis, University of Chicago, 1939).

[^88]:    ${ }^{64}$ Fremont Rider, "Alternatives for the Present Dictionary Card Catalog," in W. M. Randall (ed.), The Acquisition and Cataloging of Books, pp. 133-62.

[^89]:    ${ }^{65}$ For a more detailed discussion of the photographic department, see H. H. Fussler, Photographic Reproduction for Libraries: A Study of Administrative Problems (Chicago: University of Chicago Press, 1942).

[^90]:    ${ }^{66}$ H. H. Fussler, "Training for Microphotography," Federation internationale de documensation communicationes, VI (1939), C92-94.

[^91]:    ${ }^{67}$ H. H. Fussler, "Microphotography and the Future of Inter-library Loans," fournal of Documentary Reproduction, II (1939), 3-10.

[^92]:    ${ }^{68}$ M. F. Tauber, "Cataloging and Classifying Microfilm," Yournal of Documentary Reproduction, III (1940), 10-25.

[^93]:    ${ }^{69}$ H. H. Fussler, "Microphotography and the Future of Inter-library Loans," Fournal of Documentary Reproduction, II (1939), 6-9.
    ${ }_{70}$ "The Gentlemen's Agreement and the Problem of Copyright," Yournal of Documentary Reproduction, II (1939); 29-36. Since the war the National Association of Booksellers has ceased to exist. The agreement which was made, however, serves as a valuable precedent; and, as it was a "gentlemen's agreement," it might be resumed at some future date with another group. As an expression of what constitutes good faith, it seems that the agreement still has value. For the duration of the war the Alien Property Custodian has vested copyright in certain titles on a nonroyalty, nonexclusive basis.

[^94]:    ${ }^{72}$ University of Minnesota Library, "Report, 1940-41" (Minneapolis, 1942), p. 34 (dexigraphed).

[^95]:    7 Ibid., p. 73.
    ${ }^{44}$ Problems of binding are discussed in chap. xvii.

[^96]:    ${ }^{7}$ W. R. Thurman, foreman of the bindery of the New York Public Library, in a recent article, "Conservation of Periodical and Reference Volumes," Library Journal, LXVI (1941) 804, lists eleven questions which the librarian might ask prior to binding a volume: "(1) How much use is the volume going to have? (2) In what way is it going to be used? (3) What kind of readers are going to use it? (4) How quickly does such a volume usually get worn out? (5) At what points will it be likely to get most wear? (6) How long are the contents of the book going to be timely and how soon will they have only historical value? (7) How much is the book worth now? How much is it likely to be worth in the future? (8) Can it be easily replaced now? Can it be easily replaced in the future? (9) Is it of such a size and weight that it needs special attention by the binder? (10) How about the kind of paper in the volume, plates, maps, inserts, etc.? (iI) What is the present condition of the book or the periodicals?"
    ${ }^{76}$ Columbia University Libraries, "Binding Practices and Procedures" [New York: 1941] (mimeographed).

[^97]:    ${ }^{1}$ See J. I. Wyer, Reference Work: A Textbook for Students of Library Work and Librarians (Chicago: American Library Association, 1930); Margaret Hutchins, Reference Work (Chicago American Library Association, 1944); and Pierce Butler (ed.), The Reference Function of the Library (Chicago: University of Chicago Press, 1943).

[^98]:    'Cf. H. H. Henkle, "The Liberal Arts Function of the University Library," College and Research Libraries, II (1940), 5-13.
    ${ }^{3}$ A.C. NoE, "The University Library and Research," Library 2uarterly, IV (1934), 300-305.
    'A. K. Borden, "The Research Librarian Idea," Library Fournal, LVIII (1933), 104 -6.
    s Ibid., p. ıog.

[^99]:    ${ }^{6}$ A. K. Borden, "The College Librarian and Research," Bulletin of the American Library Association, XXIX (1935), 412-16.
    ${ }^{7}$ Peyton Hurt, "Staff Specialization: A Possible Substitute for Departmentalization," Bulletin of the American Library Association, XXIX (1935), 417-21.

[^100]:    ${ }^{\text {B }}$ As suggested by G. O. Kelley, "The Classification of Books in Retrospect and Prospect: A Tool and a Discipline," in W. M. Randall (ed.). The Acquisition and Cataloging of Books, pp. 184-86.

[^101]:    - Hurt, op. cit., p. 420.

[^102]:    ${ }^{20}$ I. G. Mudge, Guide to Reference Books (6th ed.; Chicago: American Library Association, 1936), and supplements by I. G. Mudge and Constance Winchell.
    ${ }^{11}$ John Minto, Reference Books: A Classified and Annotated Guide to the Principal Works of Reference (London: Library Association, 1929), Suppl., 1931.
    ${ }^{22}$ Louis Shores, Basic Reference Books (2d ed.; Chicago: American Library Association, 1939).
    ${ }^{13}$ H. S. Hirshberg, Subject Guide to Reference Books (Chicago: American Library Association, 1942).
    ${ }^{14}$ In the divisional library this is not true. During 1940 , circulation from all units of the University of Colorado Library amounted to 54,304 items; from the main circulation desk, 12,973, or 24 per cent of the total.

[^103]:    ${ }^{25}$ C. H. Brown and H. G. Bousfield, Circulation Work in College and Unioersity Libraries (Chicago: American Library Association, 1933); see also H. G. Bousfield, "The Circulation Department: Organization and Personnel,"' College and Research Libraries, VI (1944), 45-50.

[^104]:    ${ }^{16}$ University of California Library, Committee of the Staff Association, "University of California Library Staff Manual" (Berkeley, 1938), pp. 69-70 (typewritten).

[^105]:    M. F. Canova. "A Study of the Circulation Departments in a Selected Group of University Libraries with Special Emphasis Given to the Division of Duties between Professional and Clerical Assistants" (unpublished M.A. thesis, University of California, 1933).

[^106]:    ${ }^{71}$ E.g., D. Coney, H. H. Henkle, and G. F. Purdy, "Report of a Survey of the Indiana University Library for the Indiana University, February-July, 1940" (Chicago: American Library Association, 1940), pp. 78-79 (mimeographed). The University of Michigan library employs this measure of efficiency in an annual test. See the recent reports of the general library.
    ${ }^{58}$ University of Nebraska Library, "Reference, Order, Circulation Departments: Manual" (Lincoln, Nebraska: 1939) (typewritten).

[^107]:    ${ }^{21}$ K. D. Patterson and K. H. Berthold, "Fines-an Overdue Problem," Library Yournal, LXIII (1938), 181-83.

[^108]:    ${ }^{22}$ T. W. Koch (ed.), "Symposium on the Reserve Book System," in American Library Association, College and University Library Service, Trends, Standards, Appraisal, Problems.... (Chicago: American Library Association, 1938), pp. 73-99.
    ${ }^{23}$ Ibid., pp. 93-95.

[^109]:    ${ }^{14}$ T. P. Fleming, "The Organization of Work with Public Documents in University Libraries," in American Library Association, Committee on Public Documents, Public Documents (Chicago: American Library Association, 1935), pp. 101-27.

[^110]:    ${ }^{25}$ F. B. Rothman and S. Ditzion, "Prevailing Practices in Handling Serials," College and Research Libraries, I (1940), 165-69.
    ${ }^{26}$ J. H. Gable, "The New Serials Department," Library Journal, LX (1935), 867-71; see also his Manual of Serials Work (Chicago: American Library Association, 1937).

[^111]:    ${ }^{27}$ E. L. Casford, "Periodicals, Their Use and Preservation," Wilson Bulletin, XIII (1939), 594.

[^112]:    ${ }^{2}$ W. S. Bittner, "University and College Extension Work," in Dorothy Rowden (ed.), Handbook of Adult Education in the United States (New York: American Association for Adult Education, 1938), pp. 279-308.

[^113]:    ${ }^{29}$ Herbert Sorenson, Adult Abilities: A Study of University Extension Students (Minneapolis: University of Minnesota Press, 1938), pp. 109-10.

[^114]:    ${ }^{30}$ E.g., University of Michigan, Library, What To Read: Alumni Reading Lists (3d ser.; Ann Arbor: University of Michigan Press, 1939). The first and second series were issued under the title Alumni Reading Lists, in 1931 and 1934.

[^115]:    ${ }^{31}$ E.g., see "New Reading Lists for Alumni," Alumni Bulletin, the University of Chicago, VIII (1942), 6 ; also University of Michigan, Library, What To Read.

[^116]:    ${ }^{32}$ John E. Van Male, "The State as Librarian: A Study of the Co-ordination of Library Service in Wisconsin' (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1942).

    33 Ibid.

[^117]:    ${ }^{1}$ Institut international de Coopération intellectuelle, Rôle et formation du bibliothécaire; étude comparatioe sur la formation professionnelle du bibliothécaire (Paris: Institut international de Coopération intellectuelle, 1935), p. 21. See also Fritz Milkau, "Der Bibliothekar und seine Leute," in Handbuch der Bibliothekswissenschaft (Leipzig: Harrassowitz, 1933), II, 635-716.

[^118]:    "The term "student-assistant" here refers to a student in the School of Library Service and is usually a person with library experience. Generally he is studying for a higher degree, having received the first nrofessional degree from either Columbia or some other library school.

[^119]:    ${ }^{3}$ S. G. Akers, "Relation between Theory and Practice of Cataloging with Special Reference to Courses in Cataloging in Library Schools" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1932).
    " "Classification and Pay Plans for Libraries in Institutions of Higher Education," Part III: "Universities" (Chicago: American Library Association, 1943) (mimeographed).

[^120]:    *Data from "Statiatice of College and University Libraries," 1925-26 and 1939-40 (mimeographed). High, 252 per cent; median, 89 per cent; low, 2 per cent.
    $\dagger$ Figure for 1929-30.

[^121]:    * Data adapted from "College and University Library General and Salary Statistics," Bulletin of the American Library Association, XXXV (1941), 105 .

[^122]:    "Data adapted from "College and University Library General and Salary Statiatica," Bulletin of the American Library Association, XXXV (1941), 105.
    $\dagger$ It should be pointed out that student assistanta are not included in this table. In some inatances these asiatanta comprise a large part of the clerical help.

    I Subprofenional, clerical, and administrative office aesiatants are all included in "Orher."

[^123]:    ${ }^{5}$ Ibid., pp. xi-xii.
    ${ }^{6}$ Ibid., p. i 33.

[^124]:    For central and 7 departmental libraries.
    || Combines circulation, renerve books, and reference as the readers' department.

[^125]:    7Op.cif., pp. 175-97. ${ }^{8}$ Ibid., pp. 48-49; see also Milkau, op. cit.

[^126]:    ' Abraham Flexner, Universities: American, English, German (New York: Oxford University Press, 1930), Part 1.
    ${ }^{10}$ Tentative Report, January, 1924 (Chicago: University of Chicago Press, 1924), p. 147.
    ${ }^{21}$ H. M. Wriston, "College and University Libraries," in E. M. Danton (ed.), The Library of Tomorrow: A Symposium (Chicago: American Library Association, 1939), p. 147.

[^127]:    ${ }^{13}$ Abraham Flexner, "Is Social Work a Profession?" Proceedings of the National Conference of Charities and Corrections, 1915, pp. 576-90.

[^128]:    ${ }^{13}$ Librarian of Harvard University, 1877-97. See also chap. xv.
    ${ }^{44}$ Librarian of the U.S. Office of the Surgeon General and the New York Public Library, 1865-1913.

[^129]:    ${ }^{25}$ S. B. Mitchell, "Essentials in the Training of University Librarians-II," College and Research Libraries, I (1939), 28.
    ${ }^{16}$ C. C. Williamson, "Essentials in the Training of University Librarians-III," College and Research Libraries, I (1939), 30-31.
    ${ }^{17}$ E. W. McDiarmid, "The Place of Experience in Developing College and University Librarians," Library 2uarterly, XII (1942), 614-21.
    " Ibid., p. 621.

[^130]:    ${ }^{19}$ American Library Association, Board on Salaries, Staff and Tenure, op. cit. See also Akers, op. cit., and M. F. Canova, "A Study of the Circulation Departments in a Selected Group of University Libraries, with Special Emphasis Given to the Division of Duties between Professional and Clerical Assistants" (unpublished Master's thesis, University of California, 1933).

[^131]:    ${ }^{20}$ Dorothy Schumacher, "School Library Statistics, 1939-40," Bulletin of the American Library Association, XXX (1941), 101.

[^132]:    ${ }^{21}$ Ibid. pp. 101-2.
    ${ }^{23}$ American Library Association, Committee on Post-war Planning, Post-war Standards for Public Libraries (Chicago: American Library Association, 1943), p. 78.

[^133]:    ${ }^{23}$ Schumacher, op. cit., p. 101.

[^134]:    ${ }^{24}$ Miriam Grosh et al., "NYA Student Work Program in the Universities and Colleges," Special Libraries, XXXII (1941), 84-88.
    ${ }^{25}$ 1bid., pp. 86-87.

[^135]:    ${ }^{26}$ J. D. Russell, "Organization and Administration of Colleges and Universities," syllabus for Educ. 34 (3d ed.; Chicago: University of Chicago, 1939), p. 101 (mimeographed).
    ${ }^{27}$ McDiarmid, op. cit.

[^136]:    ${ }^{28}$ The University of Texas uses an interview record in which provision is made for ranking both graphically and by appropriate characterization the applicant's attainments, skills, and traits.
    ${ }^{29}$ For a detailed discussion of the techniques and problems involved in interviewing, see W. V. Bingham and B. V. Moore, How To Interoiew (3d ed.; New York: Harper \& Bros., 1941).
    ${ }^{30}$ For a consideration of the problems of civil service in public libraries, see H. Goldhor, "The Selection of Employees in Large Civil Service and Non-civil Service Public Libraries" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1942).
    ${ }^{31}$ E. W. McDiarmid, "Trends in Civil Service as They Affect Libraries," Report of the Library Organization and Management Section of the Institute of Government Held at the University of Southern California under the Sponsorship of the Graduate School of Library Science and the School of Government, June 9-13, 1941, comp. Dorothy E. Rosen (Los Angeles: University of Southern California, 1941), pp. 7-9.

[^137]:    ${ }^{33}$ W. E. Mosher and J. D. Kingsley, Public Personnel Administration (rev. ed.; New York: Harper \& Bros., 1941), p. 213.

[^138]:    ${ }^{33}$ F. R. St. John, "Rating a Staff for Promotion and Demotion," Bulletin of the American Library Association, XXXIV (1940), 682-87, 733.
    ${ }^{4}$ The University of Texas Library uses two forms and secures judgments on both concerning a given individual. In one, adjectives descriptive of traits are checked according to a grading scheme; in the other, traits are treated in a summarizing paragraph.

[^139]:    ${ }^{35}$ Mosher and Kingsley, op. cit., pp. 490-91. See also A. S. Knowles, Merit Rating in Industry ("Northeastern University Publications," Bull. No. I [Boston: Northeastern University, College of Business Administration, Bureau of Business Research, 1940]).
    ${ }^{36}$ Mosher and Kingsley, op. cit.
    ${ }^{37}$ St. John, op. cit., p. 685; L. M. Buker, "Service Rating Plans in Public Libraries," Library Journal, LXIV (1939), 128.
    ${ }^{38}$ Buker, op. cit.
    ${ }^{39}$ Mosher and Kingsley, op. cit., pp. 498-99.
    ${ }^{40}$ Ibid., pp. 490-91.
    ${ }^{4}$ For a detailed list of difficulties, see National Industrial Conference Board, Plans for Rating Employees ("Studies in Personnel Policy," No. 8 [New York: National Industrial Conference Board, 19381), pp. 6-7.

[^140]:    ' M. H. Lowell, College and University Library Consolidations (Eugene: Oregon State System of Higher Education, 1942), pp. 116-17.
    'G. F. Bowerman, "The Federal Reclassification Act," Library Journal, XLVIII (1923), 309-11.
    ${ }^{3}$ W. M. Randall, The College Library (Chicago: American Library Association and the University of Chicago Press, 1932), p. 59.

[^141]:    - Data from Bulletin of the American Library Asrociation, XXXV (1941), 105. It should be remembered that these and other salary figures referred to in this chapter existed before the war. Some increases in salaries for all grades of workere have neceasarily been made in order to recruit and retain personnel.

[^142]:    *Data for salaries of professors from "College and University Library General and Salary Statistice," Bulletin of the American Library Association, XXXV (1941), $105,108$.

[^143]:    - Data from "College and University Library General and Salary Statistice," Bulletin of she American Library Association, XXXV (1941), 105.

[^144]:    $s$ "College and University Library General and Salary Statistics," Bulletin of the American Library Association, XXXV (1941), 106. Eight of the institutions may be considered as falling into the college class.

[^145]:    ${ }^{6}$ G. A. Works, College and Unioersity Library Problems: A Study of a Selected Group of Institutions . . . . (Chicago: American Library Association, 1927), pp. 48-50.

[^146]:    ${ }^{7}$ H. W. Tucker, "In-service Training in Large Public Libraries" (unpublished Master's paper, Graduate Library School, University of Chicago, 1941).
    ${ }^{8}$ Ibid., p. 21.

[^147]:    , "Opportunities for Advanced Study: A Survey," Pacific Northwest Library Association 2uarterly, V (1941), 94-95.

[^148]:    ${ }^{10}$ E. W. McDiarmid, "The Place of Experience in Developing College and University Librarians," Library Quarterly, XII (1942), 617.

[^149]:    " Data from Bulletin of the American Library Association, XXXV (1941), 108.

[^150]:    - Data from M. C. Maloy, "Faculty Status of College Librarians," Bulletin of the American Library Association, XXXIII (1939), 232-33, 302.
    $\dagger$ Three in name only.

    > One in name only.

[^151]:    ${ }^{22}$ J. A. McMillen, "Academic Status of Library Staff Members of Large Universities," College and Research Libraries, I (1940), 138-40.

[^152]:    ${ }^{13}$ Bulletin of the American Library Association, XXXV (1941), 108.
    ${ }^{14}$ See H. F. Pierce, "Graduate Study in Librarianship in the United States" (Chicago: American Library Association, Board of Education for Librarianship, 194I) (mimeographed).
    ${ }^{x s}$ The University of Texas makes provision for participation in retirement benefits by members of the library staff and for continued part-time employment after the age of seventy. See Rules and Regulations of the Board of Regents for the Government of the University of Texas ('University of Texas Publication' [Austin, August 22, 1943]), pp. 11-12.

[^153]:    ${ }^{16}$ Retirement Allowances for Administrative and Service Employees (New Haven: Yale University, 1940).

[^154]:    ${ }^{17}$ E.g., see F. J. Roethlisberger and W. J. Dickson, Management and the Worker: An Account of a Research Program Conducted by the Western Electric Company, Hawthorne Works, Chicago (Cambridge: Harvard University Press, 1939); also F. J. Roethlisberger, Management and Morale (Cambridge: Harvard University Press, 1941).

[^155]:    ${ }^{18}$ Some of the points made in this section have been adapted from the Code of Ethics drawn up by a Committee of the American Library Association and published in the Bulletin of the American Library Association, XXXIII (1939), 128-30.
    19 The North Carolina Code of 1939; All the General Laws to and Including the Legislatioe
    Session of 1939, ed. by A. H. Michie and C. W. Sublett (Charlotesville, Va.: Michie Co., 1939).

[^156]:    20 Ibid., sec. 4388.
    ${ }^{21}$ Ibid., sec. 4390.
    23 Ibid., sec. 4391 . ${ }^{25}$ Ibid., sec. 3202.
    ${ }^{33}$ Ibid., sec. 7521 .

    $$
    \begin{aligned}
    & 4 \mathrm{Ibid} . \text {, sec. } 43^{82} . \\
    & \text { as Ibid., sec. } 3^{202} \text {. } \\
    & \pm \text { Ibid., sec. } 3202 \text { (1). }
    \end{aligned}
    $$

[^157]:    ${ }^{27}$ Ibid., sec. 7519.
    ${ }^{20}$ Ibid., sec. 5012.
    ${ }^{95}$ University of California, Library, "Staff Manual," compiled by a Committee of the Staff Association of the Library (Berkeley: University of California Library, 1938), p. 18 (typewritten).

[^158]:    Jo Abraham Flexner, "Is Social Work a Profession?" Proceedings of the National Conference of Charities and Corrections, 1915, pp. 576-90. See also his Universities: American, English, German (New York: Oxford University Press, 1930), Part I.

[^159]:    " B. Berelson, "Library Unionization," Library Quarterly, IX (1939), 477-510.

[^160]:    ${ }_{32}$ "Staff Associations in University Libraries," California Library Association Bulletin, II (1940), 135-37.

[^161]:    ${ }^{33}$ R. C. White, Public Welfare Manuals: A Handbook for Manual Makers (Chicago: American Public Welfare Association, 1937), pp. 3-4-

    34 M. Hutchins, "Staff Manuals," Library Yournal, LVII (1932), 1039-42; C. B. Joeckel, review of Enoch Pratt Staff Instruction Book, in Library Quarterly, VI (1936), 436-38; L. E. Fay, "The Staff Manual for the College Library," Bulletin of the American Library Association, XXXI (1937), 464-68.

[^162]:    ${ }^{3 s}$ D. F. Deininger, "Criteria and Methods for the Development of a College Library Staff Manual Applied to the Construction of a Staff Manual for the Columbia College" (unpublished Master's thesis, Columbia University, 1938); P. Howard, "Library Staff Manuals and a Theory of Library Management" (unpublished Master's paper, Graduate Library School, University of Chicago, 1939).
    ${ }^{36}$ See L. R. Wilson and M. F. Tauber, "Staff Manuals in College and University Libraries," College and Research Libraries, II (1941), 126-35.
    ${ }^{3 \prime}$ Ibid. A bibliography of staff manuals is included at the close of the article.
    ${ }^{36}$ J. P. Danton, "Our Libraries-the Trend toward Democracy," Library 2uarterly, IV (1934), 16-27.

[^163]:    ${ }^{1}$ W. W. Bishop, "The Responsibility of American Libraries for the Acquisition of the Materials for Research," in W. M. Randall (ed.), The Acquisition and Cataloging of Books (Chicago: University of Chicago Press, 1940), pp. 30-38. See also R. B. Downs, "Leading American Library Collections,' Library 2uarterly, XII (1942), 457-73.
    ${ }^{2}$ J. P. Danton, "The Selection of Books for College Libraries: An Examination of Certain Factors Which Affect Excellence of Selection," Library Quarterly, V (1935), 419-56. The principles of co-operation in book selection for college libraries apply as well to university libraries.

[^164]:    * Figures from U.S. Commissioner of Education, Report . . . . for the Year rgoo-190r (2 vols.; Washington: Government Printing Office, 1902), II, 1688-1707.
    $\dagger$ Figures from "Statistics of Univeraity Libraries, 1919-20."
    \$ Figures from "Statistice of University Libraries, 1939-40."

[^165]:    : D. Waples and H. D. Lasswell, National Libraries and Forcign Scholarship (Chicago: University of Chicago Press, 1936), pp. 69-82. (See especially Fig. 18, p. 71).
    ${ }^{4}$ K. D. Metcalf, "The Essentials of the Acquisition Program," in W. M. Randall (ed.), op. cit., pp. 82-83. See also W. W. Bishop, "The Library's Contribution to Scholarship," in A. F. Kuhlman (ed.), The Development of University Centers in the South (Nashville: Peabody Press and Vanderbilt University Press, 1942), pp. 17-32.

[^166]:    s Nashville, Tenn.: George Peabody College, 1934.

[^167]:    'See American Library Association, "Friends of the Library Groups" (College and University ed.; Chicago: American Library Association, 1938) (mimeographed); see also F. A. Allen, "Friends of the Library Organizations," College and Research Libraries, V (1944), 347-50.
    ${ }^{1}$ Report for 1938-39 (New Haven, 1939), pp. 13-18. In 1940 the Yale Library Associates had a membership of 550.

[^168]:    ${ }^{4}$ In a preliminary survey of the holdings in Italian literature by the Library of Congress, Dr. Jerrold Orne divided the field into twenty-five periods and checked the library's holdings for each period against a bibliography of basic or essential books. See Annual Report of the Librarian of Congress for the Fiscal Year Ended fune 30, 1940 (Washington: Government Printing Office, 194I), pp. 7-10.

[^169]:    , Cf. M. L. Raney, University of Chicago Survey, Vol. VII: The University Libraries (Chicago: University of Chicago Press, 1933), p. 4. Some four hundred bibliographies were checked by faculty members for holdings and desiderata during the survey of the University of Chicago Libraries. "A long series of extended conferences with individual departments, groups of related departments, faculties of Schools, or even an entire Division. In these conferences, the practical arrangements were effected for producing the bibliographies to be checked and for the preparation of written departmental reports evaluating the results. Some two hundred members of the Faculty participated in this work."

[^170]:    io See Bibliograpical Planning Committee of Philadelphia, A Faculty Survey of the Unioersity of Pennsyloania Libraries (Philadelphia: University of Pennsylvania Press, 1940), for an example of the nature of various types of materials which might be included.

[^171]:    ' See especially John Minto, Reference Books (London: Library Association, 1929), and 193r supplement; I. G. Mudge, Guide to Reference Books (6th ed.; Chicago: American Library Association, 1936), and supplements; Louis Shores, Basic Reference Books (2d ed.; Chicago: American Library Association, 1939).
    ${ }^{2}$ C. B. Shaw, $A$ List of Books for College Libraries (Chicago: American Library Association, 1931); idem, $A$ List of Books for College Libraries, 1931-1938 (Chicago: American Library Association, 1940); F. E. Mohrhardt, A List of Books for funior College Libraries (Chicago: American Library Association, 1937).
    ${ }^{3}$ L. G. Krehbiel, "Current Publications and College Library Accessions" (unpublished Master's report, Graduate Library School, University of Chicago, 1941), pp. 128 ff.
    ${ }^{4}$ W. M. Randall, The College Library (Chicago: American Library Association and University of Chicago Press, 1932), pp. 92-93.

[^172]:    ${ }^{5}$ See M. M. Helm, "Duplicate Copies of Collateral References for College Libraries," Library 2uarterly, IV (1934), 420-35.

    6 W. M. Randall and F. L. D. Goodrich, Principles of College Library Administration (2d ed.; Chicago: American Library Association and University of Chicago Press, 194I), p. 80.

[^173]:    ' R. G. Adams, "Librarians as Enemies of Books," Library Quarterly, VII (1937), 317-3I.

[^174]:    ${ }^{1}$ R. G. Adams, The Whys and Wherefores of the William M. Clements Library: A Brief Essay on Book Collecting as a Fine Art (Ann Arbor: University of Michigan Press, 1930).
    'L. C. Powell, "The Function of Rare Books," College and Research Libraries, I (1939), 101.
    ${ }^{10}$ M. Taube, "Libraries and Research," College and Research Libraries, II (1940), 22-26.

[^175]:    "H. B. Allen, "Who Uses Treasure Room Books?" Haroard Library Notes, May, 1938, pp. 180-83; see also K. Young, "Uses of Rare Books and Manuscripts," Yale Unibersity Library Gazelle, XVI (1941), 25-38.
    : For a discussion of the housing of rare books, see chap. xiv, "Buildings and Equipment."
    ${ }^{\text {is }}$ G. A. Works, Collcge and University Library Problems (Chicago: American Library Association, 1927), pp. 36-39.

[^176]:    ${ }^{14}$ Ibid., p. $124 a$.
    ${ }^{15}$ [A. C. Potter,] The Library of Harvard University: Descriptive and Historical Notes (4th ed.; Cambridge, Harvard University Press, 1934), pp. 120-21.
    ${ }^{16}$ Reports submitted to the American Library Association.
    ${ }^{17}$ Cf. C. F. Ulrich (ed.), Periodicals Directory: A Classified Guide to a Selected List of Current Periodicals, Foreign and Domestic (3d ed.; New York: R. R. Bowker, 1938).

[^177]:    ${ }^{11}$ P. L. K. Gross and E. M. Gross, "College Libraries and Chemical Education," Science, LXVI (1927), 385-89.
    ${ }^{19}$ E. S. Allen, "Periodicals for Mathematicians," Science, LXX (1929), 592-94.
    ${ }^{20}$ J. K. McNeely and C. D. Crosno, "Periodicals for Electrical Engineers," Science, LXXII (1930), 8i-84; C. F. Dalziel, "Evaluation of Periodicals for Electrical Engineers," Library Quarterly, VII (1937), 354-72.
    ${ }^{21}$ P. L. K. Gross and A. O. Woodford, "Serial Literature Used by American Geologists," Science, LXXIII (1931), 660-64.

[^178]:    ${ }^{23} \mathrm{~K}$. K. Sherwood, "Relative Value of Medical Magazines," Northwest Medicine, XXXI (1932), 273-76; J. A. Gregory, "Evaluation of Medical Periodicals," Bulletin of the Medical Library Association, N.S., XXV (1937), 172-88; R. L. Jenkins, "Periodicals for Medical Libraries," Yournal of the American Medical Association, XCVII (1931), 608-10.
    ${ }^{23}$ W. F. Mengert, "Periodicals on Endocrinology of Sex," Endocrinology, XVIII (1934), 421-22; J. A. Gregory, "An Evaluation of Periodical Literature from the Standpoint of Endocrinology," Endocrinology, XIX (1935), 213-15.
    ${ }^{14}$ R. H. Hooker, "A Study of Scientific Periodicals," Review of Scientific Instruments, N.S., VI (1935), 333-38.
    ${ }^{2 s}$ I. Hackh, "The Periodicals Useful in the Dental Library," Bulletin of the Medical Library Association, N.S., XXV (1936), 109-12.
    ${ }^{*} \mathrm{H}$. H. Henkle, "The Periodical Literature of Biochemistry," Bulletin of the Medical Library Association, XVII (1938), 139-47.
    21 R. L. Jenkins, "Periodicals for Child-Guidance Clinics," Mental Hygiene, XVI (1932),
    $624-30$.
    ${ }^{2}$ R. W. Alberts, "Evaluation of Educational Journals from the Standpoint of Research" (unpublished Master's report, Graduate Library School, University of Chicago, 1939).

[^179]:    ${ }^{25}$ Estelle Brodman, "Choosing Physiology Journals," Bulletin of the Medical Library Association, XXXII (I944), 479-83.
    ${ }^{29}$ R. R. Shaw, "The Research Worker's Approach to Books-The Scientist," in W. M. Randall (ed.), The Acquisition and Cataloging of Books (Chicago: University of Chicago Press, 1940), p. 302.

    30 1bid., pp. 301-2.
    ${ }^{31}$ J. I. Copeland (comp.), Periodical Checklist for a Teacher's College Library (Nashville, Tenn.: George Peabody Library School, 1934).
    ${ }^{31}$ D. Waples, "Periodicals for the College Library," North Central Association 2uarterly, VIII (1934), 426-44.

[^180]:    33 G. R. Lyle and V. M. Trumper, Classified List of Periodicals for the College Library (2d ed., rev. and enlarged; Boston: Faxon, 1940). Selection made "from pooled opinions of members of Antioch College faculty, college librarians, and such printed lists as the Stock List of American fournals Devoted to Humanistic and Social Sciences, the Shaw List," and several of the lists which follow Gross's statistical procedure. See also C. B. Shaw, $A$ List of Books for CoL lege Libraries and Supplement (1940) for another composite list.
    ${ }^{34}$ J. W. Hunt, "Periodicals for the Small Bio-Medical and Clinical Library," Library 2 uar. terly, VII (1937), 121-40.
    ${ }^{35}$ F. K. Drury, Order Work for Libraries (Chicago: American Library Association, 1930), pp. 97-98.

[^181]:    ${ }^{36}$ Union List of Serials in Libraries of the United States and Canada, ed. by Winifred Gregory (2d ed.; New York: H. W. Wilson, 1943), Introd.; see also A. F. Kuhlman, "Administration of Serial and Document Acquisition and Preparation," in Randall (ed.), The Acquisition and Cataloging of Books, pp. 96-97.
    ${ }^{37}$ Ibid., p. 96.
    ${ }^{8}$ Ibid., pp. 96-99.
    ${ }^{39}$ A. S. Skaggs (ed.), "Serials Currently Received in Southern Libraries: A Union List" (Chapel Hill: University of North Carolina, 1936) (mimeographed).

[^182]:    *D. H. Litchfield (ed.), Classified List of 4800 Serials Currently Received in the Libraries of the Unioersity of Pennsyloania and of Bryn Mawr, Haverford, and Swarthmore Colleges (Philadelphia: University of Pennsylvania Press, 1936).
    ${ }^{11}$ Ohio Library Association, College and University Section, "Regional List of Serials in the College and University Libraries of Ohio"' (Ann Arbor: Edwards Bros., Inc., 1936) (mimeographed).

    4" E.g., J. H. Gable, Manual of Serials Work (Chicago: American Library Association, 1937), pp. 27-29; F. B. Rothman and S. Ditzion, "Prevailing Practices in Handling Serials," College and Research Libraries, I (1940), pp. 165-69.

[^183]:    ${ }^{4}$ L. C. Merritt, The United States Government as Publisher (Chicago: University of Chicago Press, 1943). See pp. 144-52 for a discussion of problems of document distribution and of the depository system.
    ${ }^{45}$ J. K. Wilcox, "Survey of Depository Libraries," in A.L.A. Committee on Public Documents, Public Documents, ed. J. K. Wilcox (Chicago: American Library Association, 1938), pp. $26-66$.

    * Merritt, op. cit., p. 148.

    4) Wilcox, op. cit., p. 26.

    442 U.S. Stat. 436 (1922).
    ${ }^{49} 32$ U.S. Stat. 1206 (1938). ${ }^{\text {so }}$ Merritt, op. cit., pp. 147-48.

[^184]:    ${ }^{\text {st }}$ J. E. Hitchcock, "The Coverage of Material under the Subject Entries of the Dictionary Catalog in American University Libraries" (unpublished Master's thesis, University of Chicago, 1938), p. 82, Table 23; see also G. A. Campbell, $A$ Study of the Extent to Which Existing Gooernment Indexes and Catalogues Can Replace the Card Catalogue in Making the Contents of Federal Documents Aoailable (Stillwater: Oklahoma Agricultural and Mechanical College, ${ }^{1939}$ ); Jerome K. Wilcox, "Indexing and Distribution of Federal Publications; A Program for Action," Library fournal, LXIX (1944), 1029-32.
    ${ }^{52}$ See U.S. Superintendent of Documents, Checklist of United States Public Documents, 7789-1909 (3d ed.; Washington: Government Printing Office, 1911). For a list of catalogs and indexes of government documents, see Shores, op. cit., pp. 149-50.

[^185]:    s3 Public Documents, 1933-38, 1942 (Chicago: American Library Association).
    ${ }^{54} \mathrm{~J}$. K. Wilcox (ed.), Manual on the Use of State Publications (Chicago: American Library Association, 1940).
    ss A. F. Kuhlman, "Proposal To Modify the System of Exchange and Distribution of State Publications in Certain States," Public Documents, 1934, p. 66.
    ${ }^{56}$ "Exchange and Distribution of State Publications," Bulletin of the American Library Association, XXVII (1933), 837-51.

[^186]:    ${ }^{57}$ T. P. Fleming and M. Hegland, "Regional State Document Exchange Depositories and Regional State Document Centers," Public Documents, 1937, pp. 44-53.
    ${ }^{56}$ J. K. Wilcox, "State Document Center Plan: Report and Recommendations," Public Documents, 1938, p. 240.
    sp L. C. Merritt, "Municipal and State Document Collecting in the Rocky Mountain Region, with Indications of Important Documents," Public Documents, 1938, pp. 175-233.

    6o J. K. Wilcox, "State Document Center Plan: Report and Recommendations," Public Documents, 1938, pp. 234-42.

[^187]:    ${ }^{61}$ Ibid., pp. 237-38.
    ${ }^{62}$ University of Minnesota, Laws and Regulations Governing the University of Minnesota . . . . (Minneapolis: Published by the University, 1931), p. 146.
    ${ }^{63}$ H. M. Skogh, "Recent Developments in Publication and Distribution of American State Documents," Public Documents, 1936, pp. 129-45.

    64 C. Miltmore, "Florida," Public Documents, 1933, pp. 26-34.
    ${ }^{65}$ See, e.g., North Carolina, Public Laws and Resolutions, r933, pp. 512-13.

[^188]:    ${ }^{66}$ J. G. Hodgson, "The Official Publications of American Counties: A Union List, with an Introduction on the Collecting of County Publications" (Fort Collins, Colo., 1937) (mimeagraphed).

[^189]:    ${ }^{7}$ Hodgson, "The Official Publications of American Counties," p. xx.

[^190]:    ${ }^{7 x}$ Kuhlman, "Administration of Serial and Document Acquisition and Preparation," in Randall (ed.), The Acquisition and Cataloging of Books, p. 116.

[^191]:    ${ }^{7}$ A. M. Cole, "The Acquisition of Publications of Foreign Governments: The Experience of the Baker Library and Harvard College Library," Public Documents, 1935, pp. 57-61.

[^192]:    ${ }^{73}$ E. L. Erickson, "The Sessional Papers Project," Journal of Documentary Reproduction, IV (1941), 83-93.
    ${ }^{74}$ L. M. Salmon, The Newspaper and the Historian (New York: Oxford University Press, 1923), p. xxxvii; see also M. Leech, "How Not To Write History," Harper's Magazine, 1942, pp. 376-83.
    ${ }^{75}$ Quoted in D. C. McMurtrie, Early Printing in Wisconsin (Seattle: F. McCaffrey, 1931), p. 8.

[^193]:    ${ }^{76}$ See paper by J. F. Rhodes, "Newspapers as Historical Sources," in his Historical Essays (New York: Macmillan Co., 1909), pp. 81-97.
    "A. Nevins, The Gateway to History (Boston: D. C. Heath, 1938), p. 179.
    ${ }^{11}$ Kuhlman, "Administration of Serial and Document Acquisition and Preparation," in Randall (ed.), The Acquisition and Cataloging of Books, p. 96.

[^194]:    ${ }^{99}$ E.g., American Newspapers, 1821-1936; A Union List of Files Available in the United States and Canada, ed. by W. Gregory under the auspices of the Bibliographical Society of America (New York: H. W. Wilson, 1937).
    ${ }^{0} \cdot$ A short general discussion of the history of newspapers and a list of references is included in Gable, op. cif., pp. 1-6, 214. Quantitative data regarding holdings of southern libraries is included in R. B. Downs (ed.), Resources of Southern Libraries (Chicago: American Library Association, 1938), pp. 74-89.

[^195]:    " Raney, op. cit., p. 208.
    ${ }^{22}$ D. M. Mathys, "Newspaper Collections," Library fournal, LXII (1937), 8I.
    ${ }^{1 s}$ Raney, op. cil., pp. 204-5.

[^196]:    ${ }^{84}$ Kuhlman, "Administration of Serial and Document Acquisition and Preparation," in Randall, The Acquisition and Cataloging of Books, pp. 99.
    ${ }^{2}$ R Raney, op. cif., pp. 207-10. The report was made by A. F. Kuhlman.

[^197]:    ${ }^{6}$ Ibid., pp. 210-13.
    ${ }^{\text {B }}$ See chap. xiii, "Co-operation and Specialization."
    ${ }^{18}$ Raney, op. cit., Pp. 204-5.

[^198]:    ${ }^{\text {b9 }}$ E. C. Pratt, "Library Cooperation at Duke and North Carolina Universities," College and Research Libraries, II (1941), 143.
    go Virginia University, Tenth Annual Report of the Archidist, University of Virginia Library (Charlottesville: University of Virginia, 1940) p. 24.

    9 Downs, op. cit.

[^199]:    ${ }^{2}$ H. H. Fussler, Photographic Reproduction for Libraries: 1 Study of Administrative Problems (Chicago: University of Chicago Press), p. 25.
    ${ }^{33}$ G. A. Schwegmann, Jr., "Preliminary Checklist of Newspapers on Microfilm," Journal of Documentary Reproduction, IV (1941), 122-34.

[^200]:    ${ }^{94}$ A. F. Kuhlman, "Are We Ready To Preserve Newspapers on Film? A Symposium," Library Quarterly, V (1935), 209-10.
    ${ }^{95}$ Ibid., p. 210.

[^201]:    * L. H. Fox, "Films for Folios," Library Journal, LXII (1937), 361-64.

[^202]:    ' C. S. Marsh (ed.), American Unioersities and Colleges (4th ed.; Washington, D.C.: American Council on Education, 1940), p. 66.
    -Ibid., p. 91; and E. A. Henry (ed.), Doctoral Dissertations Accepted by American Universities, 1939-40 (New York: Wilson, 1940), p. iii.
    ${ }^{3}$ Henry, op. cil., p. iii. 4 Marsh, op. cit., p. 71.
    s Fahresoerzeichnis der deutschen Hochschulschriften, 1938 (Berlin, 1939). 'i

[^203]:    - Jahresoerzeichnis der an den deutschen Universitäten und sechnischen Hochschulen erschienen Schriften (Berlin, 1885 ). New title is Jahresoerzeichnis der deutschen Hochschulschriften.
    ${ }^{10}$ Paris, Bibliothèque nationale, Départment des Imprimés, Catalogue des dissertationes et écrits académiques provenant des áchanges avec les universités étrangères et reçus par la Bibliothèque nationale ... (Paris, 1884/89-).
    "Jahresoerzeichnis der schweizerischen Hochschulschriften, 1897 - '(Basel: Verlag der Universitäts-bibliothek, 1898 -). Formerly had title fahresverzeichnis der schweizerischen Universitätsschriften.

    12 "Microfilms Abstracts," Bulletin of the American Library Association, XXXIII (1939), 89.

[^204]:    ${ }^{13}$ Op. cit.
    " Julien Cain, "Notes on Thesis Literature in France," Report of Proceedings of the Sixleenth Conference of the Association of Special Libraries and Information Bureaus, 1939 (London: The Association, 1939), p. 35.
    ${ }^{5}$ Ibid.
    ${ }^{16}$ Marsh, op. cit., p. 62.

[^205]:    ${ }^{17}$ H. B. Van Hoesen (ed.), Selective Cataloging: Catalogers' Round Table, American Library Association, $\mathfrak{7 u l y}$ 3, 1924 (New York: Wilson, 1928), passim; see also J. E. Hitchcock, "The Coverage of Material under Subject Entries of the Dictionary Catalog in American University Libraries" (unpublished Master's thesis, Graduate Library School, University of Chicago, 1938).
    ${ }^{18}$ Hitchcock, op. cit., p. 77.
    19 Ibid.

[^206]:    - Slightly adapted from J. E. Hitchcock, "The Coverage of Material under Subject Entries of the Dictionary Catalog in American University Libraries" (unpublished M.A. thecis, Graduate Library School, University of Chicago, 1938), p. 77, Table 17.
    $\uparrow V$, Subject carde are ordinarily made; $X$, subject cards are not ordinarily made; and $V$ s, eubject assignment practice varies.

[^207]:    ${ }^{20}$ Some subjects are codered. As examples, the Office of Education, Bibliography of Research Studies in Education, includes the vast majority of theses in education; the American fournal of Sociology publishes lists of theses in sociology; and Library Literature includes studies in library science.

[^208]:    ${ }^{23}$ Bibliographical Planning Committee of Philadelphia, A Faculty Survey of the University of Pennsyloania Libraries (Philadelphia: University of Pennsylvania Press, 1940). See especially pp. 23-24, 68-69, 157-60, 194-95.
    ${ }^{24}$ [A. C. Potter] The Librazy of Harvard University: Descriptive and Historical Notes (4th ed., Cambridge: Harvard University Press, 1934), pp. 108-10.
    ${ }^{25}$ No distinction is made by some libraries between manuscripts such as are described in the sections on "Paleography and Manuscripts" in the annual volumes, Year's Work in Librarianship, and the manuscripts of businesses, industries, governments, and other organizations and agencies, which are classed as archives.

[^209]:    ${ }^{26}$ Bibliographical Planning Committee of Philadelphia, op. cit., pp. 194-95.
    ${ }^{27}$ Horace I. Poleman, Census of Indic Manuscripts in the United States and Canada ("American Oriental Series," Vol. XII (New Haven: American Oriental Society, 1938]).
    ${ }^{28}$ Bibliographical Planning Committee of Philadelphia, op. cit., p. 158.

[^210]:    ${ }^{29}$ R. B. Downs, "Problems in the Acquisition of Research Materials," in W. M. Randall (ed.), The Acquisition and Cataloging of Books (Chicago: University of Chicago Press, 1940), p. 69.
    ${ }^{30}$ See also [Potter], op. cit., and R. D. Hussey (comp.), "Manuscript Hispanic Americana in the Harvard College Library," Hispanic American Historical Reoiev, XVII (1937), 259-77-
    ${ }^{31}$ S. De Ricci and W. J. Wilson (eds.), Census of Medieval and Renaissance Manuscripts in the United States and Canada (3 vols.; New York: H. W. Wilson, 1935-40).
    ${ }^{33}$ E.g., Historical Records Survey, "Guide to Depositories of Manuscript Collections in the United States" (Columbus, Ohio: Historical Records Survey, 1938) (mimeographed). This is a sampling of 100 entries regarding holdings of libraries. Full descriptions are included in the "Guide to Manuscript Collections," published by various states.

[^211]:    ${ }^{33}$ L. H. Smith, "Preservation and Repair of Manuscripts in the Huntington Library," Pacific Northwest Quarterly, XXIX (1938), 41-51. The progress of archivists in the care of archival materials should suggest methods of preservation of other types of manuscripts. See volumes of the American Archivist.
    ${ }^{34}$ Fremont Rider, "Holdings of Incunabula in American University Libraries," Library 2uarterly, IX (1939), 273-84; also idem, "Incunabula in American Libraries: A Supplement," ibid., X (1940), $36 \mathrm{I}-65$. Locations of specific titles may be found in M. B. Stillwell (ed.), Incunabula in American Libraries: A Second Census of Fifteenth-Century Books Owned in the United States, Mexico, and Canada (New York: Bibliographical Society of America, 1940).

[^212]:    ${ }_{35}$ Rider, "Holdings of Incunabula in American Libraries," Library 2uarterly, IX (1939), 2;8-79. Additions to incunabula collections annually are usually few. For example, Downs reported in "Notable Materials Added to American Libraries, 1939-40," Library ${ }^{2}$ uarterly, XI (194I), 266, that the Brown University Library added three incunabula during the period 1939-40.
    ${ }^{36}$ L. A. Brown, Notes on the Care and Cataloguing of Old Maps (Windham, Conn.: Hawthorn House, 1940). See also his "Special Reference Problems in Map Collections," in P. Butler (ed.), The Reference Function of the Library (Chicago: University of Chicago Press, 1943), pp. 144-62.

[^213]:    ${ }^{37}$ E. B. Espenshade, "Building a Collection of Maps," Bulletin of the American Library Association, XXX (1936), 206-1 5.

[^214]:    ${ }^{3}$ Walter Thiele, Official Map Publications: A Historical Sketch, and a Bibliographical Handbook of Current Maps and Mapping Seroices in the United States, Canada, Latin America, France, Great Britain, Germany, and Certain Other Countries (Chicago: American Library Association, 1938).
    ${ }^{39}$ L. C. Karpinski, Bibliography of the Printed Maps of Michigan, 1804-1880 (Lansing: Michigan Historical Commission, 1931).
    ${ }^{40}$ Josephine De Witt, "Printed Maps of Alameda County, California, and Its Larger Cities" (unpublished Master's dissertation, University of California, 1939).

[^215]:    "S W. Boggs and D. Lewis, "Classification and Cataloging of Maps and Atlases" (Washington, 1932) (mimeographed).

[^216]:    ${ }^{42}$ A. F. Kuhlman, "The Preparation of a Guide for the Collection, Care, Organization and Preservation of Fugitive Materials," Public Documents, 1935, pp. 236-47.

[^217]:    ${ }^{43}$ "Archives" refers to government records while "unofficial, manuscript collections" refers to materials which originate with non-governmental agencies or individuals.

[^218]:    4 Tenth Annual Report of the Archivist, University of Virginia Library,for the Year 1939-40 (Charlottesville: University of Virginia, 1940), p. 3. This report contains a summary of the work of the archivist over a ten-year period. Since 1940 the title has been changed to "consultant in history and archives."

    45 Ibid., p. 18.
    ${ }^{* 6}$ College and Research Libraries, IV (1942), 86.

[^219]:    ${ }^{47}$ Hilary Jenkinson, "The Choice of Records for Preservation: Some Practical Hints," Library Association Record, XLI (1939), 543. Jenkinson's remarks concern "archives" more than "unofficial, manuscript materials," but the principles may be applied generally to the latter.
    ${ }^{48}$ Ibid., pp. 543-44.
    ${ }^{49}$ Tenth Annual Report of the Archivist, University of Virginia Library, p. 18.

[^220]:    so See M. Taube, "The Realities of Library Specialization," Library Quarterly, XII (1942), $246-56$, for a consideration of the problems which arise in practice to offset aims of a program of specialization.
    ss From 1940 report submitted to the American Library Association.

[^221]:    s2 C. A. Cutter, "Photography and Photoprints," Library Journal, XXV (1900), 619.
    ${ }^{53}$ B. L. Johnson, Vitalizing a College Library (Chicago: American Library Association, 1939), chap. v.
    ${ }_{54}$ N. O. Ireland, The Picture File in School, College, and Public Libraries (Boston: F. W. Faxon, 1935).
    ${ }^{3 s}$ See Philadelphia Bibliographical Planning Committee and Union Library Catalogue, "Union List of Microfilms: A Basic List of Holdings in the United States and Canada" (Philadelphia, 1942) (mimeographed); Southwest Microfilm Company, List of Microfilms (1941); and Ross C. Cibella (comp.), Directory of Microfilm Sources, Including Photostat Seroice (New York: Special Libraries Association, 1941), for available films and sources of films.

[^222]:    ${ }^{56}$ For a discussion of other projects of microfilms in university libraries, see M. F. Tauber, "Use of Microphotography in University Libraries," Journal of Documentary Reproduction, IV (1941), 1 50-57.
    ${ }^{57}$ For a comprehensive statement of the administrative problems of microfilms in libraries, see H. H. Fussler, Photographic Reproduction for Libraries: A Study of Administratioe Problems (Chicago: University of Chicago Press, 1942).
    ${ }^{58}$ M. E. Townes, "Preliminary Notes on Scientific Aids to Learning in Their Relation to Libraries" (Chicago: American Library Association, 1939), P. 7 (mimeographed).

[^223]:    ${ }_{59}$ G. D. McDonald, Educational Motion Pictures and Libraries (Chicago: American Library Association, 1942), p. 78. Chapter vi is devoted to "Films in the College and University Library."

[^224]:    ${ }^{60}$ Ibid., p. 80.
    ${ }^{61}$ Raney, op. cit., 223.
    ${ }^{6}$ L. V. Coleman, College and University Museums: $A$ Message for College and University Presidents (Washington, D.C.: American Association of Museums, 1942).

[^225]:    ${ }^{63}$ For a description of the contents of a large university archival collection, see [Potter], op. cit., pp. 92-95. Harvard Library makes a special attempt to include in its local collection every item relating to the Library itself.

[^226]:    ${ }^{0} 4$ E.g., Harvard, New York, and Temple universities.
    ${ }^{6 s}$ Fremont Rider, The Scholar and the Future of the Research Library (New York: Hadham Press, 1944), pp. 210-23.

[^227]:    : Of 6,000 Freshmen tested at the University of Florida for reading rate and comprehension, the reading rate was increased, through an intensive reading program from September to May, from 306 to 397 words per minute, or approximately 30 per cent. See J. H. Wise, "The Improvement of Reading Habits," Proceedings of the Institute for Administrative Officers of Higher Institutions, Vol. XIII: New Frontiers in Collegiate Instruction (Chicago: University of Chicago Press, 1941), pp. 103-13.

[^228]:    ${ }^{2}$ For a list of handbooks, see the heading "Handbooks" in Library Literature, r936-39, and the subsequent years.
    ${ }^{\text {J }}$ G. R. Lyle, "College Library Handbooks," Bulletin of the American Library Association, XXXII (1938), 315-22.
    ${ }^{4}$ See G. R. Lyle, College Library Publicity (Boston: F. W. Faxon Co., 1935).

[^229]:    5 For an example of these activities see University of Minnesota, Introduction to the University, Freshman Week-September 23-28, 1940 (Minneapolis: The University, 1940).
    ${ }^{6}$ E.g., the book lists issued by the University of Washington Library, Seattle.

[^230]:    ${ }^{7}$ University of Minnesota, "Report of the University Library and the Division of Library Instruction to the President of the University for the Year Ending June 30, 1940" [Minneapolis, 1940], pp. 137-44 (dexigraphed).
    ${ }^{2}$ L. Carnovsky, "The Dormitory Library: An Experiment in Stimulating Reading," Library Quarterly, III (1933), 37-65.

    - H. Branscomb, Teaching with Books: A Study of College Libraries (Chicago: Association of American Colleges and the American Library Association, 1940), pp. 147-65.

[^231]:    ${ }^{10}$ Columbia University, Report of the Director of Libraries, 1939-40 (New York: Columbia University Press, 1940), p. 16. In 1944 the fee was changed to a ten-cent minimum for three days, and three cents per day thereafter. The dollar card has been eliminated.
    "W. Munthe, American Librarianship from a European Angle (Chicago: American Library Association, 1939), pp. 9-1 5 .
    ${ }^{20}$ W. Biddle, "The University Bookstore on the Campus," Proceedings of the Association of Cooerning Boards of State Universities and Allied Institutions, 1933, p. 50.

[^232]:    ${ }^{23}$ Clark Foreman, "Book Shops as a Cultural Asset," Papers of the Southeastern Library Association, VI (1930), 52-56.
    ${ }^{14}$ University of North Carolina Report of the Dioision of Library and Library School, 1936/ 37, 1937/38.

[^233]:    is Op. cir., p. 125.
    ${ }^{16}$ G. Conklin, "University of Chicago Rental Library," College Store, IV (1938), $12,22$.

[^234]:    ${ }^{21}$ Chicago: University of Chicago Press, 1943.

[^235]:    ${ }^{18}$ C. Alexander, How To Locate Educational Information and Data' (2d ed.; New York: - Teachers College, Columbia University Press, 194).

[^236]:    ${ }^{1}$ S. S. Green, "The Lending of Books to One Another by Libraries," Library Fournal, I (1876), $15-16$.
    = E. C. Richardson, "The National Library Problem To-day," Library fournal, XXX No. 9, (1905), 3-9.

[^237]:    ${ }^{2}$ Bibliographical Planning Committee of Philadelphia, Philadelphia Libraries: A Suroey of Facilities, Needs and Opportunitics (Philadelphia: University of Pennsylvania Press, 1942), Appen. E, Pp. 84-85.

    4 K. J. Boyer, "Interlibrary Loans in College and University Libraries," Library Quarterly, II (1932), 127-28.

[^238]:    ${ }^{3}$ T. S. Harding, "The John Crerar Library as a Regional Center: A Spatial Analysis of the Services of a Metropolitan Reference Library" (unpublished M.A. thesis, Graduate Library School, University of Chicago, 1939).

[^239]:    ${ }^{8}$ Ibid., pp. ${ }^{183-84 .}$

[^240]:    9 Temple University, Sullivan Memorial Library, "Staff Manual" (Philadelphia, 1941), Appen. (mimeographed); contains a list of the forms used by its reference department.
    ${ }^{10}$ Columbia University, Report of the Director of Libraries for the Academic Year Ending June 30, 1940 (New York: [Columbia University Press, 1940], pp. 5-6. At the University of Illinois Library the unit cost of borrowing a volume was estimated in 1929-30 at \$2.03, exclusive of transportation. The cost of lending a volume amounted to 83 cents. Transportation charges both ways amounted to 73 cents per volume. If these figures can be accepted as generally applicable, then the total cost of an interlibrary loan, including transportation both ways and handling by both borrowing and lending libraries, would amount to $\$ 3.59$. In a survey of the University of California Library it was found that the unit cost of handling books loaned and borrowed was approximately the same, $\$ 1.59$ per volume, exclusive of transportation. According to these figures, the cost of each loan, not including transportation, is $\$ 3.18$, divided equally between the borrowing and lending libraries. If transportation charges of 73 cents (derived at Illinois) were added, the total cost of each loan would amount to $\$ 3.91$, as compared with the figure $\$ 3.59$ derived at Illinois. The recent reductions in postage rates would, of course, lower these figures. Nevertheless, these computations clearly indicate that interlibrary lending is relatively expensive. Such estimates, however, need further refinement in order to show the elements included (for example, searching, correspondence, and wrapping) and the proportion of the costs attributed to each element. If these data were available, more significant comparisons and interpretations would be possible. See also C. H. Brown, "Inter-library Loans: An Unsolved Problem," Library Journal, LVII (1932), 888; E. Hand, "Cost Survey in a University Library," Library Fournal, LV (1930), 763-66.

[^241]:    ${ }^{11}$ N. Van Patten, "Inter-ibrary Loan Fees," Library fournal, LVIII (1933), 890.
    ${ }^{\text {r2 }}$ G. H. Doane, "Service Charge on Inter-library Loans," Library Journal, LVIII (1933), 996.
    ${ }^{{ }^{3}}$ H. G. Brown, "Union Catalogs and Interlibrary Loan," College and Research Libraries, I (1940), 336-39.

[^242]:    ${ }^{14}$ J. Hare, "The Encroaching Graduate Schools," College and Research Libraries, I (1940), 254-56.
    ${ }^{25} \mathrm{Op}$. cit.

[^243]:    ${ }^{56}$ A recent summary of data on this subject is included in Philadelphia Bibliographical Planning Committee, Philadelphia Libraries . . . . , chap. iv. See also H. A. Kellar, "Memoranda on Library Cooperation," No. 1 (September, 1941) (Washington: Library of Congress, 1941) (mimeographed); Library of Congress, Descriptive Cataloging Division, Cooperative Casaloging Manual for the Use of Contributing Libraries (Washington: U.S. Government Printing Office, 1944), Pp. 15 I.
    ${ }^{17}$ Unpublished M.A. paper, Graduate Library School, University of Chicago, 1944.

[^244]:    ${ }^{18}$ Annual Report of the Librarian of Congress for the Fiscal Year Ending June 30, 1942 (Washington: Government Printing Office, 1943), p. 45.
    ${ }^{19}$ B. Altmann, "Centralized Cataloging: Its Principles and Organization in the United States and in Germany" (unpublished M.A. thesis, Graduate Library School, University of Chicago, 1944).

[^245]:    ${ }^{20}$ M. F. Tauber, "Subject Cataloging and Classification Approaching the Crossroads," College and Research Libraries, III (1942), 149-55.

[^246]:    ${ }^{25}$ Cf. T. R. Palfrey and H. E. Coleman (comps.), Guide to Bibliographies of Theses, United States and Canada (2d ed.; Chicago: American Library Association, 1940).
    ${ }^{32}$ E.g., Brown University Library, A Catalogue of the Napoleon Collection Formed by William Henry Hoffman 1867-19r6 (Providence: Brown University, 1922); University of California Libraty, Spain and Spanish America in the Libraries of the University of California: A Catalogue of Bouks (2 vols.; Berkeley, 1928-30); University of Chicago, Libraries, "Newspapers in Libraries of Chicago: A Joint Check List" (Chicago: University of Chicago Libraries, 1936) (mimeographed); Harvard University, Graduate School of Business Administration, Baker Library, The Kress Library of Business and Economics; Catalog, Cooering Material Published through 7776 (Roston: Baker Library, 1940).

[^247]:    ${ }^{23}$ J. H..P. Pafford, Library Co-operation in Europe (London: Library Association, 1935), pp. 85-120.
    ${ }^{24}$ W. W. Bishop, "Union Catalogs," Library 2 uarterly, VII (1937), 36-49; M. F. Tauber, "Other Aspects of Union Catalogs," Library Quarterly, IX (1939), 411-31; J. E. Van Male, "Union Catalogs and the Point of Diminishing Returns," Catalogers' and Classifiers' Yearbook, VIII (1939), 29-30.
    ${ }^{25}$ Downs, op. cit.
    ${ }^{26} \mathrm{Op}$. cif., pp. $137-86$.

[^248]:    ${ }^{2}$ A. B. Berthold, "The Union Catalog Idea," in W. M. Randall (ed.), The Acquisition and Cataloging of Books .... (Chicago: University of Chicago Press, 1940), pp. 248-49; see also H. G. Brown, op. cit.
    ${ }^{21}$ Letter from G. A. Schwegmann, Jr., January 7, 1944.
    ${ }^{29}$ Annual Report of the Librarian of Congress for the Fiscal Year Ended June 30, 1940 (Washington: Government Printing Office, 1941), pp. 263, 355-59.

[^249]:    ${ }^{292}$ Figures 20-22 are taken frore Downs, op. cit., pp. 101, 103, 105. They were prepared by L. C. Merritt.
    ${ }^{30}$ A. B. Berthold, "Directory of Union Catalogs in the United States," in Downs, op. cit., p. 351.

    3:Cf. L. R. Wilson, The Geography of Reading: A Study of the Distribution and Status of Libraries in the United States (Chicago: American Library Association and the University of Chicago Press, 1938), pp. 128-30.
    ${ }^{33}$ L. C. Merritt, "The Administrative Fiscal and Quantitative Aspects of the Regional Union Catalog," in Downs, Union Catalogs in the United States, p. 62, estimates that libraries of the United States own approximately $9,788,730$ separate titles.

[^250]:    ${ }^{33}$ The authors are grateful to H. H. Fussler, head of the department of photographic reproduction, University of Chicago Libraries, for suggestions included in this section. See his Photographic Reproduction for Libraries: A Study of Administrative Problems (Chicago: University of Chicago Press, 1942) for a comprehensive statement of the use of microphotography in libraries.
    ${ }^{34}$ For a discussion of a number of actual projects in university libraries see M. F. Tauber, "Use of Microphotography in University Libraries," fournal of Documentary Reproduction, IV (1941), 150-57.
    ${ }^{3 s}$ See R. C. Binkley, Manual on Methods of Reproducing Research Materials (Ann Arbor: Edwards Bros., 1936).
    ${ }^{36}$ To reproduce 1,000 pages, typing would cost $\$ 100$ or more; photostats, assuming a double-page spread, would cost from $\$ 0.25$ to $\$ 0.35$ or more per 2 pages, amounting to about $\$ 150$; filming, at the present rates of the University of Chicago laboratory, would cost $\$ 10.25$.

[^251]:    ${ }^{37}$ M. Taube, "The Realities of Library Specialization," Library 2uarterly, XII (1942), 246-56.

[^252]:    ${ }^{38}$ See R. C. Cibella (comp.), Directory of Microfilm Sources, Including Photostat Seroice (New York: Special Libraries Association, 1941).
    st L. R. Wilson, op. cit., pp. 117-55.

[^253]:    ${ }^{40}$ Based on recommendations made by Mr. Fussler.
    ${ }^{41}$ In this connection the experience of the department of photographic reproduction of the University of Chicago Libraries is illuminating. Mr. Fussler, in his "Report to the Director of Libraries on the Operations of the Libraries' Department of Photographic Reproduction, July 1, 1940-June 30, 1941" (typewritten), notes "the relative importance of the service to different types of clients. From its beginning up to July 1, 1941, the department has handled 1,712 jobs for 370 diferent clients, an average of almost five jobs per client. These clients were divided as follows: Individuals, students and faculty connected with the University of Chicago, 90; Individuals whose connections are not definitely known, 75; Colleges and universities, 61; Individuals connected with colleges and universities (except University of Chicago), 51 ; Departments of the University of Chicago (not library), 30; Commercial organizations, 26; Scholarly or semi-scholarly institutions, 12; Clients, individual and institutional in foreign countries, 10 ; public libraries, 4; Scholarly libraries not in universities, 4; and Special, r."

[^254]:    ${ }^{12}$ J. P. Danton and C. Elfont, "Microphotography at Work," fournal of Documentary Reproduction, IV (1941), 97-108.
    ${ }^{4}$ Cf. W. J. Wilson, "Manuscripts in Microfilm: Problems of Librarian and Custodian," Library 2uarterly, XIII (1943), 212-26.

[^255]:    ${ }^{44}$ See also W. R. Miles, "Subjective Impressions of Efficiency in Reading Microfilm," Journal of Documentary Reproduction, III (1940), 61.

    45 Ibid., pp. 6I-65.
    ${ }^{46}$ See R. R. Shaw, "Should Scientists Use Microfilm?" Library Quarterly, XIV (1944), 229-33.
    ${ }^{47}$ J. Tennant, "Readex Microprints," Fournal of Documentary Reproduction, III (1940), 66-70; E. L. Erickson, "The Sessional Papers Project," Fournal of Documentary Reproduction, IV (1941), 83-93.
    ${ }^{88}$ Tennant, op. cit., p. 69.

[^256]:    ${ }^{49}$ H. B. Van Hoesen in "Proceedings of the Conference on Library Specialization, Board on Resources of American Libraries, American Library Association, June, 1941" (New York, 1941), pp. 7-9 (microfilm). A considerable portion of the material in this section has been taken from this report. A printed abstract of this report is given in R. B. Downs (ed.), Library Specialization: Proceedings of an Informal Conference Called by the A.L.A. Board on Resources of American Libraries, May 13-14, 1941 (Chicago: American Library Association, 1941).
    so "Proceedings of the Conference on Library Specialization" (microfilm).
    ${ }^{51}$ Ibid., p. 10.

[^257]:    ${ }^{52}$ F. Rider, "Alternatives for the Present Dictionary Card Catalog," in Randall, op. cit., pp. 138-44; also Rider's "The Growth of American College and University Libraries-and of Wesleyan's," About Books at the Olin Library, XI (1940), 1-11.
    ${ }^{53}$ M. H. Lowell, College and University Library Consolidations (Eugene: Oregon State System of Higher Education, 1942).

[^258]:    54 L. C. Merritt, report in "Proceedings of the Conference on Library Specialization" (microfilm), p. 30; see also his "The Administrative, Fiscal, and Quantitative Aspects of the Regional Union Catalog,' in Downs, Union Catalogs in the United States, p. 61.
    ${ }^{5 s}$ A. B. Berthold, "Directory of Union Catalogs in the United States," in Downs, Union Catalogs in the United States, p. 351.
    ${ }^{56}$ E.g., K. Brown (comp.), American Library Directory, 1942 (New York: R. R. Bowker Co., 1942), Index to Special Collections, pp. 557-67; W. D. Johnston and I. G. Mudge, Special Collections in Libraries in the United States (Washington:'Government Printing Office, 1912); E. C. Richardson, An Index Directory to Special Collections in North American Libraries (Yardley, Pa., 1927); Special Libraries Directory of the United States and Canada (3d ed.; New York: Special Libraries Association, 1935); C. M. Winchell, Locating Books for Interlibrary Loan (New York: H. W. Wilson Co., 1930); Seymour De Ricci (ed.), Census of Medieval and Renaissance Manuscripts in the United States and Canada (New York: H. W. Wilson Co., 1935-40); C. L. Cannon (ed.), Guide to Library Facilities for National Defense (Chicago: American Library Association, 1940); W. W. Bishop, A Preliminary Checklist of American Copies of Short-Title Catalog Books (Ann Arbor, 194!).

[^259]:    ${ }^{\text {s7 }}$ E.g., R. B. Downs (ed.), Resources of Southern Libraries: A Survey of Facilities for Research (Chicago: American Library Association, 1938); J. E. Van Male, Resources of Pacific Northwest Libraries: A Survey of Facilities for Research (Seattle: Pacific Northwest Library Association, 1943).
    ${ }^{58}$ R. B. Downs (ed.), Resources of New York City Libraries: A Survey of Facilities for Advanced Study and Research (Chicago: American Library Association, 1942); D. S. Hill, The Libraries of Washington (Chicago: American Library Association, 1936); Bibliographical Planning Committee of Philadelphia, Philadelphia Libraries and Their Holdings (Philadelphia: University of Pennsylvania Press, 1941).
    ${ }^{\text {sp }}$ American Antiquarian Society, $A$ Guide to the Resources of the American Antiquarian Society (Worcester, Mass.: American Antiquarian Society, 1937); Bibliographical Planning Committee of Philadelphia, A Faculty Survey of the University of Pennsylvania Libraries (Philadelphia: University of Pennsylvania Press, 1940); K. Brown (comp.), "Guide to the Reference Collections of the New York Public Library," in Bulletin of the New York Public Library, various issues from 1935 to 1941; [A.C. Potter], The Library of Harvard University: Descriptioe and Historical Notes (4th ed.; Cambridge: Harvard University Press, 1934); M. L. Raney, The University of Chicago Suroey, Vol. VII: The University Librarics (Chicago: University of Chicago Press, 1933); U.S. National Archives, Guide to the Material in the National Archioes (Washington: Government Printing Office, 1940).
    ${ }^{60}$ R. Gilder and G. Freedley, Theatre Collections in Libraries and Museums (New York: Theatre Arts Inc., 1936); E. B. Greene and R. B. Morris, $A$ Guide to the Principal Sources for Early American History ( $1600-1800$ ) in the City of New York (New York: Columbia University Press, 1929).

[^260]:    ${ }^{61}$ M. L. Raney, "'1909 and After," Library 2uarterly, XII (1942), 651-58.
    ${ }^{64}$ Kellar, op. cit., pp. 35-40.

[^261]:    ${ }^{63}$ Ibid., P. $3^{8}$.
    ${ }^{64}$ These examples taken from the "Proceedings of the Conference on Library Specialization" (microfim), pp. 62 ff .

[^262]:    ${ }^{65}$ J. B. Fall, "A Proposal for a Middle W'est Deposit Library" (New York, 194I) (mimeographed). The author, on the staff of the New York Public Library, wrote this work under the supervision of K. D. Metcalf, director of the Harvard University Library.

[^263]:    ${ }^{60}$ E. C. Pratt, "Library Cooperation at Duke and North Carolina Universities," College and Research Libraries, II (1940), 142-45.

[^264]:    ${ }^{67}$ A. F. Kuhlman, "An Inquiry into the Feasibility and Desirability of Establishing the North Texas Regional Libraries as a Cooperative Enterprise: A Preliminary Draft" (Nashville, [1943]) (mimeographed). A final draft was prepared in 1944 -
    ${ }^{65}$ W. S. Hoole (ed.), "North Texas Regional Union List of Serials" (Denton: North Texas State Teachers College, 1943) (mimeographed). A supplement to this list, edited by A. M. Sampley, was issued February 15, 1945.
    69 College and Research Libraries, II (1941), 282-83.
    ${ }^{70}$ W. L. Perry, "Small Colleges Organize,".Pacific Northwest Library Association 2uarterly, III (1939), 115.

[^265]:    ${ }^{13}$ In "Proceedings of the Conference on Library Specialization" (microfilm).

[^266]:    74 For a detailed statement of the various aspects of the problem see Fall, op. cit.

[^267]:    ${ }^{7}$ W. Cantelmo, "The Disposal of Duplicates," College and Research Libraries, II (1941), 333-36.
    "N. C. Van Deusen, "Periodical Exchange Union," College and Research Libraries, II (1941), 288; in 1944 the Committee on the Periodical Exchange Union of the Association of College and Reference Libraries revised the procedures of the operation of the union and changed the name to the Duplicate Exchange Union. See also Association of the College and Reference Libraries, Agricultural Libraries Section, "A Clearing House for Duplicate Public Documents," College and Research Libraries, III (1941), 89-91.

[^268]:    ${ }^{2}$ Publications not specifically referred to in the text, but which may be consulted with profit, include the following: American Library Association, Committee of the College and Reference Section, College and Reference Library Yearbook, Number One (Chicago: American Library Association, 1929); Georg Leyh, "Das Haus und seine Einrichtung," in Fritz Milkau, Handbuch der Bibliothekswissenschaft, II (Leipzig: Harrassowitz, 1933), 1-115; S. P. Turner, Library Buildings: Their Planning and Equipment ("McGill University Publications," Series XIII, No. 24 [Montreal, 1929]).

    2 Chicago: American Library Association, 1932.
    ${ }_{3}$ Chicago: American Library Association, 1939.
    4 E.S. Evenden, G. D. Strayer, and N. L. Engelhardt, Standards for College Buildings (New York: Teachers College, Columbia University, 1938), pp. 126-53.

    5 J. L. Wheeler and A. M. Githens, The American Public Library Building: Its Planning and Design with Special Reference to Its Administration and Service (New York: C. Scribner's Sons, 1941), pp. 13-14.
    ${ }^{6}$ E.g., Bibliographical Planning Committee of Philadelphia, Philadelphia Libraries: A Survey of Facilities, Needs and Opportunities (Philadelphia: University of Pennsylvania Press, 1942), Appen. F, "Specifications for a University Library." This is an example of the application of standards to a building for the University of Pennsylvania. The various rooms and space allotments, worked out on the basis of available footage, are described.

[^269]:    ${ }^{7}$ An example of how plans can change drastically over a period of years is presented by J. P. Boyd in "Outline of a Building Program for the Princeton University Library: Report from the Librarian to the Committee on the Library of the Board of Trustees, May, 1943" [Princeton, N.J., 1943] (mimeographed; confidential). Dr. Boyd is chairman of the Co-operative Committee on Planning of New University and College Libraries, made up of representatives of 11 educational institutions which are planning to spend more than $\$ 25,000,000$ for library buildings after the war. The objectives of the committee are ( 1 ) to explore the present state of planning; (2) to co ordinate the approach to the fundamentals of library planning; (3) to initiate studies relating to various aspects of buildings and scientific aids to learning; and (4) to disseminate information, ideas, and experience to members of the group and to any other institutions planning library facilities.

[^270]:    ${ }^{8}$ A brief outline of the development of American university library buildings is contained in W. Munthe, "Modern American Library Buildings, III," Library Association Record, 3d ser., Il (1932), 283-90. See also his American Librarianship from a European Angle: An Attempt at an Evaluation of Policies and Actioities (Chicago: American Library Association, 1939), pp. 174-80.

[^271]:    9 B. P. McCrum, An Estimate of Standards for a College Library: Planned for the Use of Librarians, When Presenting Budgets to Administratioe Boards (rev. ed.; Lexington; Va.: Journalism Laboratory Press, Washington and Lee University, 1937), p. 137.

[^272]:    ${ }^{\text {r0 }}$ Bibliographical Planning Committee of Philadelphia, op. cit., pp. 86-90.
    ${ }^{11}$ W. M. Randall and F. L. D. Goodrich, Principles of College Library Administration (2d ed.; Chicago: University of Chicago Press, 1941), pp. 172-74.
    ${ }^{2}$ Boyd, op. cit.

[^273]:    ${ }^{13}$ Bibliographical Planning Committee of Philadelphia, op. cit.
    14 Ibid., p. 7.
    ${ }^{15}$ The Annex of the Library of Congress (Washington: Government Printing Office, 1937).
    ${ }^{16}$ C. Z. Klauder and H. C. Wise, College Architecture in America and Its Part in the Development of the Campus (New York: C. Scribner's Sons, 1929), pp. 23-45.

[^274]:    ${ }^{17}$ For further discussion of these subjects see chap. xiii.

[^275]:    ${ }^{18}$ F. K. Walter, "The University Library Building," in The American School and Univer-sity: $A$ Yearbook Devoted to the Design, Construction, Equipment, Utilization and Maintenance of Educational Buildings and Grounds, XIII (1941), 307.
    ${ }^{15}$ Op. cit., pp. 31 -33.
    ${ }^{20}$ Harvard, Yale, Columbià, Princeton, Pennsylvania, Brown, North Carolina, Virginia, Rutgers, and Georgetown (Fremont Rider, "The Growth of American College and University Libraries-and of Wesleyan's," About Books at the Olin Library, XI [1940], 8).
    ${ }^{21}$ Ibid., pp. 1-1 1 .

[^276]:    ${ }^{22}$ Chicago, California, Illinois, Cornell, Minnesota, Western Reserve, Iowa State, Oberlin, Rochester, and Syracuse (ibid., p. 8).
    ${ }^{3}{ }^{3}$ F. K. Walter, "Essentials of a University Library Building-I," College and Research Libraries, I (1939), 46.
    ${ }^{24} 1 \mathrm{lbid}$. , p. 40.
    ${ }^{25}$ M. H. Lowell, College and University Library Consolidations (Eugene: Oregon State System of Higher Education, 1942).
    ${ }^{26}$ Various types of facilities provided in university libraries may be observed in the plans included in Hanley, op. cit. See also R. Offor, "Report 19: United States and Canada: Buildings," in Library Association, A Survey of Libraries: Reports on a Suroey Made by the Library Association during 1936-1937 (London: Library Association, 1938), pp. 399-439.

[^277]:    ${ }^{27}$ Op. cit., p. 33.
    ${ }^{28}$ Op. cit., p. $17 . \quad$ Op. cit., p. 180.
    ${ }^{30}$ R W. Henderson, "The Cubook: A Suggested Unit for Bookstack Measurement," Library 耳ournal, LIX (1934), 865-68; "Note of Correction," ibid., p. 976; "Bookstack Planning with the Cubook," Library Fournal, LXI (1936), 52-54.
    ${ }^{35}$ Ibid., p. 53 . An allowance of 1.47 cubooks per cubic foot of stack may be made. For space requirements for various classifications of books when shelves are filled solidly with no open space, see Wheeler and Githens, op. cit., p. 415.

[^278]:    ${ }^{32}$ W. M. Randall, "The Physical Administration of the Book Collection," in The American School and University: $A$ Yearbook Deooted to the Design, Construction, Equipment, Utilization, and Maintenance of Educational Buildings and Grounds, VIII (1936), 261-64.

[^279]:    ${ }^{34}$ Hanley, op. cit., pp. 136-37.
    ${ }^{35}$ J. F. Larson, "University Libraries," Architectural Forum, LIV (1931), 741-49.

[^280]:    ${ }^{36}$ R. E. Ellsworth, "Essentials of a University Library Building-Discussion," College and Research Libraries, I (1939), 50-56, 96; W. H. Jesse, "Divisional Organization," 7ournal of Higher Education, XV (1944), 459-64.

[^281]:    ${ }^{38}$ Branscomb, op. cif., pp. 118-30.
    ${ }^{30}$ Examples of greater seating capacity in reserve book rooms than in the main reading room include Northwestern, Southern California, Kansas, Oregon, and Temple (see Hanley, op. cit., pp. 136-37).

[^282]:    ${ }^{40}$ Harvard University Library, The Houghton Library (Cambridge: Harvard College, 1942). It is probable that in the future many of the larger university libraries which have not provided adequately for the housing and care of rare books will follow the pattern of Harvard in setting up a separate building. Columbia University has adapted the old Low Memorial Library building toward this end.

[^283]:    ${ }^{41}$ For a detailed treatment of the photography department in the library, see H.H. Fussler, Photographic Reproduction for Libraries: A Study of Administratioe Problems (Chicago: University of Chicago Press, 1942).

[^284]:    © J. P. Danton, "Microphotography in a University Library," Journal of Documentary Reproduction, I (1938), 297-315.
    ${ }^{43}$ Letter from Harry Clemons, librarian, dated November 27, 1940.
    ${ }^{4}$ E C. Roosen-Runge, "The Photographic Laboratory at Brown University," Journal of Documentary Reproduction, III (1940), 104-8.
    ${ }^{4}$ Ibid.

    * Between the small laboratory and the laboratory of the second type is the intermediate unit, represented by the Bibliofilm Service in Washington, D.C., which is equipped to render service to scholars throughout the nation. This service is stationed in the United States Department of Agriculture Library and serves several Washington libraries. The Library of the Public Health Service maintains its own film service.

[^285]:    "J. O. Kraehenbuehl, "Lighting the Library," College and Research Libraries, II (1941), 231-36.

[^286]:    $4^{8}$ Ibid., p. 232.
    49 See J. O. Kraehenbuehl, "Library Table Lighting," College and Research Libraries, II (1941), 306-17. This is a careful study of the library table and fluorescent table lamps.

    Kraehenbuehl, a professor of electrical engineering at the University of Illinois, recommends that in new installations the table lamp should not be used. His experiment of the require-

[^287]:    ments of the library table lamp "shows that a single row of fluorescent lamps in a suitable equipment properly designed is capable of supplying the necessary illumination for the work area. The lamp should be mounted with the lowest portion of the reflector sixteen inches above the lowest edge of the table whenever the table has a flat or a sloping top. For the sloping top this is thirteen inches above the six-inch center strip" (ibid., p. 317).
    so Ibid., p. 234. The foot-candles proposed here are suggested by Krachenbuehl. They are higher in each case than those included in Gerould, op. cit., p. 100, or those specified for the new Nebraska Library (proposed specifications and sketching for "Don L. Love Memorial Library," 1941 [manuscript]).

[^288]:    ${ }^{51}$ E. W. McDiarmid and G. R. Tatum, "Library Noise," Library Quarterly, VIII (1938), 200-209.
    ${ }^{\text {s2 }}$ See C. D. Plaister, Floors and Floor Cooerings ("Library Equipment Studies," No. 2 [Chicago: American Library Association, 1939]), for a detailed statement of library foors.

[^289]:    ss For detailed descriptions of equipment and its uses, and for the other needed equipment, see Fussler, op. cit. See chap. v for a discussion of administrative problems relating to films.
    ${ }^{36}$ Danton, op. cif., I (1938), 297-315, and II (1939), 221-24; R. A. Beveridge, letter in "Editor's Corner," fournal of Documentary Reproduction, II (1939), 166-68; idem; "Brown University," ibid., III (1940), 104-8.

[^290]:    ${ }^{57}$ See articles by Parker, Pratt, Quigley, and Waugh cited above in n. 54 .

[^291]:    se "Enlarge Library," Library Yournal, LXIII (1938), 971.
    s9 "University Library Addition," Library Fournal, LXV (1940), 165.

[^292]:    ${ }^{1}$ See also D. S. Hill, The Libraries of Washington . . . . (Chicago: American Library Association, 1936).

[^293]:    ${ }^{2}$ G. G. Dawe, Meloil Dewey, Seer: Inspirer: Doer, 185ı-r@3I (Lake Placid, N.Y.: Lake Placid Club, Melvil Dewey Biografy, 1932).

[^294]:    3 Institut international de Coopération intellectuelle, Rôle et formation du bibliothécaire; étude comparative sur la formation professionnelle du bibliothécaire (Paris: Institut international de Coopération intellectuelle, 1935).

    4 Institut international de Coopération intellectuelle, Bibliothèques populaires et loisirs ouvriers; enquête faite à la demande du Bureau de Travail (Paris: Institut international de Coopération intellectuelle, 1933).
    $s$ The story of the development of this idea, which was presented to the American Library Association in 1913 , involved a number of librarians and is fully set forth in the Preface.

[^295]:    ${ }^{6}$ Chicago: American Library Association, 1936.

[^296]:    ${ }^{7}$ Chicago: University of Chicago Press, 1942.

[^297]:    ${ }^{8}$ The title was changed in 1957 to Public Documents with Archives and Libraries, with J. K. Wilcox as joint editor for 1937 and 1938. In 1938 it became Archioes and Libraries.

[^298]:    ' New York Public Library, Bookmen's Holiday: Notes and Studies Written and Gathered in Tribute to Harry Miller Lydenberg (New York: New York Public Library, 1943).

[^299]:    ${ }^{1}$ See A. Miles and L. Martin, Public Administration and the Library (Chicago: University of Chicago Press, 1941), chap. viii, for a discussion of library measurement. Many of the points raised are applicable to university library evaluation.

[^300]:    ${ }^{3}$ See D. E. Cole, "An Analysis of Adult Reference Work in Libraries" (unpublished Master's thesis, Graduate Library School, University of Chicago, 1943). Cole found that it was not entirely satisfactory to classify reference questions on the basis of levels of difficulty.

[^301]:    a Among the reports of university librarians which are effective and might serve as models are those of Columbia, Pennsylvania State College, Michigan, Minnesota, North Carolina, Princeton, Temple, Texas, and Yale.

[^302]:    4 Various categories of surveys have been suggested. E. W. McDiarmid, in The Library Surocy: Problems and Methods (Chicago: American Library Association, 1940), pp. 3-4, mentions the self-survey, question-and-answer survey, subjective analysis, and objective analysis. These surveys so described are not discrete or mutually exclusive and are not particularly applicable to university libraries.
    ${ }^{5}$ See University of North Carolina, Report of the Dioision of Library and Library School, 1937-38 (Chapel Hill: The University, 1938), pp. 12-21.
    ${ }^{6}$ G. A. Works, College and University Library Problems . . . . (Chicago: American Library Association, 1927).

    7 E.g., "Statistics of University Libraries," compiled annually since 1912-13; "College and University Library General and Salary Statistics," annually since 1935, with standard system of reporting since 1939-40 (published in Bulletin of American Library Association until 1942, and since 1943 in College and Research Libraries); J. A. McMillen, "Statistics of Southern College and University Libraries," compiled annually since 1926-27; North Central Association of Colleges and Secondary Schools, "Statistics on College and University Libraries."

[^303]:    The U.S. Office of Education collects statistics annually for about go per cent of the college and university libraries of the country. The other compilations cover from 19 to 40 libraries. Some institutions do not permit their libraries to give out certain information.
    ${ }^{8}$ C. B. Joeckel (ed.), Current Issues in Library Administration (Chicago: University of Chicago Press, 1939); L. H. Gulick and L. Urwick (eds.), Papers on the Science of Administration (New York: Institute of Public Administration, Columbia University, 1937); J. M. Gaus, L. D. White, and M. E. Dimock, The Frontiers of Public Administration (Chicago: University of Chicago Press, 1936); H. Fayol, Industrial and General Administration, trans. J. A. Coubrough (London: Isaac Pitman \& Sons, 1930); P. Howard, "Library Staff Manuals and a Theory of Library Management" (unpublished Master's paper, Graduate Library School, University of Chicago, 1939).

    Q E.g., R. A. Miller, "Cost Accounting for Libraries: A Technique for Determining the Labor Costs of Acquisition and Cataloging Work" (unpublished Ph.D. thesis, Graduate Library School, University of Chicago, 1936); application of unit costs of administration and cataloging on per student basis, in Iowa State College of Agriculture and Mechanic Arts, Iowa State College Library Report, 1935-1937 (Ames: Iowa State College Library, 1936), pp. 17-20; J. H. McNeely, University Unit Costs (U.S. Office of Education Bulletin No. 21, 1937) (Washington: Government Printing Office, 1938).

[^304]:    *For titlen of surveys, see bibliography at end of chapter.

[^305]:    ${ }^{\text {a }}$ See D. Waples, Investigating Library Problems (Chicago: University of Chicago Press, 1939). This manual defines the logical elements and processes of research.
    $=$ L. Shores, Origins of the American College Library, 2638-1800 (Nashville, Tenn.: George Peabody College, 1934).

[^306]:    ${ }^{3}$ J. H. Shera, "The Literature of American Library History," Library Quarterly. XV (1945), 21.
    ${ }^{30}$ See also A. Keogh, "The Yale Library in 1742," William Warner Bishop, A Tribute, 194r, ed. H. M. Lydenberg and Andrew Keogh (New Haven: Yale University Press, 1941), pp. 7687.
    4. P. Storie, "What Contribution Did the American College Society Make to the College Library? A supplementary chapter on the History of the American College Library" (unpublished Master's thesis, Columbia University, 1938).
    s V. Satterfield, "The History of College Libraries in Georgia as Interpreted from the Study of Seven Selected Libraries" (unpublished Master's thesis, Columbia University, 1936):

[^307]:    6 R. B. Duncan, "A History of the George Peabody College Library, 1785-1910" (unpublished Master's thesis, George Peabody College for Teachers, 1940).

    7L. E. Wilcox, "History of the University of Illinois Library, 1868-1897" (unpublished Master's thesis, University of Illinois, 1931).
    ${ }^{8}$ E. Atkins, "A History of the Fisk University Library and Its Standing in Relation to Libraries of Other Comparable Institutions" (unpublished Master's thesis, University of California, 1936).
    -D. Smith, "History of the University of California Library to Igoo" (unpublished Master's thesis, University of California, 1930).
    ${ }^{10}$ F. K. Walter, "Notes on the Beginning of a Mid-West University Library," Essays Offered to Herbert Putnam by His Colleagues and Friends on His Thirtieth Anniversary as Librarian of Congress, 5 April r929, ed. W. W. Bishop and A. Keogh (New Haven: Yale University Press, 1929), pp. 510-19.
    ${ }^{11}$ E. M. Hensel, "History of the Catalog Department of the University of Illinois Library" (unpublished Master's thesis, University of Illinois, 1936); E. R. Ralston, "Bibliographical Problems in the Order Department of a Large University Library" (unpublished Master's thesis, University of Illinois, 1939); K. M. Ruckman, "Gifts and Exchanges in the University of Illinois Library" (unpublished Master's thesis, University of Illinois, 1936); R. W. McComb, "Browsing Room Reading in the University of Illinois Library, 1931-35" (unpublished Master's thesis, University of Illinois, 1936); also A. M. Monrad, "Historical Notes on the Catalogues and Classifications of the Yale University Library," in Papers in Honor of Andrew Keogh, Librarian of Yale University, by the Staff of the Library, $307 u n e, 1938$ (New Haven: Privately printed, 1938), pp. 251-84. Other articles in this volume contain historical material relating to various aspects of the university library, such as holdings and early collections, manuscripts, and bookplates.

[^308]:    ${ }^{12}$ E.g., M. B. Ruffin, "Some Developments towards Modern Cataloging Practice in University Libraries as Exemplified in the Printed Book Catalogs of Harvard and Yale before the Year 1876" (unpublished Master's thesis, Columbia University, 1935); or the more general work by A. D. Osborn, "Studies in the History and Theory of Cataloging" (unpublished Master's thesis, University of Michigan, 1936). Such surveys as those of the libraries of the universities of Florida, Georgia, Indiana, Mississippi, and Pennsylvania, of the University of Chicago, of Harvard University, and of the 7 western universities provide a starting-point for a systematic study of university libraries. Staff manuals, brief histories published in local papers or magazines, and other materials are available for a number of institutions.
    ${ }^{13}$ W. D. Johnston, History of the Library of Congress, Vol. I: 1800-1864 (Washington: Government Printing Office, 1904); see also Lucy Salamanca, Fortress of Freedom: The Story of the Library of Congress (Philadelphia: J. B. Lippincott, 1942).

[^309]:    ${ }^{4} 4$ H. M. Lydenberg, History of the New York Public Library: Astor, Lenox and Tilden Foundations (New York: New York Public Library, 1923).
    ${ }^{25}$ G. Spencer, The Chicago Public Library: Origins and Backgrounds (Chicago: University of Chicago Press, 1943).
    ${ }^{16}$ K. J. Hartmann and H. Füchsel (eds.), Geschichte der Götinger Universitāts-Bibliothek, verfasst oon Göttinger Bibliothekaren (Göttingen: Vandenhoeck und Ruprecht, 1937).
    ${ }^{17}$ University of Chicago, Tentative Report of the Commission on Future Policy of the University Libraries, fanuary, 1924 (Chicago: University of Chicago Press, 1924).
    ${ }^{14}$ F. Reichmann, "The Location of Books on the College Campus" (unpublished Master's thesis, Graduate Library School, University of Chicago, 1942), p. 66.

[^310]:    19 J. H. Gable, Manual of Serials Work (Chicago: American Library Association, 1937).
    ${ }^{20}$ H. H. Fussler, Photographic Reproduction for Libraries: A Study of Administratioe Problems (Chicago: University of Chicago Press, 1942), chap. vi.

[^311]:    ${ }^{21}$ A student at the Graduate Library School, Ralph W. McComb, has begun an investigation of this phase of library administration in his proposed doctoral dissertation "The Financial Administration of University Libraries in the United States."

[^312]:    ${ }^{24}$ R. A. Miller, "Cost Accounting for Libraries: A Technique for Determining the Labor Costs of Acquisition and Cataloging Work" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1936); see also Fremont Rider, "Library Cost Accounting,' Library ${ }^{2}$ uarterly, VI (1936), 331-81.

[^313]:    os S. G. Akers, "Relation between Theory and Practice of Cataloging: with Special Reference to Courses in Cataloging in Library Schools" (unpublished Ph.D. dissertation, Graduate Library School, University of Chicago, 1932).

[^314]:    ${ }^{26}$ E.g., R. H. Deily, "The Cataloging of Beowulf Material and Other Anglo-Saxon Remains" (unpublished Master's thesis, Columbia University, 1937); F. I. Ambuhl, "A Study of the Uniform Entries Used in the Cataloging of Sacred Books and Anonymous Classics" (unpublished Master's thesis, University of Illinois, 1928); C. E. Krieg, "The Cataloging of Grail Literature" (unpublished Master's thesis, University of Illinois, 1935).
    ${ }^{27}$ D. S. Belcher, "Preparation and Cataloging of Serials, School of Mines and Metallurgy Library, Rolla, Missouri: A Study of Procedures and Costs" (unpublished Master's thesis, University of Michigan, 1939).
    ${ }^{28}$ H. H. Peckham, "The Arranging and Cataloging of Manuscripts in the William L.

[^315]:    ${ }^{4}$ T. M. Iiams, "Foxing and the Deterioration of Paper" (unpublished Master's thesis, Graduate Library School, University of Chicago, 1939); A. D. Minogue, The Repair and Preseroation of Records ("Bulletins of the National Archives," No. 5 [Washington: National Archives, 1943]).

    94 E.g., John Archer, "Ten-Year Test of Bindings," Bulletin of the New York Public Library, XL (1936), 97-99.
    ${ }^{4}$ G. F. Purdy, "Why Not Research in Book Conservation?" Library fournal, LXVI (1941), 144.

    4E.g., Günther Reichardt, "The Durability of Paper," Library Quarterly, VIII (1938), 510-20.
    ${ }^{41}$ P. E. Clapp, "A Technical Research Laboratory for the Library," College and Research Libraries, I (1940), 251-53.

[^316]:    ${ }^{43}$ See W. R. Thurman, "Conservation of Periodicals and Reference Volumes," Library Journal, LXVI (1941), 804.
    *S See chap. vi.
    so Frank A. Lundy has begun an investigation, "Personnel Administration in University and College Libraries," which should clarify some of these issues. The study is being prepared at the Graduate Library School.

[^317]:    ${ }^{\text {st }}$ Also included in U.S. Congress, Congressional Record, LXXXIV, Part 8 (1939), 8218.
    ${ }^{52}$ A. W. MacMahon and J. D. Millett, Federal Administrators: A Biographical Approach to the Problem of Departmental Management (New York: Columbia University Press, 1939).

[^318]:    ${ }^{\text {ss }}$ D. O. Kelley, a student in the Graduate Library School, University of Chicago, has begun work on a study dealing with tie problem of mobility.
    sf Danton, np. cit., p. 456.

[^319]:    ${ }^{\text {ss M. M. L. Raney and H. L. Leupp, "The H. W. Wilson's Company System of Scale Pricing: }}$ A Critical and Constructive Examination" (a special committee of the Association of Research Libraries), [Chicago], 1941 (mimeographed).
    ${ }^{56}$ Altmann, op. cit.
    ${ }^{\text {s7 }}$ F. Rider, The Scholar and the Future of the Research Library (New York: Hadham Press, 1944).

[^320]:    ${ }^{58}$ H. A. Kellar, "Memoranda on Library Cooperation" (Washington: Library of Congress, 1941). (Mimeographed.)
    ${ }^{59}$ Downs, op. cit.
    ${ }^{60}$ A study along this line has been completed at the Graduate Library School by Andrew J. Eaton, "The Acquisition of Contemporary World Publications of Scholarly Interest by Selected Libraries in the Chicago Area."
    ${ }^{61}$ Bibliographical Planning Committee of Philadelphia, Philadelphia Libraries.... (Philadelphia: University of Pennsylvania Press, 1942), pp. 26-29.

[^321]:    ${ }^{65}$ K. D. Metcalf and E. E. Williams, "Proposal for a Division of Responsibility among American Libraries in the Acquisition and Recording of Library Materials," College and Research Libraries, V (1944), 105-9. This proposal for obtaining and cataloging materials was drawn up by a commitee consisting of Archibald MacLeish, Julian Boyd, and K. D. Metcalf. It contains valuable suggestions for postwar co-operative action.

