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Library Trends

Current Trends in College and University Libraries

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Library Trends, a quarterly journal in librarianship, provides a medium for evaluative recapitulation of current thought and practice, searching for those ideas and procedures which hold the greatest potentialities for the future.

Each issue is concerned with one aspect of librarianship. Each is planned by an invited Guest Editor. All articles are by invitation. Suggestions for future issues are welcomed and should be sent to the Managing Editor.

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Introduction

ROBERT B. DOWNS

In launching a new journal upon the library profession, already surfeited and perhaps at times even inundated by existing literature in the field, the University of Illinois Library School has not rushed in rashly. A long period of discussion and serious thought was devoted to the question of, first, whether there was a need and place for another library periodical, and, second, if the answer was affirmative, what kind of journal? Advice was obtained from persons in other institutions with points of view as nearly impartial and objective as possible. Only after being fully convinced that a genuine and worthwhile contribution to librarianship is possible, did the Library School decide to establish Library Trends.

Because of the variety and extent of publishing in the field, it was the consensus of advisers that library science has reached a stage in its growth where synthesis and interpretation are required. Media for reporting original research and current developments are probably adequate. In no existing organ, however, has one been able to secure a well-rounded view of the state of progress of any particular area of librarianship. No source has brought together widely scattered fragments into a coherent and connected whole. It was agreed, accordingly, that this sort of integration should be the primary aim of Library Trends. Initial inspiration for the plan came from observing the notable success of the Annals of the American Academy, the Review of Educational Research, and the Law Forum, which follow similar patterns.

Proceeding on this premise, a further decision was made, namely, to inaugurate publication by a series of issues on major types of libraries. To obtain a broad perspective and to provide a foundation for more specialized treatment later, each of the first several numbers of Library Trends will be concerned with a specific branch of the field, i.e., college and university, public, school, special, and governmental libraries. In substance, the purpose is to offer a general status quo. 
ROBERT B. DOWNS

statement of social, political, educational, and economic tendencies now affecting libraries, with some forecasts of things to come and attempts to identify areas in need of further investigation. The present issue, dealing with the principal trends in college and university libraries, opens the series.

If anyone questions the desirability of doctoral programs and other research in librarianship, he should be convinced, by a perusal of these papers, that the surface of studies needed has barely been scratched. In virtually every division of the profession considered herein, it is apparent that there are innumerable opportunities, and in many instances an urgent want, for more experimentation and up-to-date research. To illustrate, the following questions are selected, more or less at random, from comments and suggestions offered by contributors to this issue of Library Trends:

What should be the relationship of audio-visual services to the library? What are the educational advantages of separate undergraduate or lower-divisional libraries in universities? Are subject-divisional types of library organization more expensive to administer than traditional forms? How can cataloging be adapted to the specialized needs of subject-divisional organizations? Does the use of library materials vary radically among scholars in different subject fields? How do scholars and research workers use catalogs and other bibliographical aids? Could changes be made in the period of loans or in the collection of fines that would make many circulation records unnecessary? What criteria or principles should be used for withdrawal of material from collections? What form of library catalog is preferable—book or card, divided or whole, etc.? How can the products of the new graduate programs in library education be evaluated? What kind of preparation makes for success in librarianship? Can some types of library material be processed more economically and satisfactorily on a decentralized basis? How can the principles of management be applied most effectively to library problems? What are the potentialities of television for promoting library public relations? What has been the impact of microphotography on library resources? How can scientific bases be devised for evaluating and planning library buildings? How can the contributions of engineering be efficiently utilized in library lighting, heating, air-conditioning, and other mechanical aspects of library architecture? Would it not be desirable to have regional libraries, such as the Midwest Inter-Library Center and the proposed Northeastern Regional Library, fit into some logical national plan?
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These are representative of a multitude of questions raised by the papers herein presented. They point to the fact that contemporary American librarianship is a dynamic, growing organism, never satisfied with static conditions. As recently as twenty-five years ago, few of these queries would have been asked, for situations to which they apply are themselves new. Even the research approach to library problems is a development no more than a generation old, with perhaps a few scattered exceptions. Here the University of Chicago Graduate Library School played a conspicuous role, and its influence has been profound since about 1930.

The authors of this number of *Library Trends* by no means limit themselves, however, to propounding questions. One gets, on the contrary, from reading their surveys of various topics, a sense of gratifying, and in some instances spectacular, accomplishments. All along the line, advances are taking place, and it is apparent, at least in some areas, that we are on the threshold of greater things to come.

One dominant impression emerges from the evaluations and syntheses prepared by the several contributors. This is that the college or university library is emphasized as an educational force, and, growing out of that fact, increasing attention is being paid to the needs of individual library users, ranging from the entering college freshman to the established scholar, in all types of institutions from the junior college to the large and complex university. The reader is the focus of interest to Mr. Ellsworth in his review of trends in higher education, to Mr. Swank in his consideration of the educational function of the library, and to Mr. Dunlap and Mr. Orr in their discussions of public services and public relations. The same reader is less directly apparent, perhaps, but is obviously on the minds of Mr. Wright when he writes on technical processes, and of Mr. McAnally and Mr. Coney when they deal with matters of organization and management. He may well have been looking over the shoulders, also, of Mr. Vosper examining resources, Mr. Reece planning buildings and equipment, Mr. Williams raising questions about cooperation, Mr. Thompson preparing librarians for the profession, and Mr. McCarthy trying to find funds to finance the increasing cost of library operations.

It is for the library’s clientele, patrons, readers, users, or however we wish to designate them, that we, as college and university librarians, establish divisional and undergraduate libraries, provide unhampered access to book collections, set up special study facilities, bring audio-visual aids into the library, improve the efficiency of lighting and airc-
conditioning, arrange buildings conveniently for use, appoint expert staffs for guidance and reference work, organize operations to insure prompt and efficient service, try to simplify the library catalog to make it intelligible to the layman, build up rich resources for research, and work to maintain good public relations. The more progressive the library, the more it centers its program around the reader's needs and interests.

Many divisions of librarianship are in a state of healthy ferment today. Those concerned with library buildings and equipment provide a notable example. An architect of 1925 would scarcely recognize the most advanced product of his 1952 colleague. Once having recovered from the shock, however, the architect and librarian of a generation ago would probably be delighted with the simple lines, the flexibility, the pleasing use of color, the convenience of arrangement, the effective lighting, and the other highly functional aspects of our newest library structures. They would be no less startled by, but quickly reconciled to, the equipment and furnishings—scientifically designed, utilizing new materials, attractive in appearance, and inviting to the user.

The great pioneers in library cooperation, such as E. C. Richardson, would be gratified if they could read the chronicles by Mr. Vosper and Mr. Williams of impressive progress in the development of resources for research, and of such broad gauged enterprises as the Farmington Plan and the Midwest Inter-Library Center, though Mr. Williams, rightly, is inclined to examine these projects with a critical eye. His questions deserve careful thought.

Another lively area is that of technical processes. For the last decade, approximately, as Mr. Wright points out, a movement has been gathering momentum towards unification of all technical divisions in larger library systems, greater simplification of cataloging methods, increasing mechanization, and inauguration of other steps to speed the work and reduce the cost while at the same time improving the product for the ultimate consumer. Mr. Coney on management and Mr. McAnally on organization deal with related aspects of this problem.

The status of personnel in college and university libraries is by no means standardized. Equally wide open, as Mr. Thompson brings out, is the question of the best preparation for professional librarians. Perhaps too much uniformity in either preparation or status is neither possible nor desirable. Nevertheless, there is clear evidence both of
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more highly qualified staffs and of better recognition of the place of librarians in colleges and universities throughout the country.

Concerning the financial support of college and university libraries, Mr. McCarthy shows that the picture is a mixed one. Large institutions are holding their own under inflationary pressures better than small colleges, and publicly supported ones better than private institutions. On the other hand, in terms of expenditure per student, the universities under private control are continuing to set the pace, as they have done in the past.

Altogether, these twelve papers offer a comprehensive view of the state of college and university libraries at mid-century—the advances, present conditions, problems and future prospects. There are many reasons for satisfaction in this over-all look, but few causes for complacency as we tackle the many important tasks ahead.
Trends in Higher Education Affecting the College and University Library

RALPH E. ELLSWORTH

The term “trends” in this article is used loosely enough to include developments that have not been present during the entire period of the contemporary American university’s evolution, but tightly enough to exclude temporary flurries of excitement. Not all libraries have been affected in the same manner or to the same extent by these ideas for the very obvious reason that men differ in their interpretations of the meanings of events. Further, no attempt is made to document cause and effect where the relationship is obvious and widespread.

The rapid and extensive growth of colleges and universities is perhaps the most important factor in determining the nature of the institutions. In 1900, there were 237,592 students enrolled. In 1947, there were 2,354,000.¹ This growth, itself a result of the ideas that shaped the twentieth century, has served as host for almost all the germinal developments in the modern university, the final outcome of which remains uncertain at the mid-century point.²⁻⁵ The many reasons for this growth need no presentation or discussion in this article except for the covering statement that the universities and colleges today are somewhat analogous to the growing plant whose normal cycle is being shaped as much by imposed nutrients as by the natural products of the soil. Specifically, the effects of World War II on colleges and universities were impressive and extensive, but just how long-standing no one can say. Likewise, a sudden cessation of the threat of future wars would throw university life into immediate confusion, because at the present time no one can tell what the demands of a “normal” social order would be like.

The curriculum is both cause and effect in relation to changes in enrollment. The modern university feels a new kind of responsibility

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to the social order which leads it to spread the benefits of teaching and research over every recognizable phase of the citizen's life. The university is close to the current scene and is very sensitive to it. Witness the presence of institutes and workshops for lawyers, teachers, plumbers, hotel managers, farmers, and those in other vocations in the normal life of the university, particularly those in large urban cities, or in state-supported universities.

The modern university believes that all aspects of the lives of citizens are worthy subjects for research and teaching. Hollis notes that:

Without exception the leaders of this period [Harper, Gilman, Eliot, White and Angell] advocated a program of research and instruction calculated to minister to the everyday needs of national and community life. They were not afraid of vocational, professional, or otherwise utilitarian studies. The squeamishness that now abounds in this regard emanates largely from liberal arts teachers of undergraduates who have come to have a voice in graduate affairs in most universities. In his inaugural address Gilman sounded a note that was reiterated generally by other presidents. He promised that Johns Hopkins would make for "less misery among the poor, less ignorance in the schools, less bigotry in the Temple, less suffering in the hospital, less fraud in business, less folly in politics." He believed that the attainment of such highly practical ends called for advanced study in many subjects for which graduate research had not before been customary, even in Germany.

Programs based on this kind of thinking have greatly expanded the scope of library collections until one finds a university like Illinois receiving over 17,000 periodicals currently. The book collections, likewise, cover all phases of modern life from philosophy to faucets.

Changes in size and scope can be seen in the traditional liberal arts college and in the professional schools. In the former, the changes are shown in the content of the curriculum, in teaching and testing methods, and in basic attitudes of students and faculty.

First, in terms of curriculum, two opposing forces operate. One favors the humanistic tradition based on subjects that have been in the liberal arts curriculum for a long time; the other favors the introduction of professional or semi-professional courses, majors or minors. Those who defend the humanistic tradition do so under one of two banners—"liberal" or "general" education but those who favor the infusion of "professional" education use several lines of attack. Some would compress the contents of the four-year liberal arts curriculum...
into a two-year general education program, followed by a strong professional major. Some would hold that the humanistic tradition is a point of view rather than a series of subjects. They would argue that "A specialized subject, taught in a liberal spirit, offers more opportunity for the intellectual and social development of the student than a general subject taught as a narrow discipline." 9

Second, the large enrollments in the arts colleges have led to the lecture-plus-textbook method of teaching and to the development of a testing program that determines the manner in which students study. Under the lecture-textbook reading system, a large amount of information can be put into the students, but since the instructor does all the hard creative thinking in the preparation of the textbook, the method leads to a passive, receptive attitude on the part of the student, an attitude that is not conducive to the development of aggressive and lasting habits of reading. 5, 10 The professor in charge of a large class cannot take the time to grade papers that test the student's ability to think creatively and reflectively. As a substitute, so-called "objective" tests are used. These tests can be graded mechanically and quickly, and impartially. Students have learned that the best way to study for these examinations is to confine one's reading to the assignments and to do the reading shortly before the examination. This causes library use to be largely confined to a few titles and to a few days in the term. Study of attendance records in reserve rooms show this practice to be almost universal. 11 It cannot be claimed, of course, that the tests are entirely to blame.

And third, in terms of basic attitudes, although the assertions are difficult to document, two facts seem obvious: First, the impersonality of student-faculty relationships in the large classes means that students seldom are fired by a tremendous thirst for learning. Instead, they tend to assume a defensive, defiant attitude against the efforts of the faculty to teach. Second, professors pretty generally are convinced that a large percentage of the student body is either uneducable 12 or at least not interested in learning. They are sure that the quality of the students has declined. 13, 14 Others admit the unwillingness on the part of the student to learn, but attribute this not to lack of ability in the student, but to the failure of the university to offer a challenging curriculum. The two lines of thinking on this point are exemplified by the books of Robert M. Hutchins along the lines of traditional intellectualism and by Harold Benjamin's The Saber-Tooth

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Curriculum, along the lines of basing the curriculum directly on the contemporary needs of living people.

It is not necessary to take sides on the issue as to whether it is the curriculum or the ability of students that is to blame. The facts are that the professor thinks that only a small minority of his students will respond to his teaching. His skepticism toward his students is matched by theirs toward his reading assignments. Librarians, in the middle, catch the brunt of both antagonisms.

In the professional schools the effects of size and scope can be seen in the following developments:

First, qualitative standards have been raised, partly because of faculty desire for excellence and partly because of fear of an oversupply of practitioners. Both reasons plus a third, namely, a growing realization that professional men need exposure to the influence of the older humanistic disciplines, have had the effect of lengthening professional curricula. This is usually done by requiring the student to have either an A.B. or three years of study before he enters the professional school (for example, medical, law, and library schools); or, in the schools that previously had no liberal arts prerequisite, the requirement of at least one or two years of general education work. Developments in colleges of engineering illustrate the latter trend.

Schools like Massachusetts Institute of Technology and Illinois Institute of Technology now make arrangements with liberal arts colleges for combined liberal arts and engineering curricula.

Another development in the professional school that works in the same direction, but for different reasons, is the current interest in the social consequences of the profession’s activity. This usually leads to courses in the ethics of the particular profession, or it leads to having the students take courses in the liberal arts college that accomplish the same purpose.

These developments of a standards-raising nature have a direct bearing on library use. They make the difference between a student who reads widely and one who does not. They also determine the scope of the collection that will be required in the professional school library.

Looking directly now at students, faculty, and administrators in colleges or universities, one can define a few characteristics of each group that are different from what they were a generation ago, and different in a way that shows up in library use.

First, the students. Although it may be true that the decline in the use of close reading practices may cause students to become careless
in their attention to detail, the point is debatable. But there can be no doubt of the ability of present day students to work with complex and sophisticated library collections in a manner that was impossible among undergraduate students a generation ago. The rapid growth of elementary and secondary school libraries, the development of methods of teaching in the schools based on a respect for the minds of youngsters, plus a growing interest in improved teaching methods in the colleges have all been responsible.

It has been observed time and time again that after World War II college students took their work more seriously than did their predecessors. Some of this was due to the fact that many were married and thus more stable, some to the realization that good grades opened up channels of advancement in the armed services not open to poor students, and some to the realization that they must hurry to make up for time lost in the Services. Regardless of the reason, post-war students used libraries in a manner that gladdened the hearts of librarians and professors.

Second, the faculty. The present generation of faculty did their graduate work under teachers many of whom had done their graduate work in Europe, and who could read foreign languages readily. Many of the present generation cannot. This fact may have more to do with the trend toward abolishing foreign languages as a research tool than any one will admit. University libraries today are receiving more material written in foreign languages than they ever did in the past. The number of scholars able to read these has declined. (The author cannot prove this, as a general statement, but knows that it applies to certain departments in several universities, and suspects that it is true generally.) The fact that the abstracting tools in a scholar's subject fail to list articles and books in other languages is accepted by him as proof that the latter do not exist.

Most faculty members today cannot afford to build personal libraries and they expect the university library to supply their book and journal needs. Thus, collections are sometimes built to satisfy the personal needs of a professor as well as to strengthen an area of scholarship.

The professor today knows that promotion and recognition depend on quantity and quality of publication, above all else. Administrators no longer know how to identify good teaching, and hence cannot use it as a basis for promotion. Thus it is that a great deal of faculty publication rests on research done under forced draft conditions and
for ulterior motives. Such work bothers the consciences of the professors and clutters up the journal files.\textsuperscript{18}

Third, the administrator is no longer a professor drafted to the task. He is a professional who has had special training in his own work. This professionalism creates a barrier between him and the faculty, which results in an anti-administration attitude on the part of the faculty and a feeling of insecurity and frustration on the part of the administrator.

That the administration of universities has become bureaucratic is undeniable, as is the fact that it takes a larger percentage of the university's income than it did thirty years ago. In 1932, all colleges and universities in the United States spent 19 per cent as much for administration and general expenses as for resident instruction. In 1948, the same institutions spent 26 per cent as much for administration and general expenses as for resident instruction.\textsuperscript{19} Whether this increase is due to the introduction of labor saving machines, modern accounting practices, mere size of institution, or the desire of the administrations to justify their own activities is a matter of dispute. The fact is that there is a traditional antagonism between faculties and administrators; and librarians, whether they deserve it or not, are usually grouped with the administration, even though they think of themselves as belonging on the other side of the fence.

Within the framework of knowledge itself there are developments that are significant to libraries.

First, the trend toward specialization and departmentalization, or the fragmentation of knowledge, continues in spite of such cries of protest as the following:

Departmentalization in our universities is a natural result of orderly technical progression in complex scientific studies. To some degree we require it still and shall long require it. When it comes to meanings, however, it will be a detriment if overdone. . . . The narrow specialist of today is not even a good specialist.\textsuperscript{20}

The excessive departmentalization of the twenties and thirties led in the forties to a search for curricula that would result in general understanding. Common to all discussions around the theme of general education one always finds that in the older departmentalized curricula there is a lack of a common intellectual experience shared by all college students. Faculties debating the problem usually find it
possible to agree that this lack exists, though seldom can they agree on a sensible way of filling the gap.

Divisional area study and other forms of multidepartmental curricula have evolved to compensate for some of the weaknesses of excessive departmentalization. Examples are the Program in American Studies at the University of Minnesota; The Northwestern University African Study Center; and Program in Russian Studies, Cornell University. Almost every college or university has at least one.

Then there are internal shifts in the relationships among areas of knowledge which cause whole departments to be moved, even in a physical sense. Psychology, originally a part of philosophy, has become completely independent, but with new leanings toward biology, mathematics, and medicine. Biochemistry in many universities is now a part of the medical school. Chemical engineering is now, in most universities, a department in the engineering division, even though in a physical sense it may be still located in the chemistry department.

Where the tides of change have left a department stranded, a new emphasis within the department sometimes causes a rebirth of interest. Thus in the classics departments, interest in studying the Greek and Latin language and literature has almost disappeared, but these departments have shifted to teaching and research in the civilization of Greece and Rome—a broader kind of ancient history. The work is done in the English language and is sometimes presented by both the classics and history departments.

A more general shift—the decline of the humanities—has been going on for thirty years or more. Sigerist says:

The humanities, and to a certain extent the social sciences also, became the stepchildren of the university. The trend was toward utilitarianism. Philosophy, the mother of all sciences and the connecting link between them all, was pushed into the background.

Attempts to revive the power and influence of the humanities through conferences at universities (Stanford, Toronto, and Colorado) have had the effect of stimulating those who were already believers, but little else. Meanwhile, librarians observe that a major share of their book and journal funds are continuing to be spent for the humanities even though these subjects are losing their place in the academic scene. Librarians soon may well need guidance and instruction from the faculty on this point.

Much has been said about the use of audio-visual aids in higher
education and their importance is obvious. A few universities, as, for example, Oregon and Purdue, have seen the wisdom of keeping the development of these tools related to the book, picture, and journal so that funds will be properly divided among them and so that no one medium will suffer from neglect or lack of availability of the others. The State University of Iowa has gone so far as to label an area of the campus as the Communications Center. In the center is the central library, flanked on one side by the journalism building and the broadcasting station, and on the other by the site of a proposed television studio.

Western Reserve University is now giving full credit for home study by television, and the University of Louisville and the Louisville Public Library have experimented with television in so-called “neighborhood colleges” with branches of the public library system as the centers. Transcontinental broadcasting by television of an actual surgical operation has already been accomplished.

The academic future of this communication device seems of great importance, especially if all agencies interested in education can learn to pool their talents and facilities and thus discover the strength of each in combination with the others.

Within the graduate colleges there are several developments that are relevant.

First there is the rapid decline of the university graduate college as a place where research is done. Before 1918, there were few governmental or industrial research laboratories. In 1941 there were 2,264 industrial research laboratories with over 44,900 full-time employees; whereas there were only 1,000 universities doing research (only 300 of any size) involving about 10,000 persons, many of them only part-time. The development of the special libraries field is clear-cut evidence of the trend. Many large industries have built their own research laboratories since World War II (Bell Telephone laboratories in New Jersey, General Motors Corporation, Maytag Washing Machine Company, etc.). Sometimes these are located on the campus of a university (e.g., the Meat Research Institute on the campus of the University of Chicago).

During World War II some of the finest talent in the country was placed in the Office of Scientific Research and Development to stimulate and coordinate research necessary to win the war. Today the Office of Naval Research distributes microcard reproductions of research materials to scientists in the field with whom it has research
contracts. The Atomic Energy Commission maintains a bibliographic service for its participants that goes far beyond the levels of help any researcher in a university would expect to receive.

These are indicative of the direction in which scientific research is moving. What this will eventually mean to the universities one cannot say. It may be that university scientists will have to do less research themselves and spend more time training others.26

But for libraries, the trend is clear. Scientific libraries will be for fundamental research in science; industrial libraries will need, in addition, the literature of applied science.

Second, the rapid growth of the graduate school (562 Ph.D.'s granted in 1918 27 and 6,510 in 1949/50 28) has resulted in a flood of dissertations that place a very heavy publication load on the already overburdened subject journals. This load became so clear to librarians that in February of 1952 the Association of Research Libraries adopted a plan for the development of a new bibliographic control and abstracting tool for doctoral dissertations.29 This plan provides for micropublication of the full texts of dissertations and for the expansion of Microfilm Abstracts. It will relieve subject journals of the necessity of publishing articles based on dissertations. This is important because, in almost all areas, the journals are so oversupplied with articles that delays in publication are becoming serious.30

Third, over thirty years ago, a midwestern university began giving advanced degrees for graduate work in literature and the fine arts with a “creative” thesis in the form of a painting, poem, novel, musical composition, drama, or stage design, instead of the usual thesis. This is no longer considered extreme heresy among universities. Two give Ph.D.'s and many give the master’s degree for creative work. The library resources necessary for this type of research are much smaller than those needed by departments that use the traditional approach entirely.

Fourth, the infiltration of scientific methods into the social sciences and humanities through the use of statistical and laboratory methods causes the researcher to rely less on evidence from printed sources and more on data taken from the field or the laboratory, and a shift in publication outlet from the book to the journal article takes place.

Fifth, the method of comparative analysis in the social sciences, with anthropology occupying a pivotal role, calls for the use of a wide range of printed materials not formerly needed.31 The anthropologist draws his data from all subject fields in the areas he is studying. The drudgery
involved in tracing down and assembling the publications is considerable in the typical university library. Extension of the comparative method in the social sciences and humanities will probably lead to the development of a tool similar to, or better than, the Human Relations Area Files.

The accrediting associations in the twentieth century have played an important role in raising standards of academic personnel, and graduate study. This influence is well understood. Perhaps it can be said that accrediting associations are particularly successful in the early years of an institution, but once the schools they nursed through early years are stabilized, the associations tend to become a nuisance, fretting about minor provisions. In a period of stable or declining income, they can, by insisting on a certain minimum of support, cause a university to deal unfairly with departments that do not have accrediting associations behind them.

The last trend to be considered will be the efforts of colleges and universities in various regions to improve the quantity and quality of their services through regional cooperation.

The southeastern states have gone farthest in this direction. The governors have created a Board of Control for Southern Regional Education that is allocating responsibility for developing training and research centers among the various institutions in the regions. The graduate deans and librarians in the southeast are approaching their tasks in the same spirit, as is evidenced in the following statement of Pierson's:

In this brief account of these distinctive movements in Southern University libraries; namely, the building up of manuscripts and original source materials in special areas by certain institutions, the emergence of cooperative University centers and the interlocking administration of graduate schools and libraries, it is seen that southern institutions are attempting to use their limited resources to the best advantage.

Other parts of the country have also attempted to make limited incomes go further by cooperation. New England has tried it in public health education, and the Rocky Mountain states have done the same for medical education. Inter-institutional cooperation is an old story to university librarians, and they are aware of its advantages when the conditions are favorable and the right spirit exists.

In summary, the modern colleges and universities reflect the instability and changing character of the social order out of which they
grow. The rapid growth of the university, the drastic adaptations made by universities during the last two World Wars, the vast extension of scientific method, and the sudden development of the United States as a major world power all shape the nature of the modern university. It is from these forces that library programs and practices evolve.

References

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24. Hollis, op. cit., p. 33.


26. Hollis, op. cit., p. 34.


Organization of College and University Libraries

ARTHUR M. MCA NALLY

Within the last fifteen years, college and university libraries have been led by a number of factors to recognize the importance of sound organization. Perhaps the most obvious of these factors is the growth in the size of collections. Whereas in 1900 no library in the United States had a book collection of over 1,000,000 volumes, by 1937 there were thirteen such libraries, and by 1951, twenty-eight, of which fourteen were university libraries. Whereas there were only 79 libraries with 200,000 or more volumes in 1937, there were 239 in 1950, 103 of which were college or university libraries. At what point organization begins to emerge as a problem and to be recognized as a separate element of administration can only be guessed at, but a fair estimate seems to be when a library collection reaches 200,000 volumes.

Other developments of the last fifteen years that might well be expected to influence library organization are: (1) growth in the campus population and changes in its composition, (2) changes in higher education and in research, (3) rising costs and tightening finances, (4) changes in the rate and in the forms of publication, (5) advances in technology, (6) increased institutional coordination and cooperation, and (7) the growth of professional knowledge. The general outlines of these developments are well known; most of them are discussed at length in other articles in this issue, and are not elaborated upon here. Familiarity with the elements and principles of administration and with the fundamentals of sound administrative organization is also taken for granted.

However, one pertinent factor, namely, the increase in the fund of professional knowledge available to the librarian, should be discussed, especially as it relates to organization. Studies conducted during the
last few years have provided much factual information about the learning process, the methods of scholars, the existence of research materials, and the communication of ideas. Through possessing a more exact knowledge of these factors, the librarian is able to organize his library so that it will be more responsive to the needs of his patrons.

Over the past twenty years, librarians have discovered, taken over, and modified for their own use the principles of management that had been developed earlier in industry, government, and military science. Leaders in this development have been C. B. Joeckel, L. R. Wilson, D. Coney, K. D. Metcalf, and many others. These elements and principles of organization and administration were first publicized widely in the profession by the 1938 Library Institute of the University of Chicago.¹

The same year marked the date of the first formal survey of a university library by a committee of experts.² The published reports of such surveys have dealt at length with the principles of library organization and administration and unquestionably have had considerable influence on the profession.

Steadily increasing collections and the tremendous expansion in campus populations after the war have led many universities to erect new library buildings, or, in less fortunate circumstances, to add to and modify old ones. In the process, librarians have been compelled to review the educational philosophy to be embodied in their libraries and to reconsider organization. They have had to choose between several different methods of organization for service, two of which have evolved within the last fifteen years. After the war, the Cooperative Committee on Library Building Plans also stimulated thinking on library organization as well as on library buildings, through its various conferences and its published proceedings.

Finally, the various graduate schools of librarianship and certain specialized journals have, during the past twenty years, fostered a better understanding of the principles of organization and provided more information on which decisions about organization may be based. The graduate library schools and the college library journals are relatively recent. The Library Quarterly began publication in 1931; College and Research Libraries in 1939.

As recently as 1940 the average college or university library was organized along departmental lines. Work was divided among as many as thirty or forty departments, depending on the size of the library, and the heads of these departments all reported to the chief librarian and were responsible to him alone. The departments were supervised
and coordinated only through one man, the librarian. The span of control of the chief librarian therefore was as large as the number of departments in the library. Yet eight or ten is generally accepted as the maximum number of departments one man can competently control.

As the library grew, more departments were added and the task of the chief librarian was increased. If he felt overburdened, he added another secretary or an assistant who also reported to him. It is obvious that as the number of units grew larger in the big libraries, administration began to break down, or else the librarian became so immersed in operational duties that he had little time left for the broader aspects of librarianship, such as educational planning and institutional relationships, two very important responsibilities.

In the early and middle forties the librarians of some of the large university libraries, dissatisfied with this traditional plan, began to seek a more efficient administrative organization. (As early as 1938 Coney referred to "The emergent trend toward a divisional head" for technical processes.) The work of the library was divided into two to four major divisions, each of which contained a number of related departments. An assistant administrator was appointed for each division, placed in charge of the work of that division, and given the authority necessary to administer it properly. Only the two to four division heads reported directly to the librarian. The changeover to divisional organization in each large library usually followed shortly after the retirement of an older librarian accustomed to the departmental plan of administration. In the seven years since 1945, divisional organization has proved so satisfactory that most of the major libraries now have a small group of capable administrators at a level immediately below that of the librarian.

These early divisions were not always well thought out. Consequently, there was a good deal of rearranging before a uniform plan emerged. At least three different forms of divisional organization were tried at Columbia, Harvard, Illinois, and other universities between 1941 and 1950. The oddities of some of these early forms of divisional organization were due to insufficient understanding of the principles of administrative organization, but in other instances conditions peculiar to the individual institution brought them about. Organization almost never starts from scratch; it is affected by capacities of existing personnel, by environment, and by the continuous interaction of the various parts of the institution. No satisfactory history of this evolutionary process exists; but the development of divisional organization
at Columbia University is well documented\(^8\) and can be considered typical.

By 1952, however, one particular plan for divisional organization has been widely accepted in large libraries. This is a bifurcated functional organization, in which all library activities are considered either readers’ services or technical services. An assistant or associate director is placed in charge of each of the two divisions and is responsible to the director for its conduct. The “librarian” has become in the meantime the “director of the library” or the “director of libraries.” At least twenty university libraries are now organized in this fashion. Representative are the libraries of such universities as Illinois, Cornell, Chicago, Tennessee, and Wisconsin, and the library of Pennsylvania State College.

In a number of libraries the two assistant administrators both have the title of assistant director and are coequal. This practice of not designating a second in command, still in use at Harvard, Illinois, and Tennessee, and used at Columbia before 1948, seems administratively questionable. The two officers do perform staff as well as line duties but their first responsibilities are as line officers. The two divisions may be equally important but administrative principles call for a distinction between the two.

These division heads in the past have usually combined line duties with auxiliary staff and general staff duties. The tendency in large libraries now is to split off auxiliary staff functions and assign them to lesser officers attached to the director’s office. For example, when the procurement and training of personnel becomes a major activity, a full-time personnel officer is appointed, given a lesser or staff rank as opposed to administrative rank, and assigned to the office of the director. Most such appointments have come into being since 1940.

Many university libraries also have an administrative assistant to the director, who is usually a professionally trained person. This assistant supervises an office staff in charge of general accounting, budget work, supplies, space assignment, payrolls, etc. Examples are the libraries at the Universities of Michigan and Illinois. Sometimes the accounting force reports to the director himself, as at Yale. Such administrative assistants usually perform only technical staff functions.

At Yale, Harvard, and the University of Texas, experiments have been made with a floating research and planning staff attached to the director’s office. The research and planning officers, performing only staff functions and having no line authority, certainly appear desirable,
and it is surprising that other libraries have not adopted the idea. Even the Library of Congress staff officers appear to be chiefly technical or auxiliary rather than general staff officers. The 1949-50 Annual Report of the Librarian of Congress contains a description and a chart of the Library’s organization. A general staff should contribute significantly to the improvement of libraries by evaluating existing services and providing data for sound planning. A few university libraries have used special staffs for evaluating collections, as has been done at Louisiana State University. However, such duties may be carried on in other university libraries by office personnel whose titles do not reflect their work. Most university libraries appear to depend on administrative or line officers to perform these functions.

A number of variants from this bifurcated function-divisional plan do exist. Harvard University Library has at the secondary level of administration four assistant directors in charge of four units: circulation and reference, cataloging, the Houghton Library (of rare books), and the Lamont Library (for undergraduates). Only the first two are based entirely on function. The University of Pennsylvania Library has, in addition to the two usual assistant directors for service and preparation, a third for administration, corresponding to the Columbia University Library plan of 1944 to 1948. The University of California Library is difficult to assess because of frequent staff changes, but as of 1950 it had an assistant librarian in charge of a variety of specific administrative and public service functions, an acting head of branches at a lower level but reporting to the librarian, and an acting head of general services under the assistant librarian. The heads of technical departments and of certain branch libraries reported directly to the librarian whose span of control covered nine or ten divisions. The State College of Washington Library places an associate director over the two assistant directors for technical services and readers’ services.

In some instances the two-unit divisional plan has been adopted only in part. The libraries of the Universities of Kentucky, Syracuse, and Ohio State have a head of branch libraries; the State University of Iowa Library recently abandoned such an appointment. The Universities of New Mexico and West Virginia have not adopted the divisional plan entirely but do have heads of technical processes. In the Northwestern University Library, which has a non-divisional organization, the head of the reference department supervises certain branch libraries. Numerous other variations from the usual bifurcated divisional plan exist, and many libraries are seeking improved adminis-
In a few libraries organized on a divisional rather than a departmental basis, one or two relatively new departments are not included in any division but report directly to the chief librarian. An example is the Department of Photographic Reproduction at the University of Chicago, which originated in the early thirties. The chief of the proposed Audio-Visual Center at Stanford University apparently will report to the Director of Libraries. Also, many libraries have established special collections units to bring together private collections and certain form-of-material units, but these ordinarily seem to be fitted into the function-divisional plan.

Divisional organization has been most fully developed in the large university libraries. Examining the organization of medium-sized and small college and university libraries reveals that function-divisional organization has not been widely adopted by them. Smaller libraries usually remain organized on a departmental basis; for them, the departmental plan probably is entirely satisfactory. However, the subject-divisional plan of organization has been adopted by a number of medium-sized and small libraries since 1938. This form of organization will be discussed in the following section.

Increased democracy in administration may be noted nearly everywhere. Staff members are more fully informed of affairs of general interest and are allowed to participate in the making of decisions
which affect them. Administrative councils have been established since 1945 in many university libraries such as those of the Universities of Chicago, Oklahoma, and Illinois. Reports of their proceedings are usually distributed to the entire professional staff. At least a dozen college and university libraries started staff or administrative bulletins in the forties. Independent staff associations have been organized at Columbia, Illinois, and many other libraries, usually with the encouragement of the directors. The increasing use of these various devices indicate that as libraries have grown larger they have found it increasingly desirable to establish formal lines of communication for the easy transmission of information and orders within the library. The lines for transmitting orders downward are not enough; information and ideas also must move upward and laterally as well. Such activity takes place naturally in small libraries but it must be planned in large ones.

The internal organization of the institutional library has also been affected by the growth of various supra-institutional influences. Examples are the board of regents established for all state-supported higher education in Oklahoma and in New York; the Library Council of the University of California libraries; regional cooperative compacts such as those for the New England Deposit Library, the Midwest Inter-Library Center, and the Southern Regional Education Board; and new or expanding plans for cooperation such as the Farmington Plan and cooperative microfilming projects. So far, however, the influence of such forces on the internal organization of libraries has not been great.

Certain technological experiments in the recording, location, and transmission of information have important implications for all aspects of library service; they may even change the basic nature of the library. However, the full impact of these experiments may not be felt for a number of years if their development continues at the present rate.

Four different bases of departmentalization of readers’ services in college and university libraries exist. Of these, one is traditional, the second has been modified considerably since 1940, the third came into use in 1938, and the fourth is less than five years old. Each is claimed to offer excellent service, each has certain virtues, and each has strong adherents. The three newest are based primarily upon subject rather than function; in fact, this trend toward a subject basis is the outstanding development in organization for service during the last fifteen years.  

[ 26 ]
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Traditional Centralized Organization. The average college and small university library for many years has been and still is organized for service into three functional departments—circulation, reference, and reserve—and often has a fourth commodity or form-of-material department—periodicals or serials. Its virtues hardly need detailing, but it provides no subject-specialist service and is a small-library organization which many institutions have outgrown. It is usually operated more economically than any other library.

Decentralized Subject-Departmental Organization. The plan of service used by most large university libraries is based upon the existence of a strong system of subject-departmental or branch libraries, plus a central unit which serves areas of knowledge not provided for by branches and which supplements branch library service. The central unit is almost always organized on traditional function and material bases, though a number of subject-departmental service units may be housed in the central building. The central unit bookstacks tend to become a storage place for less-used materials.

This system of organization provides very satisfactory and probably effective service to upperclassmen, graduate students, and faculty members, if enough duplication of resources is allowed; if the branches are staffed with librarians having both subject field and professional training, and are not too specialized; if the various units are coordinated properly; and if the entire system is run well. The most common branches are for law and medicine; next most common are units for engineering and the various sciences. These subject-departmental units also tend to take the place of personal libraries which, in this age of increasing publications, the average professor can no longer afford.

In such library systems the needs of undergraduates tend to be overlooked and they formerly were poorly served. During the last few years, however, a number of university libraries have recognized this condition and corrected it by providing an open-shelf undergraduate library, either in a separate or, more often, in the general library building. The Lamont Library opened at Harvard in 1949 is a good example. Others, all in the central library buildings, are at Yale, Chicago, Duke, Texas, Illinois, and U.C.L.A. Four such undergraduate or freshman-sophomore libraries were started in one year, 1951, at Minnesota, Oklahoma, Iowa, and New Mexico.

While this is an excellent plan of service for large universities, it is by far the most expensive because of high staffing costs and extensive duplication of resources. Administration and coordination of units
was often poor or nonexistent until the forties, when administrative centralization was undertaken in many libraries. Many librarians object to the breakdown of subjects into relatively small units, but it may be said that the clientele seldom does. However, even some of the largest libraries have found they can ill afford a fully developed system of numerous branch libraries. The tendency now is to reduce the number of departmental libraries, in the interests of efficiency and economy, by consolidating units or drawing some into the central unit. The establishment of new units is eyed very carefully everywhere.

At the same time it should be noted that the University of California at Los Angeles is expanding its system of subject-departmental libraries, and that the Massachusetts Institute of Technology after very careful consideration of its plan of library service has decided on a fixed number of outside subject branches. Princeton and Iowa have not included the branch libraries for science in their newly-erected central buildings.

A major weakness of branch library service has been the lack of effective administration. This could only be expected when the branch libraries were completely independent, as they used to be in many universities. Most of them have been drawn into the library system only within the past twenty-five years. The departmental libraries at Harvard University are still decentralized administratively; although the director of the university library does have some legal control over them, he prefers as a matter of principle not to exert it. However, the centralization process is going on steadily nearly everywhere else that independent branch libraries still exist; representative are activities at Cornell, Michigan, Oklahoma, and Nebraska.

Within the last few years major improvements have been effected by investing a number of administrators at a level immediately below that of assistant director for public services, with the control of several branch libraries grouped by broad subject fields. At the University of Illinois Library, this improvement took the form of subject councils presided over by elected chairmen. At Columbia University, the number of administrative (but not necessarily physical) subject-departmental units was reduced from thirty-seven to fifteen by grouping the administration of two or three such units under another unit, with subject-divisional officers appointed to control the fifteen units. The Stanford University Library is now following the plan for coordination outlined by its earlier survey, except that each subject-
divisional librarian, instead of managing one subject-divisional service unit, controls a number of separate subject-departmental units; administration is centralized but the units remain as they were, departmental rather than divisional. The plan of having assistants to the assistant director in charge of public services is needed only in institutions where the number of departmental libraries is large.

**Centralized Subject-Divisional Organization.** The third type of organization is based upon groups of subjects. Service is centralized in the main library building but is divided into five or six units corresponding to such logical divisions of subject fields as humanities, social sciences, physical sciences, and life sciences.

Provided for each subject division is a reading room staffed by professional librarians with appropriate subject training. In the room, freely available to the reader on shelves about the walls and on free-standing stacks, is a collection of 20,000 to 30,000 of the most frequently used volumes. Adjacent to the reading room are bookstacks housing the other books on the subject. To free the librarian for reference and advisory work, some libraries with this scheme of organization have placed exit controls and circulation service at the exits from the room or from the building.

The plan is designed to obtain some of the advantages of the subject-departmental system for medium-sized libraries without the disadvantages, including cost, of the large system. It should be noted that this organization appears to have many advantages, but has never been evaluated. Descriptions are usually enthusiastic; reviews by outsiders are sometimes critical. Like any other plan, it works best when conditions are favorable for it.

The idea for this plan of organization dates back to the 1880's, and it has been used for a long time by some public libraries. The first university libraries to adopt it were Brown University (which reduced its nineteen service units to three) and the University of Colorado, both in 1938. Since that time it has been adopted by the University of Nebraska, Washington State College, and the University of Oregon. The University of Wisconsin considered the plan while designing its new building but decided against it. It seems to be suited best to small or medium-sized universities. No very large university has adopted it.

However, various modifications of the administrative (though not physical) organization along subject-divisional lines have been used in efforts to improve the administration of departmental libraries, especially in the largest institutions. The examples at Columbia, Illi-
nois, and Stanford have been mentioned. At the University of California, reference services have been separated into subject-divisional units.

The heads of the subject-divisional units usually report to the librarian. One of them is sometimes designated as the assistant librarian, although all unit heads are usually administratively co-equal. If technical services are combined into a functional unit, the resulting span of control for the librarian is not excessive—the number of subject units varies but is never large. At least one general service unit usually exists as well, to service the central bookstacks and to control exits.

**Open or Interspersed Organization.** The newest method of organizing for service might be called the open, fluid, or interspersed system. In its best form it is basically a subject organization. Books are shelved in all areas of the building, with reader space scattered throughout. Service is provided according to readers' need or financial ability of the library; with the exits controlled, such a building could be kept open by one exit attendant plus one roving assistant. It places unusual dependence on the scheme of physical classification of books, and may prove difficult for undergraduates to use if collections are large.

The central unit usually serves only social sciences and humanities; physical and biological sciences are served by branch libraries. Examples of this plan are to be found in the libraries at Princeton and Iowa, and at Oklahoma A. and M. College. The building for the last, which is not yet completed, will have two large browsing and reserve rooms. The State University of Iowa Library, visited by the writer, provided service at a circulation desk, in a reference area, in a special collections room, in a public documents area, and at the exit. Excepting for these services, the library appeared to be basically self-service.

Along similar lines, Northwestern University within the past year has thrown open its central bookstacks to all comers as an experiment; it provides no assistance therein to readers, but supervises the exit.

The open plan of service corresponds rather closely to decentralized subject-departmental organization and has some of the elements of the subject-divisional plan as well. But it is more flexible or fluid than either. It has not yet been evaluated but probably will prove popular. It has one advantage that none of the others have: service can be reduced to a very low level. This is advantageous in permitting longer hours of service, but may possibly make it difficult to prove the need for an increased subject-field or subject-department staff when and if such a need arises.
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Each of these newer systems of organization has been developed in an effort to improve service or reduce cost, or both. Each is based upon definite theories about teaching, learning, and research, and the administration of each can be sound. The last three plans provide small and informal reading areas, easy access to at least a selected collection of books, and service by specialists who combine subject field and professional training. Of course, no institution can adopt any one of the plans blindly. Each college or university must choose its library plan with a regard for educational policies and practices of the institution, campus population, financial considerations, campus geography, the existing building, and like factors.

A trend toward the unification of all acquisition and cataloging functions under one divisional head was noticed some fifteen years ago. Since then, the term "technical processes" (or "technical services" as some prefer it) has come into everyday use and a functional division including all technical services has been adopted by many libraries. This divisional organization appears to be a successful improvement over previous plans of organization.

However, both the content and the departmentalization of technical services have been under attack from several sources. Some of the forces at work are: (1) dissatisfaction with the institutional approach to the physical book and a trend toward the wider acceptance of bibliographical and national approaches to information; (2) the difficulty and expense of processing the ever-growing flood of information; (3) increasing use of non-book forms for the recording of information; (4) arrearages in cataloging; (5) growing criticism of huge card catalogs; (6) acceptance of the principle of different levels of value and use of materials, and consequently of levels of accessibility and of cataloging; and (7) technological developments in recording, locating, and providing information. So far few major changes have resulted, but sooner or later these forces may affect all aspects of the individual library.

The chief criticism of the present divisional organization of technical services centers about its failure to recognize the importance of bibliography. R. C. Swank suggested the creation of a bibliography department (i.e., division) which would compile and service both catalogs and bibliographies. Although the Duke University Library established a Bibliography Section in its technical processes division, no larger library appears to have followed this suggested plan.

A similar proposal to combine certain services to readers with cer-
tain technical processes was made in 1940 by J. J. Lund, who suggested that ordering, accessioning, and descriptive cataloging be one unit, and subject cataloging and reference (or bibliographical) service to readers another.25

A number of university libraries have drawn together their bibliographical resources and placed them near the card catalogs. Examples are to be found in the libraries of the University of California at Los Angeles and the University of Illinois; it is planned at Stanford University. This action has not yet been reflected in the administrative organization of libraries, though it should be said that since the thirties an increasing number of libraries have been providing assistance to readers by placing an assistant at an information desk near the card catalog.

Close association in a divisional organization has tended to break down the barriers separating acquisition from cataloging functions. An illustration of this is the growth of deferred cataloging, preliminary cataloging, or simply precataloging. When uncataloged material piles up in the acquisitions department, it is arranged by serial number or date of receipt or by author; and a simple author card (an order slip is often used) is inserted in the card catalog. The arrearage can be processed regularly at any time, and in the meantime is available for use. Sometimes the circulation of such items is handled by the acquisitions department, sometimes by the regular circulation unit. A similar system has long been used in the Library of Congress; in the 1940's, versions were tried out by Harvard26,27 and Yale, and since then precataloging has been accepted by a growing number of libraries. The John Crerar Library, which has closed stacks, has adopted accession or date of receipt arrangement of its cataloged collection.28

A similar disregard of functional departmentalization is evident at Columbia, Illinois, and other university libraries, where units of the acquisitions department completely process added volumes of continuations and serials and even do some simple cataloging.

Nearly every university library has had to create additional sub-departments or sections in both acquisitions and cataloging during recent years to cope with an increased volume of work. The University of California Library, a representative large library, in 1950 had sixteen units (called sections and divisions) in cataloging and eight in acquisitions. Organization in acquisitions departments is usually based on forms of material; cataloging departmentalization is usually on many bases.
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An average acquisitions department in a moderately large library will have form-of-material units for book order, for serials, and maybe for government documents and microcopies, plus a gift and exchange unit, and process units for checking, accounting, and clerical activities.

Departmentalization in cataloging is usually much more complex. The usual bases for division of work are form of material, subject, language, level of difficulty, and level of cataloging to be given, plus service or process. However, there is no general agreement on the levels at which departmentalization on the various bases will be made. Rather common is an upper-level division by form into a unit for serials and continuations, and other units for books. Cataloging of books is divided into sections by subject, language, level of difficulty, or level of cataloging to be given. Subject units are still the most common, but the tendency now is for such units to cover an entire subject field such as social sciences.

In a few instances, cataloging is divided at the upper level on a functional basis into descriptive and subject cataloging—Duke University and Yale University libraries provide examples. The University of Chicago experimented during the forties with division into descriptive and subject cataloging at upper levels, but now has such separation at the very lowest level, within the subject units, where the separation is rather vague.

An increasing number of university libraries are experimenting with upper-level division into units based on level of cataloging to be given or level of difficulty. The Harvard University Library established three levels based upon value of material and level of cataloging, with some cataloging deferred and handled by "drives." Items destined for the New England Deposit Library received very brief cataloging. The Columbia University Library uses a Processing Unit for simple cataloging; it is less than four years old. Many libraries separate cataloging at upper or lower levels into units for items for which printed cards are available and units to handle items for which no cards are available, a level of difficulty basis. The processing of some materials in acquisitions departments has already been noted. It seems probable that the reluctance of some cataloging departments to adopt a number of different levels of cataloging has contributed to the development of precataloging in acquisitions departments and to the performance of some simple cataloging there.

Sub-professional and clerical activities have been separated adequately from professional work in most large libraries, as they have at
California, Illinois, and Columbia Universities. The volume of such service processes has led to their departmentalization; units are established for checking, typing, card reproduction, marking, filing, etc. Some units have grown so large that they have themselves been subdivided. Fluidity is maintained by keeping clerical personnel in large or small pools rather than assigning them to small cataloging units.

Binding is sometimes a unit in acquisitions or in cataloging or under the serial section in either department, but more often it is a third-level activity under the chief of technical processes. Wherever it is, it is usually a problem unit.

There is still wide variation in the organization of work for serials and public documents, though units for each are now usually located in acquisitions departments. In a few libraries, the unit in acquisitions processes the materials completely, including doing the cataloging; in others, the work is split between the acquisitions department and the cataloging department. A few libraries with functional organization maintain public service units for public documents and serials; in these libraries, the public service units may also do all or part of the processing of such materials. A trend is emerging toward the establishment of central serials record units; many such units have been established within the last five years.

Technical processes, especially the work of acquisitions, are increasingly centralized. The central acquisitions department usually acquires for all units of the library except those some distance from the main campus. Although standard cataloging and the cataloging of standard forms of material are usually centralized now, much lower-level processing of non-book materials is carried on in branch or other service units. Perhaps some such materials can be processed for use more economically and more satisfactorily by small readers' service units. Whatever the reason, there is much more processing work carried on in this way than is generally recognized. However, growing acceptance of bibliographical duties by cataloging departments and increasing acceptance of many levels of processing are tending to draw such decentralized processing work back into the cataloging department.

Conclusion. Most of this discussion has dealt with developments in the large library field. Anyone who investigates the subject will discover that a dozen or so of the largest libraries pioneer in the study of organization and in experimenting with new forms. Probably the function-divisional plan of library organization encourages such activity. But the obvious reasons for concentrating on large libraries are
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that problems of organization become more important as a library grows; and that departmentalization has to be clearer and more complete as the work grows in volume and complexity. Leadership and the chief contributions appear to come from those large university libraries whose directors are themselves personally interested in problems of organization and administration.

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ARThUR M. MCA NALLY


The Educational Function of the University Library

RAYNARD C. SWANK

This paper reviews recent trends in university libraries toward the more effective realization of their educational or teaching function. Trends in college libraries have been recently covered in Lyle's Administration of the College Library,¹ and in Wilson's Library in College Instruction.² The developments identified in college libraries are also identifiable in university libraries, although differences have arisen because of the larger size of university libraries and because of their emphasis on research. By and large, the emphasis on research in university libraries has tended in the past to neglect of the instructional needs of undergraduate students.

During the last twenty years there has been a reformation in many university libraries—a reformation which does take into account the teaching as well as the research needs of the university. Intelligent and apparently successful efforts are now making possible the fuller use of the library as a tool for instruction. The idea of the library as a teaching instrument, as advanced by L. R. Wilson, B. H. Branscomb, and others, and as implemented by the creative experimentation of R. E. Ellsworth, promises to become a regenerating force of great consequence.

Several trends which are important individually in both college and university libraries, but which now tend to become merged with more general and basic trends in university libraries, will be noted first. The more general and basic trends with educational implications in university libraries will then be described more fully.

Reading is often stimulated by means of browsing rooms,³ dormitory libraries, and other reading centers. For the most part, these centers are extracurricular; they are intended to stimulate voluntary reading

¹ Director, Stanford University Libraries.
of a general cultural and recreational nature. The successful ones attract students by means of comfortable rooms in accessible locations, pleasing appointments, an air of informality, smoking privileges, liberal circulation rules, and shelves of colorful, readable books. Although incidental to the main program of a library, the browsing room in some places has shown that a pleasant atmosphere does encourage reading. It has also suggested the educational value of wise selections of books directly accessible on open shelves.

A number of libraries use their browsing rooms for book talks, poetry readings, chamber music programs, and lecture series. Others use their browsing rooms as headquarters for organized student activities, such as literary clubs and private library competitions. These programs have shown that the library can assume a place in the cultural life of the institution and can organize students for educational pursuits.

There are readers' advisers who really help, who show that libraries can undertake counselling with good effect. Their services go beyond traditional reference service by giving unhurried, personal attention to the reading interests and problems of individual students.

Considerable attention is being paid to the instruction of students in the use of the library. For beginning students, orientation tours and lectures are widely conducted, and short courses of instruction, usually elective, are offered. Hammond has made a systematic attempt to test the effectiveness of these courses in library methods. Upper-class and graduate students may also be offered courses in advanced bibliography. While formal course work in library methods has sometimes proved disappointing because of the lack of specific curricular motivation, the effort has emphasized another educational need which the library should try to satisfy.

The desire to help students use the library more effectively has also led to the publication of handbooks on the collections, organization, services, and regulations of the library. Posters and signs have been widely exploited for directing and informing students within the library building.

These are some of the methods which have been devised to increase the educational efficiency of the library. But these particular methods, however useful and suggestive they may be, are too limited in their conception and application to contribute significantly to the programs of the larger and more complicated university libraries. Recently some university libraries have taken a fundamental turn which places them squarely in the center of the educational pattern of the university. The browsing rooms and readers' advisory services, the dormitory
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libraries and the book talks, and even the courses in library methods are but flanking operations. Now, since the establishment of Ellsworth's Colorado plan, which started a remarkable series of innovations at Nebraska, Washington State, Princeton, Harvard, Iowa, and elsewhere, the university library is more completely within the scheme of things that are germane to a university education.

Open Shelves

Direct access on open shelves to all or a major part of the book collections is now accepted as a stimulant to reading, whether required or voluntary. Some of the newer buildings have been deliberately planned to coerce the reader into open stacks. The physical and administrative barriers formerly set between readers and books have been removed. Every reading room is a browsing room in which students are brought into intimate contact with teaching materials selected to enrich the instructional program. Even books for voluntary reading may be associated with curricular objectives in this setting.

There are many variations in open-shelf arrangements from simple access to a conventional book stack to flowing distributions of stacks throughout the reading areas. Access may be permitted to the entire collections or only to selections of the most important books. The new libraries at the Universities of Colorado and Nebraska display extensive selections of live materials on wall and island shelving in specialized reading rooms. The library at Princeton opens to its readers an enormous stack with carrels, study rooms, and reading tables provided throughout.

Open shelves are not only an educational stimulant in their own right; they are also a condition necessary to the success of other methods of teaching with books. Open shelves are the key to all designs for the library as a teaching instrument.

A Laboratory Situation

A large part of the teaching process is being brought into the library. The library is no longer merely a place to read; it is a workshop in which faculty, students, and librarians work together. It becomes

a great study center for the campus—a workshop where faculty researchers in many departments can study in convenient and stimulating quarters in close association with graduate students—a new kind of home for the College of Liberal Arts, a base that will give personality to and unify many of the now scattered activities of that College—a
center where new methods of teaching and new faculty-student relationships may emerge. 13

To create a laboratory situation, an abundance of special study facilities, in addition to reading tables, is provided in proximity to the book collections—study cubicles, faculty offices, conference rooms, seminar rooms, typing rooms, and the like. Library areas are allocated to specific instructional departments, or groups of departments, and adapted to their special needs. Tutorial and seminar classes which make frequent use of library materials are held in the library; faculty members are available in the library for consultation. As far as is possible, all the facilities needed for the scholarly use of books are conveniently concentrated in the library.

In this setting, readers' advisory and other guidance services may develop not merely as special library projects but as regular parts of the teaching program. The laboratory situation provides greater opportunity for observation of student problems, for assistance in the solution of those problems, and for general familiarity with the curriculum. The librarian and teacher work together as colleagues. Cooperation becomes integration; supplementation becomes participation.

Audio-Visual Services

The scope of the library has traditionally been extended to include a variety of visual and aural materials—maps, charts, pictures, models, phonograph records, slides, etc.—but only recently have the educational applications of such aids, especially the non-paper aids, become sufficiently important to command immediate attention. Significant current developments in the field of motion picture films, sound recordings, and slides are now leading to the organization of many audio-visual centers.

These audio-visual aids, like books, are instructional materials, and they are used together with books in the educational process. If the library is to maintain its position as the study center of the campus, it cannot afford to neglect these newer study materials. Aside from the gadgetry of audio-visual services, which often obscures the educational nature of the materials themselves, the parallel with book services is close. The essential jobs to be done are the conventional ones of acquisition, cataloging, circulation, reference, and storage, all of which may be integrated with the older library services.

Because of the elaborate apparatus, however, special facilities for the use of audio-visual materials must be provided, such as phonograph and recording booths and film and slide projection rooms. Also,
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because of the local production of audio-visual materials, such facilities as recording studios and photographic dark rooms are desirable. Workrooms are, of course, required for such activities as equipment maintenance and film inspection and repair.

Audio-visual services have been growing so fast in recent years that it is difficult to assess their present nature and extent. On many campuses, these services have become separated from the library and are being developed by the business office, the school of education, the extension department, or some other agency. On some campuses the services are scattered; on others they are centralized. Library-centered services have been established in a number of places, such as the University of Oregon,14 Purdue University,15 West Virginia University,16 Ball State Teachers College,17 Lycoming College,18 and Wright Junior College.19 Library interest in audio-visual aids has now become sufficiently general that the Association of College and Reference Libraries has appointed a Committee on Audio-Visual Work under the chairmanship of Fleming Bennett. This committee has undertaken as its first project a survey of audio-visual programs, both library and non-library, in colleges and universities throughout the country.

The newer libraries, planned as teaching instruments, almost always provide in some way for audio-visual services. The conception of the library as a laboratory presumes the concentration under good working conditions of all important kinds of instructional materials. Failure to integrate audio-visual and book resources cannot help deterring the proper development of study habits and teaching methods and most certainly will limit the contribution of the library to the educational program. It will even limit the effective use of books, since books and audio-visual materials, when used together, supplement each other in many teaching situations.

Organization by Subject

The reorientation of the library toward the educational program has now affected the organization of the service departments, especially in the larger libraries. The curriculum is divided into subject fields; the library follows suit. The traditional organization by forms of materials, such as periodicals and maps, and by types of services, such as reference and reserve, is giving way to organization by subject divisions.20, 21 Whereas the traditional organization scatters materials and services needed by scholars working on any subject, the newer organization attempts to bring them together. Generally speaking, a subject division is an open-shelf study area, with adjacent stack, labora-
tory, and possibly audio-visual facilities. It is usually designed primarily for the convenience of advanced students and faculty members.

The subject-divisional organization was first applied in logical form to a university library by Ellsworth at Colorado. The Colorado plan employs three subject divisions—Humanities, Social Science, and Science—which are simply large reading rooms housing extensive selections of frequently used books, journals, bibliographies, and reference works. Some plans employ four or more divisions; variations are numerous. In the newer buildings, the subject divisions may consist of overlapping segments of continuous study and stack areas, instead of separate reading rooms in the conventional sense.

An important extension of the subject-divisional plan involves the departmental libraries in the larger universities. These outlying units, instead of being separately administered by an assistant librarian as special problem children, are organized as branches of the related subject divisions of the main library. The departmental librarians then become regular members of a divisional staff, and their libraries are placed in a definite relationship with the rest of the library system. In some instances, such as the Biological Science Division at Stanford University, a division may consist entirely of departmental and school libraries, with headquarters in the largest unit, and be located entirely outside the main library.

The educational significance of the subject-divisional plan derives from the association of library services with specific departments of the instructional program. The library divisions are given subject content and curricular motivation. Their efforts are focused on a definite clientele, with whose projects and problems the library staff can become familiar. The library's services are varied to satisfy the widely different needs of physical scientists, social scientists, and humanists. Definite parts of the library belong to them. Library staff members specialize in their divisional subjects, identify themselves with the faculties of instructional departments, and may in fact become active members of those faculties.

A General Education Division

The recent emphasis on general or liberal education, with all its many interpretations, has stimulated the development of separate under-class, or lower-divisional, and undergraduate libraries. C. L. Mowat, in his "Libraries and Liberal Education," presents a review of general education programs and discusses the implications for li-
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The university library is characteristically a research library—large, complex, and difficult to use. It is bewildering and frustrating to the underclassman without training or experience in its use. Moreover, it is superfluous for the average underclassman, whose book needs are circumscribed, and its subject departmentalization may actually be bad for the purpose of general education. By and large, the great university libraries have in the past offered less to underclassmen by way of good, appropriate service than have many of the libraries of the better liberal arts colleges.12, 24

The general education division is designed to give beginning students an appropriate and desirable first library experience in the university, to instruct them in the best use of the library, and to spare them the research library (and the research library them) until they undertake advanced study of a specialized nature. The division usually contains an extensive open-shelf collection of reserve books, collateral readings, periodicals, bibliographies, reference works, and a careful selection of good books for general cultural and recreational reading. While the underclassman may be freely permitted and sometimes encouraged to use other divisions of the library, the general education division is intended to satisfy most of his library needs.

The general education division may be conceived as either a lower-divisional or an undergraduate collection, although it appears that in all but the largest research libraries the lower-divisional conception may become dominant. The Lamont Library at Harvard is an undergraduate division;25 lower-divisional libraries have been established at Colorado and Iowa.26 When conceived as a lower-divisional library, the collection may be oriented toward some theme which is appropriate to the local doctrine of general education. The World Room at Kenyon College and the Heritage Library at the University of Iowa illustrate this possibility.27

The general education division is falling heir to at least two of the more conventional ways of increasing the library's educational usefulness: instruction in the use of the library and the encouragement of voluntary reading. Both are, of course, functions of the subject divisions as well, but they are especially pertinent during the underclass period when reading and study habits are being formed. Freshman orientation, formal introductory courses in library methods, and informal guidance of students working in the library all find a natural home in the general education division. They are significant parts of the general education program. So also is the formation of good read-
ing habits, no matter whether the reading is required or voluntary. The library’s effort to make a reader of every student is being focused in the general education division; and if this division is consequently used as a browsing room by advanced students and faculty, the purpose of general education is served all the better.

Since many variations of the general education division can already be found, and since the value of such a division is still controversial, the University Libraries Section of the Association of College and Reference Libraries has appointed a special committee to investigate the problem. This committee, under the chairmanship of William Dix, has begun a comparative study of the under-class and undergraduate libraries which have so far been organized.

An Academic Staff

A library that participates in the academic program must develop a professional staff of real academic caliber, a staff that deserves to stand as colleagues with the faculty and that is accepted by the faculty. Faculty status or its equivalent for the qualified individuals on the staff is essential. In the subject-divisional organization, the obvious means are graduate training in a subject field in addition to library training, and direct association with the faculty by teaching a subject course or a course in bibliographic methods, by the direction of theses, or by pursuit of individual research.\(^21, 28\)

The subject-divisional organization, implemented by open shelves, laboratory facilities, and audio-visual services, offers greater opportunity for staff development than any other general type of organization yet devised. Librarians have traditionally tended to remain too much apart from the main current of academic affairs. They have not been curious enough about what is going on and how they can help. They have not shown a convincing interest in the nature and purpose of the activities which their jobs are intended to support. The fault may be partly but not entirely their own; it is partly the traditional character of the library organization, which has not affiliated library jobs with particular fields of academic endeavor. The subject-divisional organization does define and emphasize the academic affiliations of library jobs and charges librarians with the responsibility for getting acquainted. The vacuum of library forms and techniques is broken, new channels of communication with faculty and students are opened, and the rewards for good service are more direct and tangible.
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A Functional Building

Some of the methods of increasing the educational effectiveness of the library are contingent upon the creation of hospitable conditions in new or remodelled buildings. To an appreciable extent, the development of those methods has been paced by advances in building construction and design. The librarian who wishes to open his stacks to the reader, adopt laboratory situations, introduce audio-visual services, reorganize into subject divisions, or establish a general education division may be handicapped by an outmoded plant.

The change in library buildings over the last ten years has been remarkable. From the educational point of view, modular planning, dry construction, and new methods of air conditioning and lighting have produced a type of building which is sufficiently flexible to accommodate a variety of new services and to be readily modified as educational needs change. On the other hand, they succeed, with only gestures towards monumentalism, to create a comfortable, informal, friendly atmosphere conducive to a pleasant study experience.29

Much can be done with many older buildings, however, to adapt their form and shape to more vital educational activities. Interiors can be remodelled and additions can be built. The University of Oregon library with its recent addition offers an example of an older building modified for subject-divisional and audio-visual purposes.

A Few Questions

Taken together, these elements of the new library programs form a pattern of service which could hardly have been prophesied several decades ago. The pattern is rich in theory, fundamental in nature, and varied in practice. The new programs are still in their formative stage; all are different and every good one contains something new. It will be a long time yet before an evaluation is possible.

Toward the further development of this pattern and its ultimate evaluation, several lines of inquiry may be suggested.

First, it must be explained that in this paper the word “teaching” has been loosely used as synonymous with “educational.” While it is probable that all librarians and most faculty members will agree that the library is an educational division of the university and that the librarian’s work is educational in the sense that it contributes directly to the teaching program, some will not agree that the librarian “teaches” at all in the accepted sense of the word, or, if they grant
that he does teach, will not agree that such teaching is a significant part of the educational program. Are his "teaching" activities as significant to the educational program, for example, as his own distinctive and generally recognized contributions as a librarian? A realistic inquiry into the proper and reasonable use of the word "teaching" in this context might help to ensure that a good program is not over-promoted for the wrong reasons or under-promoted for the right ones. A survey of faculty attitudes on the contributions of the library to the instructional program might be a useful corrective at this time.

Second, it is important for librarians to look forward to the time when it will become possible to compare theory with practice. For example, what solid improvements are realized from the laboratory or workshop theory? To what extent does the theory fail to produce the expected results? How much of the educational process does actually prove in different situations to be centered in the library with good effect?

Third, what conditions should determine whether a separate general or liberal education library is desirable and whether that library, if established, should be undergraduate or lower-divisional in scope? Also, what relationships are desirable between the general education library and the research library? A study of the general education libraries now in existence at various universities, with reference to their curricular origins, would be a valuable guide to future action. The work of the Committee on Underclass and Undergraduate Libraries of the University Libraries Section of the Association of College and Reference Libraries is aimed in a general way toward finding answers to these questions.

Fourth, it is commonly charged that the subject-divisional type of organization is more costly than the traditional types. It may be or it may not; in any case the charge should be investigated, if any method can be found of isolating cost data for equivalent services. Certainly the size of the library would be an important factor in the analysis of relative costs.

Fifth, there are many aspects of the audio-visual program of which fruitful studies could be made. The most important at the moment is present services, a general survey of which the Committee on Audio-Visual Work of the Association of College and Reference Libraries has already begun. Another is the integration of audio-visual and book services in the library. What kinds of audio-visual services—acquisitions, cataloging, storage and lending of materials, production, equip-
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ment maintenance, etc.—should be performed centrally by an audio-visual department, and what kinds should be delegated to the regular library departments? Another is the exploration of library facilities and teaching methods for utilizing audio-visual aids in the library as study materials, as contrasted with their use merely as classroom aids.

And sixth, the basic problem of cataloging (discussed more fully in this issue by Mr. McAnally and Mr. Wright) will become more crucial as the trend toward subject specialization in bibliography and other services conflicts more conspicuously with the established pattern of centralization and uniformity in cataloging. While the service program is undergoing important changes of an educational nature the cataloging program often remains static. How can cataloging be adapted to the specialized needs of the subject-divisional organization?

These are only a few questions, but they are enough to indicate that the recent educational trends of university libraries are reviving fundamental issues. Nevertheless, there is every reason to expect that, if present trends continue, the central position of the library in the instructional program will be strengthened, and its contributions to that program will become increasingly substantial. The library remains the only major educational division of the university which is common to all faculties, and the study of books is still the greater part of an education.

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Services to Readers

LESLIE W. DUNLAP

Libraries exist to serve the readers of today and of tomorrow. This is axiomatic, yet librarians know little about these readers and their probable demands. Even more surprising is the fact that college and university librarians manifest comparatively little interest in services to readers; a recent survey of areas which college librarians consider worthy of investigation reflects an active interest in administrative problems and in non-book materials but comparatively little concern for the use of the collections.¹

Disregard of the actual needs of readers in college and university libraries has been a constant in the development of American librarianship. Recent studies of consequence in this area will be noticed in this paper, but their number is small indeed. The two comprehensive volumes on college and university libraries by Lyle² and by Wilson and Tauber³ say little about the use of materials; circulation and reference work are discussed in separate chapters in Lyle’s volume, but services to readers are dealt with in a single chapter in The University Library. Both volumes discuss reader services as they are practised, not as they could or should be. College and University Libraries and Librarianship,⁴ a work concerned with planning for the period following World War II, shows even less interest in readers. Here the use of materials is treated in a chapter concerned chiefly with their organization, and of the nine recommendations relating to library materials only two can be considered as directly related to use. One recommendation proposes that librarians give more attention to the effective use of books but does not indicate how this is to be done; the other admonishes college librarians to assume greater responsibility for audiovisual materials.

The paucity of information regarding the needs and desires of readers has compelled librarians of institutions of higher education to make decisions based on a number of widely accepted but unsub-

¹ Associate Director, University of Illinois Library.
stantiated assumptions. A few examples may be useful here. A university librarian confronted with the problem of what newspapers published in a state or region should be preserved for scholars will search in vain for studies of the use made of files of American newspapers by historians compared with that made by political scientists or sociologists. The working habits of undergraduate and graduate students are practically terra incognita to the librarians of academic institutions; exciting accounts of the literary discoveries made by research workers have been published, but these give little assistance to the librarian who desires to understand how scholars use catalogs and other bibliographical aids. Here again the librarian operates on certain assumptions, for example, that subject bibliographies are more useful to the advanced student than subject headings in dictionary catalogs; but there are few studies to support this belief. Where the studies have been made and the implications for university libraries are clear, the weight of the institutions usually precludes radical change. Fortunately, librarians are inveterate optimists; they have faith that what they do is worth the doing although proof may not be evident or even demonstrable.

A fundamental assumption in the administration of American libraries, school and public, is that if a person has direct access to books he will find the volume which best suits his need. This notion, regardless of its truth or falsity, is embraced by readers and librarians alike; because no one should dispute the right of an individual in a democracy to make choices which do not directly cause harm to others. Browsing in a large collection is one of the most respectable alternatives to work, and no librarian who has indulged in this form of academic whittling wishes to interpose barriers between a reader and the books on the shelves. The recent history of librarianship has been a struggle to keep every reader in direct contact with some books; access to certain materials becomes progressively more difficult in this day of enormous collections and regional depositories while the approach to others is embellished with the interior decorator's art.

Another basic assumption in college and university librarianship is that readers may be classed in four categories: undergraduates, graduates, members of the faculty, and persons outside the academic community. Each group may be subdivided: undergraduates may be considered as lower- or upperclassmen, graduates may be candidates for the master's or doctor's degree, and so on; but the four major divisions are dominant. Each is believed to have certain identifiable
characteristics which distinguish it from the others, and librarians have tried to meet the demands which result from the qualities common to each group.

Studies of the use of college and university book collections reveal that few undergraduates make extensive use of library materials. The average number of books borrowed in a year from the general collections is about twelve for each undergraduate student, and the average would be much lower were it not for a small group of students who borrow many books. Fewer than half of the students account for more than ninety per cent of the books withdrawn from the general collections by undergraduates. McDiarmid found that undergraduate use in a group of libraries differs in relation to sex, year in college, scholastic achievement as reflected in grades, and subject field; but the differences among the institutions studied revealed a greater range than those of sex, academic class, or scholastic rating. Generalizations regarding undergraduate library use made by McDiarmid and others are supported in the main by a detailed analysis of the records of books borrowed from the library at Hamilton College.

No comprehensive study has been made of the use of university libraries by graduate students, but we do have the investigations of Swank, McAnally, and Stevens of dissertations prepared by Ph.D. candidates in English literature, in American history, and in certain other fields. These studies, although suggestive, are not conclusive; because they examine the product rather than the process of research. Moreover, these studies of library use as reflected in doctoral theses assume that the candidates who prepared the dissertations gathered most, if not all, of their information in the libraries of the institutions from which they received their degrees. Librarians, who in this country are constitutionally peripatetic, should be quick to recognize that graduate students are equally if not more so. The need for a more searching examination of the bibliographical practices of research workers has been pointed out in a proposal of the American Library Association for “A Basic Study of Bibliographical Organization.” In an inquiry suggested as appropriate to the “Basic Study,” research workers would keep diaries and case records of their reading and sources of data, and of developments in their investigations; such information might prove of real value to the librarian who wishes to anticipate the requirements of graduate students and other research workers.

The needs of members of the faculty are even less distinct. Interests
of professors range from trivial antiquarianism to broad philosophical generalizations, and no apparent common denominator characterizes the library use of an instructor in playwriting and that of a professor in hydraulics. Members of the teaching faculty often are credited with a detailed knowledge of the literatures of their respective fields and, as a consequence, are thought to have little need for a subject approach to library materials. This can in truth be said only of teachers who are bibliographically minded; many are not. It may be significant to note that few of the great American book collections were formed by teachers—even by those with wealth.16

Persons outside the academic community which supports a college or university library who are entitled to some service from the institution range from nearby residents to visiting scholars. The possibilities for service to extramural readers are limitless, but librarians provide for few. During 1951 one large university library introduced a fee of twenty dollars a semester for extramural readers.17 Unless this amount is considered a fair charge for services to be rendered—and it is difficult to see how a fixed sum could be—the fee must be recognized as a device to reduce the number of readers from outside the academic community. Restrictions respecting the use of manuscripts and other rare materials in university libraries by extramural readers, and such restrictions are common, are not justifiable unless there is reason to believe that persons connected with an institution can make better use of sources of information than those who are not. This is rarely a warrantable assumption, and use of unique or uncommon materials by extramural readers should not be restricted unless demands of this nature interfere with the services given to members of the academic community. The use of manuscripts by visiting scholars has been considered by a special committee of the Association of Research Libraries.18

College and, in particular, university librarians, unable to meet the peculiar requirements of many individuals and unable, or unwilling, to permit every person direct access to all materials, have adopted the practice of segregating in departmental libraries and other special locations books considered appropriate to the needs of groups of readers. The graduate seminar library has been a commonplace in American university libraries for more than half a century, yet the volumes on the shelves are rarely used in classes held in the rooms. Seminar collections permit the intensive use of books, but their possibilities are seldom realized. Recognition of the special needs of
undergraduates has resulted in the establishment of libraries for readers at this level in Columbia University, the University of Illinois, and elsewhere. The most famous of these, the Lamont Library at Harvard, was planned to give college students direct access to a collection of selected volumes, to encourage recreational reading, and to concentrate library services to undergraduates in a single location. The segregation of books to meet the demands of a group of readers appears in its most unhappy form in the reserve book room. Reserve book rooms employ the closed shelf, open shelf, or combination systems; but none provides for more than the most elementary demands of a large number of students. The scheme of renting books for supplementary readings introduced at the University of Chicago should be superior to the practice of placing books on reserve, yet the latter is the rule rather than the exception. Even if librarians found it difficult to maintain rental collections, the money expended for staff in most reserve book rooms might be used to better advantage in the purchase of additional copies for regular loan.

To compensate for the rigors of institutional atmosphere, detailed classification, and lack of direct access to the general collection, librarians have provided browsing rooms where popular literature can be read in comfort. Browsing rooms, although somewhat out of fashion, seem to be on the increase. This would appear to be an encouraging manifestation of the desire of students for extra-curricular reading, but this is not conclusive. It may mean only that more librarians have come to accept the browsing room as a workable substitute for a service which the entire library should but does not perform.

The curse of bigness afflicts many colleges and most university libraries, and at times the needs of the individual seem to be lost from view. This is particularly true at circulation desks where the desire to furnish books promptly and to keep an accurate and detailed record thereof has resulted in the introduction of McBee Keysort cards, IBM, photographic and mechanical charging machines, electrically operated conveyors, time-recording devices, and gadgets beyond number. As its first project the Research Planning Committee of the Association of College and Reference Libraries has undertaken to synthesize and evaluate the circulation control systems in college and university libraries. Confronted with this welter of machines and variety of systems, it is odd that librarians have given so little attention to changes in the period of loans or in the collection of fines which
would make many of the records unnecessary. The regular period of loan to an undergraduate for a volume, big or little, is two weeks, subject to renewal, although it is obvious that in many cases a loan period of one month, not subject to renewal, would be to the advantage of both the borrower and the library. Fines of a penny a day to twenty-five cents an hour are standard practice in college and university libraries, yet no one believes that fines provide income commensurate with the trouble of collecting them. Fine collecting prevails because some punitive measure seems necessary to secure the return of volumes wanted by others, yet fines do not reform refractory students. The cynical might reply that some students are beyond reformation; but so long as the student continues in school, the librarian should not despair.

The desire of college and university librarians to meet specific needs of individual readers contributed to the development of reference work in the last quarter of the nineteenth century. In the first half of the last century, students had practically no access to books in the college library; but, after the introduction of more liberal teaching methods and extensive curricular offerings, the need for assisting the student in his pursuit of information became clear. The assumption by the library of the responsibility to make any part of the collections readily available to any qualified user probably is the most revolutionary change in the development of American librarianship. The next step toward meeting the peculiar needs of individuals, that of furnishing recorded information regardless of subject or location, has already been taken by reference librarians in large university libraries. The fulfillment of this additional responsibility has focused deserved attention on bibliographies, union catalogs, descriptions of resources, and other compilations needed by reference librarians in the identification and location of materials for research.

One of the results of the efforts of American librarians to furnish research workers with needed materials is the borrowing of uncommon publications from other libraries in this country and abroad. The practice began late in the nineteenth century and increased with the development of research work in this country until the nature and extent of the service demanded certain controls. A brief review of the early history of interlibrary loan and the text of the 1917 A.L.A. Code of Practice for Interlibrary Loans are to be found in Locating Books for Interlibrary Loan, by C. M. Winchell. The Interlibrary Loan Code of 1940 is a cogent statement of the principles which should be
followed in interlibrary loan work, but the experience since the adoption of this Code suggests that it has not been observed in spirit or in letter. The costs of interlibrary loans have spiraled in recent years, and all aspects of the service are under review. A committee of the Association of College and Reference Libraries, headed by W. A. Kozumplik, developed a unit form for interlibrary loan requests, which at the end of 1951 had been adopted by more than three hundred libraries, and has in preparation a revision of the 1940 Code. Another promising development in interlibrary loan work is the recent decision of the University of California Library to supply photographic copies of articles instead of lending volumes of scientific journals. Small economies can be effected through more careful bibliographical work in preparing requests for interlibrary loans, but larger savings are promised by the use of standard forms, photoduplication, and the refusal to lend materials for certain categories of borrowers (for example, students preparing masters’ theses).

The librarian is an intermediary between books and readers, and the wider and deeper his knowledge of both, the more effectively he can bring the two together. The impossibility of providing every reader direct access to all books implies that great care will be used in the selection of the works to which direct access is permitted. This makes it incumbent on the librarian to have an intimate knowledge of a number of notable books. At the same time, the librarian who desires to bring a wealth of pertinent literature to bear on an investigation of a reader must be familiar with bibliographies and other guides to materials. The riches of subject bibliographies, other than those described in Winchell’s Guide to Reference Books and other well known compilations, are rarely exploited.

The chief problem before a college or university librarian is simply what can he do to place the right book in the hands of a reader. To answer this problem the librarian needs, in addition to a knowledge of books, a keener understanding of persons engaged in living and learning. Every reader has had the experience of finding a book such as Tristram Shandy stupid at one sitting and delightful at another. Psychological factors of the utmost importance in the communication of ideas ordinarily are beyond the ken of the librarian who supplies the printed page, but only through satisfaction of the peculiar needs of individuals will the library become an effective agent in the learning process. Truly, in colleges and universities the librarian’s job, imaginatively conceived, is to bring “the books and the mind together at the moment of inspiration.”
References

Services to Readers

Resources of University Libraries

ROBERT VOSPER

The last decade and a half has witnessed a level and variety of fruitful activity among American university and research libraries that may well mark this as one of the major periods in library history. This development has been rich in many aspects of library work, but markedly so in those that relate to the accumulation of books and other library resources for research.

Several of the projects that have contributed to this efflorescence are of such large scale that it would be clear, even without reference to the background, that there must have been a considerable history of planning and urging that suddenly came into focus in the last fifteen years. (Even this background history, however, is relatively short, limited almost to the present century. Wilson\(^1\) indicated that a great improvement in the opportunities for American scholars “has been effected through the enormous increase in American library holdings since 1900.” Writing in 1938 about the development of American universities out of colleges, Bishop\(^2\) said, “It is fair to say that since these colleges have become universities their libraries have held before them the goal of adequate provision of the materials for advanced research. . . . This aim is a development of the last seventy-five years, perhaps even the last forty years.” On this particular point Kraus\(^3\) stated that “It was not until 1900 that graduate schools began to emerge from among our colleges and state and municipal universities.”

The sparse situation in the early years of the twentieth century can be seen conveniently in the studies and exhortations, from 1905 to 1929, of Richardson.\(^4\) Often right on the track of developments that began to crystallize at mid-century, he was aware of “the poverty of American libraries in the matter of research books” and made inventories of certain periodicals and of source materials for European history to prove his case. He saw that the distribution throughout

\(^{1}\) Wilson, W. G. (1901). “An address to the American Library Association.”


\(^{3}\) Kraus, A. (1940). “Graduate education in America.”

the country of what we then had was extremely uneven, certain areas
heavily duplicating materials that were totally lacking in other areas.
He proposed "cooperation in purchase and distribution [and] the pre-
 requisite cooperative list" and urged that certain libraries adopt subject
specialties for which they would then have national responsibility.

By the mid to late 1930's the situation had improved considerably.
The previously cited articles by Wilson and Bishop clearly mark and
synthesize the change, written as they are by thoughtful librarians
after long and intimate acquaintance with research libraries. The
number of books in American libraries had risen sharply. Wilson cited
the growth of certain collections in the thirty years since 1900: the
Library of Congress from slightly less than one million to four million
three hundred thousand; Harvard from a half million to two and a
half million; Chicago from three hundred thousand to almost a million.
Major bibliographical tools, national in scope and thus basic to any
cooperative work, had only recently been provided in the Union List
of Serials (in 1927) and the National Union Catalog at the Library
of Congress (implemented by a 1927 Rockefeller Foundation grant).

Both writers, however, indicated a general lack of cooperation
among librarians in the accumulation of resources. Wilson found that
"evidences of actual organization and co-operation on the part of
American libraries to provide essential source material . . . do not
appear . . . frequently," and Bishop more strongly affirmed that "to
anyone attempting a review of the history of American libraries as a
group it is apparent that their growth has been almost entirely indi-
vidual, unplanned with reference to any other library or group of
libraries. . . . There appears to have been practically no concerted
effort toward building up in the country as a whole a system of libraries
designed to further the interests of scholarship and research."

Even as they were writing, however, the period of large-scale co-
operation was coming close. The groundwork was being laid by the
American Library Association's rejuvenated Committee (later Board)
on Resources of American Libraries, a group which in the succeeding
years has been consistently vigorous and productive. In 1935 there was
published a study report of the Committee that now appears as ger-
minal rather than merely preliminary. It noted that the purpose of the
Committee was "to cooperate with other national organizations in the
study of existing resources for investigation and in an attempt to work
out a program of collection which would result in the purchase of
materials in lines not now covered and in the elimination of unwise

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duplication.” The first task, however, was to “sum up available information on the research resources of American libraries and such sporadic efforts as have been made toward their coordination.” The study report is the result of this summing-up, so interesting a review of certain developments up to this turning point in library history that it deserves greater durability than mimeograph paper provides. Here is a detailed, although admittedly not complete, record against which the Wilson and Bishop articles should be read and against which the accomplishments of the next fifteen years can be reviewed. One major proposal of the Committee for next essential action was that a “thorough going survey of materials should be made.”

A fairly precise gauge of the accomplishment since then, and of course before, in analyzing and reporting on library resources can be had by comparing the contents of this thirty-two page 1935 report with Downs’ 1951 listing, sponsored by the same Board on Resources, of approximately six thousand articles, books, and journals that describe American library collections. In his introduction Downs reports that “the most striking proliferation of such material has occurred chiefly in the last generation.” Here then is a detailed recording of ways in which we begin to know more about available resources for research. The introduction provides an analysis of the varieties of material included, but certain significant categories need mentioning here. Downs notes the importance of the several current periodicals, published by individual libraries, which “not only report systematically on current acquisitions, but are also retrospective, going back to describe older items and collections.” He says that “they constitute, therefore, valuable storehouses of information concerning these several libraries.” It is interesting that of the eleven he lists, nine have been started since the mid 1930’s. He does not undertake to list the more ephemeral, often mimeographed, newsletters of individual libraries, a fairly recent phenomenon also, in which a good deal of acquisitions information is often tucked away.

Another significant category, the general surveys of libraries, includes forty-eight items, virtually all of which have been published in the last fifteen years. Most impressive in this group are the full-scale regional surveys of resources, as distinguished from regional directories of libraries. The first of these was of southern libraries, and others followed for the New York area and for the Pacific Northwest. Unfortunately no others seem to be in immediate prospect, although it may be that the importance of such surveys is less in
guiding scholars to materials than in assisting librarians to project other cooperative programs. Most of the surveys of individual libraries, whether short descriptive articles and handbooks or comprehensive studies, are also of recent years; others are under preparation, notably a comprehensive one at Yale.

On a wider scale is the sequence of reports, undertaken by the American Library Association Board on Resources, of notable materials added to American libraries. In the first, covering the year 1938-39, was expressed the expectation that, if continued from year to year, the enterprise would “build up a substantial body of information on the country’s library holdings.” After a decade’s experience, the Board has recently issued a questionnaire about the usefulness of the reports in their present form. Certainly they are a problem to compile and difficult to use, but it is equally true that the whole problem of creating a usable system of reports on resources, a problem we have only recently started to attack, still requires much effort and experimentation at various levels. Such information is essential to knowing both what we have and what we lack and is thus basic to any planned program of acquisitions.

Behind these many national, regional, local, and subject reports looms the National Union Catalog at the Library of Congress. Despite its incompleteness it is still so important a record of the holdings of American libraries that Downs, in an excellent summary of the question of bibliographical control, has recently called it “the master key to bibliographical control in the United States.” Recognizing the value of the National Union Catalog, the Library of Congress has recently made tentative estimates of the costs, including editing, of reproducing it in one form or another.

Another index of national scope at the Library of Congress, one less frequently mentioned in recent years and less well known, is a record, by subject and locality, of 65,000 (in 1941) special collections in American libraries. This index bridges a long period between the work of the E. C. Richardson era, when it was begun, and the deliberations of a 1941 Conference on Library Specialization called by the American Library Association Board on Resources. Reviewing previous experience, the Conference reported that “despite the extensive attention given the theory of specialization ... concrete action has been limited to a few scattered localities.” Nonetheless the conclusions of the Conference were only favorable to the concept of library specialization; in fact it was a conviction of the Conference that
“the development of adequate library materials in America requires agreements on specialization in book acquisitions by the institutions of higher education.”

An acid negative vote was cast by Mortimer Taube after reading this report. He proposed that historical research, the kind of research that has produced the library problem of endless book needs, is so “unprincipled in its needs as to make a rational division of interests . . . quite impossible.” Only a “sounder historiography” could solve the problem, he thought. His statement of the problems in the way of agreements is useful, but in the light of recent developments it is clear that he was overly pessimistic. Certainly in the Farmington Plan there is now concrete evidence of the practical possibilities for specialization agreements, although of a type somewhat different from that around which earlier discussions centered. So generous is its conception that the Farmington Plan must stand as a milestone in American intellectual history.

Discussion of it must begin, however, with earlier developments in the late years of the second world war. Boyd correctly spoke of a landmark in the history of library cooperation in America in analyzing the significance of the Library of Congress Mission to Europe. Fortunately the Mission, or the Cooperative Acquisitions Project as it was later officially named, has been fairly well documented. Peiss, who directed a large portion of the vigorous activity in Europe, wrote exciting field reports, Clapp explored the purchase of books in Europe, and running accounts appeared in the Library of Congress Information Bulletin throughout the life of the program. Downs prepared a full summary report and assessment from the home front, and Evans related the mission to other activities of the period.

For the purposes of this article the importance of the Mission is less in its successful acquisition of a large stockpile of European publications of the war years—two million pieces all told—than in the cooperative participation of some sixty-one university and research libraries with the Library of Congress procurement program once it got under way and in the division of books among these libraries on a subject basis. This distribution pattern, worked out by a special committee, had severe growing pains, and even some after pains, but the experience was instrumental in the birth of the Farmington Plan.

Distribution on a subject basis of books cooperatively acquired, with the receiving libraries morally committed to record their intake in the National Union Catalog and to lend their intake via interlibrary
loan, is in effect successful library specialization. This was the basis of the Mission during its short life and is the basis of the Farmington Plan which looks toward permanence and wide expansion in its procurement program.

The Farmington Plan has been widely studied and discussed, and it will be considered also in another article in this journal. Several basic articles on the Plan are listed as additional references to this paper. Here it need only be placed in the historical picture as an effectively functioning cooperative agreement among over fifty research libraries throughout the country. Statesmanlike in purpose and vigorously prosecuted, the Farmington Plan, whatever its incidental weaknesses, is a project of which American librarians can be reasonably proud and which finally commits us to a common pool of books in this country.

Developed as an idea in a 1942 meeting of the Council of the Librarian of Congress, the plan was soon referred to the Association of Research Libraries which worked out procedures and set the plan into operation with the year 1948. Begun on a restricted and experimental basis to acquire current books in the trade of research importance from three European countries, the Plan by now has expanded to cover the current book production of seventeen countries which are listed in a footnote on page 157 of this journal. Under discussion are various possibilities for expansion, to include for example non-trade publications and to cover material in other than the Roman alphabet.

The first objective of the Plan is that one copy of every important foreign publication be in some American library and recorded centrally in the National Union Catalog. It should be noted that behind the Plan is the belief, substantiated by studies, that our total holdings of foreign books has been inadequate and that this is a problem that can be solved only on a cooperative basis. The division of subject fields among the participating libraries has been a complex problem and changes in the pattern have been made from time to time, but thus far the principle of subject division (specialization) has been maintained.

Inherent in these specialization agreements is a high degree of cooperation among American libraries. It is now clear that cooperation in this and other areas is not merely desirable; it is feasible and on a large scale, as proved by experiences of the last few years. Moreover, cooperative effort among university libraries is extensive and operates on many fronts. This is so evident that another article in this journal
consider “cooperation” separately. It should be explained here, however, that cooperative effort is one of the most significant of recent trends in the development of university library resources. Hardly any major activity in this area can be separated from the concept of cooperation.

Mention should be made here, however, of three other cooperative resource collecting programs of special importance: the Documents Expediting Project, the United States Book Exchange, and the Midwest Inter-Library Center.

The Documents Expediting Project was set up in 1946 by the Joint Committee on Government Publications, representing several national organizations, and in cooperation with the Library of Congress, to facilitate the procurement and distribution of the almost innumerable “processed” federal publications that are not distributed through the office of the Superintendent of Documents. Starting with thirty-one subscribing libraries, the Project set up a Washington procurement office which, in its first four years, “distributed to its cooperating libraries a total of two million pieces at a total recorded expense of $38,310.04, or at an average cost of a little less than two cents a piece.” By January 1952 there were seventy-six libraries in the project.

The United States Book Exchange was established in 1948, on the closing of the American Book Center for War Devastated Libraries, as a private, non-profit corporation, under the sponsorship of nineteen national organizations, to serve as a clearing house for the exchange of library duplicates and to facilitate current publications exchange arrangements. By November 1950, there were 715 participating institutions, 249 in the United States and 466 in foreign countries, and the Exchange was doing a booming land office business amounting to an annual turnover of about 200,000 items. It successfully fills a need that has plagued librarians “ever since John Leland’s day” by making it economically feasible to trade duplicates systematically. The exchange work in the United States and Canada is supported by handling fees; services to libraries abroad, financed initially by a Rockefeller Foundation grant, are now handled as contracts with the Department of State. Discussions are now underway that may extend the scope of the Exchange’s activity as an agent for cooperative procurement programs.

The Midwest Inter-Library Center, which opened for business late in 1951, ranks with the Farmington Plan as a high point in the history of library cooperation. A list of pertinent articles is given in the Ad-
ditional References to this paper, but a full report should not be made here. Its significance for library resources bears repeating however, for the Center is far more than a storage warehouse for the less-used books of the fifteen libraries now participating. As Colwell said in his dedicating speech, "It produces economies, that is true; but its justification rests primarily in the fact that it increases the educational resources that are available to the member-institutions." It does this, moreover, not merely by pulling together from the members a commonly owned collection of bulky research materials, but also through the gradual development of a planned acquisitions program of its own, for the benefit of the members. Thus it plans to fill in broken files of minor journals, develop complete collections of certain foreign and state documents, and acquire newspapers on microfilm. For the Middle West, and also for the nation, the center will soon become a great source of research strength.

The Association of Research Libraries, organized in 1932 and now comprising about fifty institutional members, is both a symbol and a working and planning center for the cooperative movements among university and other research libraries. Meeting in full session twice a year and supported by working committees, the Association has instituted and supported most of the large-scale cooperative programs.

In the early years of this century librarians who urged such steps as specialization agreements and cooperative acquisitions programs based their appeal on the "community of interest" among university libraries. The first World War raised large problems of governmental need for books, particularly in the Peace Conference days, but it was not until the late war, with heightened dependence on technical research, that the problem of access to research materials became so acute that the principle of the "national interest" came to the foreground in library resources planning. It is possible that Archibald MacLeish, then Assistant Secretary of State, first gave the idea high-level sanction, when in 1945, in response to a proposal from the then Acting Librarian of Congress, Luther H. Evans, "that the national interest, both in time of war and in time of peace, is intimately affected by the holdings of the large research libraries," MacLeish replied "that the national interest is directly affected by the holdings of many of the private research libraries." 24

Recognition of this principle hastened the projection of the Farmington Plan, and in recent years many of the discussions in the Association of Research Libraries have centered around the need for exten-
sion of the Plan or development of other resource collecting programs in the national interest. Currently an Association of Research Libraries Committee on National Needs is concerning itself with, among other things, the adequacy of American research resources.

It must be evident from much that has been said in this paper that the Library of Congress, far more than participating, has assumed a role of active leadership in all of the contemporary programs to enrich the research resources of American libraries. This is in fact a primary characteristic of the whole movement. Here is perhaps the place to state explicitly also that no discussion of American library resources can be limited to university libraries; the whole group of research libraries, general and specialized, are necessarily involved in the matter discussed in this paper.

The role of the Library of Congress however merits special notice. The Library of Congress Mission obviously extended from the Washington center. It is less frequently remembered that the Farmington Plan takes it name from a meeting place of the Council of the Librarian of Congress. The Library of Congress provides space and certain facilities as well as vigorous moral support for the Documents Expediting Project and the United States Book Exchange. The Library of Congress recently promoted projects to acquire Russian books cooperatively and to spread Japanese books, from duplicates at the Library of Congress, through the country. And it is through the agency of the Library of Congress that the other research libraries of the country can share effectively in the support of the national interest.

The rapid development of the several forms of micro-reproduction in very recent years has had an almost revolutionary effect on many forms of research, by making the world stock of manuscripts and rare books almost the common and accessible property of all scholars and all libraries. The complaint of a quarter century ago that American libraries, no matter what their efforts, could never match European libraries for richness in manuscripts and early printed books, has almost been stopped. The large-scale, and often cooperative, filming programs are so many and are started so frequently that they cannot be even listed here. In fact in this field too libraries are already faced with a problem of bibliographical control, to which the recently established Microfilming Clearing House Bulletin is a partial solution.

The newly revised and cumulated edition of the Union List of Microfilms,²⁶ which records about 25,000 microfilms in 197 institutions, provides a solid retrospective record. It also offers some idea
of the increase in microfilm resources, for the original edition of 1942 included only 5,221 items. Although many of the major filming programs are undertaken commercially, such as those to film all Short Title Catalog books and to film early English and American literary periodicals, the materials are generally of university library calibre. The Library of Congress again is a prime mover in the stockpiling of film, with extensive projects in Mexico, England, Europe, and the Middle East, to preserve in film groups of manuscripts and scarce printed materials. Many university libraries, generally on their own but occasionally in cooperative venture, have filmed newspaper files or undertaken, as at the Bancroft Library, extensive programs to film archival materials abroad. The coordination of these scattered and often concurrent programs, a matter of considerable importance, is being approached from several points of view; and more effective use of cooperative efforts seems desirable. In view of these problems it appears that the whole complex matter of the impact of microphotography on library resources deserves its own thorough report and synthesis.

One pressing consequence of the continually speeding race to keep abreast of published materials has been that major research library book stocks and book stacks have grown so large as to create a difficult and expensive social problem. Rider first pointed out that the book collections of research libraries in this country have been doubling in size on the average every sixteen to twenty years for generations. At Harvard the situation has been of such immediate impact that Harvard Librarian K. D. Metcalf has become the foremost student of the problem. He has analyzed it in general and particular terms, warned librarians of the consequences of failure to act soon, and he has proposed and developed several practical attacks on the problem at Harvard and elsewhere. He has dramatically described the growth of libraries by observing that “we have as many university libraries today in this country with over 1,000,000 volumes as we had in 1920 with over 250,000—fourteen in each case.” He goes on to the expectation that “in 1980 we shall have more libraries with 2,000,000 volumes than we had in 1920 with 250,000.”

The New England Deposit Library is one of his answers, providing less expensive storage space for little-used books. The Midwest Inter-Library Center combines this idea with the elimination of most of the duplication involved in the central storage unit. Recently Metcalf has suggested that both of these approaches are necessary, and similar developments are under serious discussion in other
parts of the country, notably in the Northeast and on the Pacific Coast. Some people look to an eventual network of such centers throughout the country. Microphotography has of course saved some space but is far from being the panacea that some have thought.

It is probable however, that despite all approaches, the problem of the geometrical expansion of libraries will be with us for some time. In fact one commentator, L. N. Ridenour, former Dean of the Graduate College at the University of Illinois, has suggested that the exponential rate of growth is a normal characteristic of every worth-while aspect of human life and that the recent falling off from this rate in some of our largest libraries is a measure of the inadequacy of present library methods.34

Librarians are in fact faced with the dilemma of seeing their collections grow beyond financial and bibliographical control and at the same time recognizing that their collections, in the aggregate, are often inadequate and uneven in quality.

In 1905 E. C. Richardson was disturbed by the uneven distribution of library resources in this country. Carl Hintz in reporting on the notable acquisitions of 1948-49 observed that relatively few libraries were involved, notably those in the Northeast and Middle West and to an increasing extent those on the Pacific Coast. From the Great Plains-Rocky Mountain region and from the South and Southwest, the reports were few and isolated. The distribution is still uneven and may always be so to a considerable extent since the concentration of rich libraries will normally follow a concentration of population and wealth. The sharp rise in these factors has, for example, very appreciably altered the library picture on the Pacific Coast in the last two decades. Symbolic of this change, if the writer may be permitted, is the development of the University of California at Los Angeles, the youngest of the wealthy state universities.35

The relatively recent and richly endowed Duke University has performed an equal service in the Southeast. This region, traditionally book-poor, has, however, admirably advanced its position in recent years by the leverage of its own boot straps. In enlightened cooperative efforts and the intelligent exploitation of existing resources no other region can quite match the Southeast.36-38 Regional cooperation in the development and recording and storing of resources is of course a major characteristic of recent university library activity.

The discussion above notes some of the trends to be observed in
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university library resources in this country during the last half century, but notably in the last fifteen years.

The result is a picture of some optimism, for indeed the whole period is dramatically short. There has been much bold activity and generous thinking. This seems especially true in the recent period when many projects, long hoped for, have finally come into being. There are of course still many unsolved problems. The distribution of resources and bibliographical control over them require much effort. There are areas of subject and geography in which our resources all told are perhaps critically weak, and we are still far indeed from even knowing what the total of publication may have been up to now.\textsuperscript{11}

The advances that have been made, however, were sharply saluted by Wright who said recently that “the center of gravity for research has shifted from Europe to the United States, and the center of gravity of libraries has also shifted from the old world to the new . . . the development . . . has been so phenomenal . . . that now it is sometimes necessary for European scholars to come to America to find materials for the histories of their own countries.”\textsuperscript{39} Fifteen years ago the report was quite different.

References


24. MacLeish, A., as quoted in Boyd, op. cit.


Resources of University Libraries


ADDITIONAL REFERENCES

Farmington Plan


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Midwest Inter-Library Center


Midwest Inter-Library Center Newsletter, No. 1, Oct. 1949, to date.
Some Aspects of Technical Processes

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The idea of treating the "technical processes" of order work, binding, cataloging, classification, etc., as a unit is relatively recent in American libraries. The term first appears among the entries in Library Literature in the volume covering the years 1943-45. J. L. Cohen, reporting to the American Library Association Division of Cataloging and Classification at Atlantic City in 1948, on a survey of twenty-six libraries with technical services divisions, found only three institutions with such divisions in existence before 1941, two of which were public libraries. The past decade has seen a rapid spread of this type of organization, however, and it is safe to assume that the trend will continue, in spite of Swank's suggestion that the catalog department is a more suitable partner for the bibliographical than for the order department.

The unified technical processes department has won approval on three grounds. In larger institutions particularly the reduction in the number of department heads reporting to the chief librarian is important for efficient management. Even in smaller institutions the reduction from two, three, or four department heads to one head of technical processes makes possible the hiring of a chief who is better qualified for administrative responsibility. The administrative unification of the various operations represented in these new departments is normally accompanied by a simplification of records and clerical routines, and the resulting reduction in operating costs is frequently the most important aspect of the unification.

Since all of the activities which fall within the realm of technical processes involve large amounts of record keeping and other clerical activities, it is natural that ways should be sought to combine records and eliminate duplication to the greatest degree possible. Duplication of effort appears to be an almost universal accompaniment of a division of closely related activities, since each person along the line

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of flow of materials desires a personal reassurance of the accuracy of the previous steps. The accumulation of these duplications becomes expensive. Their prevention is difficult without having one person familiar with the whole procedure and responsible for its over-all efficiency. The librarian has too many duties to be able to exercise this supervision directly and needs a supervisor of technical processes who can comprehend the whole preparatory work.

This economy of money and effort is being realized in the handling of serials. In one institution the passage of a periodical from first receipt to its final shelving as a bound volume is marked by eleven operations in eight different files. To prevent such multiplicity of records many libraries are turning to a central serial record in which all the information on any live serial can be entered and from which all needed information regarding the serial can be secured. In this central record original receipt of parts, including title-pages and indexes; instructions for binding; dispatch to bindery and return; permanent shelf location; and the number of volumes on the shelf can be noted. A telephone inquiry from any library desk can quickly and cheaply secure information needed. To maintain service the serial record must be adequately staffed and available at all times. If such a central record could be tied to an annotated copy of a Union List of Serials enlarged and kept up to date, the expense of recording and cataloging serials would be cut sharply. Even if, as at present, many serial records had to be transferred to the card catalog as the volumes were completed considerable savings would be possible.

Duplication of effort may also be avoided by the recording, for future use, of information discovered by the acquisition department in the course of preparing orders or of accepting gifts. The fact that an author's name is already in the library's catalog, the presence in the library of other copies or editions, bibliographic citations given in dealers' catalogs, are all pieces of information of value to the cataloger. Noted on a prepared form which may, after passing through the hands of a preliminary cataloger, be used as a cataloger's work sheet, this information can save valuable time for the final cataloger. Such cooperation is difficult to achieve when the persons concerned belong to separate divisions.

The acquisition program of a college or university library must be closely related to the curriculum, the teaching methods, and the individual faculty interests of a particular institution. To prevent the growing library from taking the form of a number of highly specialized
collections, and to cover the fields which overlap or fall between the various courses of the curriculum, it is essential that there be some funds for books of general interest, free from the strings of departmental allotments. However, the fact that a large proportion of funds must be spent for books with direct curricular interest prevents any large degree of standardization in college library collections. The Shaw and Mohrhardt lists\textsuperscript{3-5} are useful guides indicating outstanding works in various fields as selected by groups of specialists. Such lists are of course rapidly outdated, and in any case are to be taken as suggestive rather than prescriptive. The overwhelming proportion of purchases consists of new books, for which no such guides exist. Here the duty of the acquisition officer becomes one of following reviews, of recognizing reliable reviewers, and of seeing the relationships between new books and the curricular and general educational interests of the institution.

Closely allied to the problem of book selection is the problem of weeding a collection. More and more libraries are being forced to face the fact that they cannot continue to hold all the material now in their possession. Whether they unite in creating a storage library, such as those in Boston and Chicago, the proposed center in the New York area, and, on a smaller scale, the newly established Hampshire Inter-Library Center shared by Amherst, Mount Holyoke and Smith; or whether they favor outright disposal of unneeded volumes, librarians must decide on principles for withdrawal as well as on principles of selection. The criteria used in selecting material are applicable, in reverse, to decisions on the weeding of collections. Gosnell has treated the problem in two papers\textsuperscript{6,7} which will grow in importance as the problems they deal with affect more and more libraries. The costs of housing and housekeeping will drive college libraries, and even university libraries, to Hardin’s position: “Let no book remain on the shelves unless someone fights to keep it there.”\textsuperscript{8} The worth of the collection will have to be measured not by quantity but by quality available. Through cooperation libraries can secure the benefits of the availability of large amounts of material needed for research programs, while saving on housing costs and gaining in efficient use of materials by keeping collections free from obstructive masses of seldom-used volumes.

In carrying out the routines of book ordering the acquisition department is turning to two new methods which are rapidly ousting the traditional order card. The first of these methods is the use of punched
cards to carry order and bookkeeping information and to enable this information to be transcribed and tabulated rapidly by machine.\textsuperscript{9-10} Unless an institution is using printing and tabulating machines for other purposes also, the cost of the machines would outweigh the saving in clerical time; but the presence and availability of such machines in most universities makes this library use possible. Punched cards prepared originally for acquisition may be used later for new book lists and other purposes where the brevity of information available on a punched card will not be a handicap.

Smaller libraries are turning to the multiple-form order records to reduce clerical work. These give, in a prepared group ready to use with a single typing, order form, order record, departmental financial record, LC card order, and temporary shelf-list or catalog entry. By reducing the need to transcribe identical information several times they speed the work of ordering and help to keep costs down. The Department of Agriculture Library under the guidance of R. R. Shaw has experimented with the use of simple photographic equipment to reduce the time spent in duplicating information for various records. At present a larger experiment in a number of libraries of different size is testing the general usefulness of these methods.

The reaction against the growing mass of cataloging rules and practices which first found a focus in Osborn’s “Crisis in Cataloging”\textsuperscript{11} has not yet spent its force. The simplifications in descriptive cataloging introduced by the Library of Congress in 1947 have generally been well received, even if they did not go as far as some catalogers and administrators had hoped. Since there is no difficulty in interfiling cards which vary in the amount of descriptive information carried, libraries which so desire can simplify beyond the Library of Congress rules; and a study carried on at the Library of Congress indicates that even for the largest libraries no additional description is needed to keep editions separate.\textsuperscript{12}

Description, however, is a minor part of cataloging, even though it can be an expensive one. It does not affect the interfiling of entries made under different rules nor does it ordinarily affect the comparison of catalog entries with other bibliographic sources. An attack on the problem of name and title entries is more difficult. Changes here bring up the expensive matter of recataloging. But successful simplification with a promise of long range savings may easily overcome the fear of immediate costs.

After Taube’s\textsuperscript{13} radical proposal for abolishing all of the present
rules for corporate author, the Cataloging Policy Committee of the American Library Association's Division of Cataloging and Classification agreed that the corporate entry rules should have first priority in a study of author and title entry. This study is just starting and it is impossible to know now what form it will take. It seems safe to believe, in view of the present temper of most catalogers, that some way will be found to produce both simpler rules for corporate authors and entries which will be easier for the untutored public to find. After the problem of corporate entries is resolved, a similar study should be made of possible alterations in other parts of the rules for entry. The twin goals of these studies must be economy in the making of the catalog and efficiency in its use. There is still plenty of occasion for the pursuit of both.

The great wave of cost accounting surveys that struck the catalog departments in the thirties and early forties appears to have receded. Aside from answering the question "How much does it cost to catalog a book?" with a resounding "Too much," these surveys also called attention to the high cost of many of the subsidiary activities carried on as part of the duties of the catalog department. The direct cost of cataloging has been attacked by a simplification of descriptive cataloging and will be further reduced by expected simplification in rules of entry. Filing costs have led to interest in reducing the size and complexity of the card catalog, as well as to simpler filing rules. The time spent in adding subjects to cards, and especially in altering subjects to make use of more exact and more modern terminology, has led several institutions to file subject cards, without transferring the headings, directly behind a guide card for the specific subject heading. Such a group of cards can be transferred to a different subject heading by means of a simple change in the single guide card without alterations on each separate card.

The preparation of catalog cards has provided a particularly fruitful field for the exploration of economies possible through mechanization. As the typewriter displaced the manuscript card, so various methods of mechanical reproduction are now displacing the typewriter. The addressograph,\textsuperscript{14-15} the mimeograph,\textsuperscript{16} and the photographic camera \textsuperscript{17} have all been put to use. The addressograph stencil has proved most adaptable for various cataloging purposes, and has the great advantage of being easy to hold in a file for later use if more copies of the card are needed. Not only catalog cards but book cards and pockets can be printed from the same plates. All of these methods share the free-
dom from proofreading which constitutes the great saving of mechanical reproduction. Which one a library will choose will depend on the availability or cost of the original equipment and the cost of the materials used.

The most valuable result of the study of cataloging costs has been the realization that very little is known about the ways in which the information supplied by the catalog is used. Costs were justified or assailed largely on the basis of a subjective belief that the information given was needed or was not needed. The measure of value for the catalog does not lie in its beauty of appearance or its logical construction, but in its usefulness. How, why, and how much are library catalogs used?

One of the outstanding developments of recent years has been the application of survey techniques to the problem of the actual use made of the card catalogs created at such great expense. The catalog rules and practices of the nineteenth and early twentieth centuries were largely based on a priori concepts of the purposes which the catalog should serve. The reaction against excessive costs which began in the 1930's was accompanied by efforts to discover the real use made of information supplied on catalog cards and the relative needs of different groups in the library's clientele for specific kinds of catalog information.

The most insistent demand for the fullest possible cataloging has come from reference librarians who have pointed out that information given on the card is always available, whereas information dug out of the book itself for a reader's use is lost and has to be unearthed again for each new demand. The argument has validity. Too frequently, however, it is based on a single striking example and calls for a thousand-fold repetition on the cataloger's part to answer a single reference question. On the other hand a bibliographic scholar has argued that, since for his purposes he has to examine each volume for himself, practically all descriptive cataloging is useless. Amidst such personal pleas evaluation of actual needs is difficult. To obtain a more valid basis for decision, recourse must be had to the techniques developed in the social sciences.

By the use of questionnaires, interviews, and special call slips prepared to secure the wanted information, the ways in which different groups of patrons use the catalog have been studied in a number of colleges and universities. Studies so far made have indicated that the descriptive information provided is relatively little used, that advanced
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students tend to start with bibliographies and use the catalog only as a finding list, and that the great use of subject cards is for modern materials in the English language. However, many more studies must be made in different types of institutions before definite results can be secured. Administrators must be prepared to weigh the relative uses by indicated groups of readers before these surveys can really affect cataloging practices. As objective reviews of the actual usefulness of present methods, however, these surveys appear to be the most promising of all current developments in the field of cataloging and should be encouraged for their ultimate benefits.

The card catalog, which attained a commanding place in American libraries at the end of the nineteenth century, has recently found itself under attack as expensive in its creation and upkeep and confusing in use. A variety of alternatives to the card catalog are currently under discussion, and changes in its construction to alleviate its difficulties have been tried with some success. The most successful of these changes have been the division of the catalog into parts and the simplification of filing rules.

One of the first results of a study of the use made of the catalog was the discovery of a different approach to author and to subject entries. The former are consulted chiefly to find out whether the library has a certain preselected work, and a brief inspection is usually enough to determine this fact. The subject cards are used to discover what is available in the library and some time is generally spent in determining which of the various volumes in the library is desired. If the two types of entries are separated, the person desiring a specific title will be served more quickly, the filing problems presented by the use of homonyms as names and as subjects will be avoided, and greater emphasis can be placed on the subject approach. New problems are, however, produced by the division. Titles are used both as informal subjects and as specific entries. Many publications include, in introductions and notes if not in the text, subject material about the author. In trying to meet these problems varying types of division have been suggested. Some libraries have split off subjects only, leaving author and title cards together. Others have divided into three parts, author, subject, and title. Still others have tried a name catalog, which includes all material by and about persons and corporate authors, while placing other types of subject cards in a separate catalog. The variety in the types of division suggests that logical analysis of the use of the catalog has not yet been carried far enough to yield solid results. A
recent summary of experience with the divided catalog, based on reports from a number of libraries which have tried this system, concludes that the divided catalog is more helpful to the staff than to the undergraduate user for whom it was mainly designed, but it is to some degree useful to the student also. The sum of the advantages to both groups will probably lead to a steady spread of the divided catalog unless some revolutionary change in the whole concept of the card catalog intervenes.

A different type of division in the catalog would be a splitting off from the large catalog of entries for the more recent and more frequently consulted materials. In essence this has been accomplished through a different approach by the creation of separate undergraduate libraries, of which the Lamont Library at Harvard is an outstanding example. A somewhat similar result might be obtained without the necessity of erecting a separate building by the creation of an undergraduate catalog containing entries for the hundred thousand or fewer titles which would be needed for undergraduate use.

Since the complexities of filing have bothered both staff and public for years it is not surprising that successive filing codes in the past twenty-five years have turned more and more toward a simple alphabetic order. A completely alphabetic arrangement would introduce almost as many problems as it would solve. Some compromise with other arrangements, particularly the numerical, is necessary. Departures from alphabetic arrangement in the future, however, must be thoroughly justified if they are to endure. The simplicity of the alphabetic order has almost completely done away with the various logical groupings formerly in use, and has proved itself of great use in all libraries where it has been tried.

More radical attempts to solve the problems resulting from the cost and complexity of the card catalog have also been suggested. One suggestion is a return to the book catalog, at least for all older and less used material. Because of the cost of printing, such catalogs would have to be made by photo-offset, microprint or microfilm. While the cost of preparation of such catalogs, including the cost of reading machines if micro-reproduction is used, would be great, there would be a continuous saving in cataloging and filing costs, and a considerable gain in efficiency from use of a smaller catalog. Since the subject approach to printed materials falls off rapidly with age it might be possible to remove subject cards from the catalog when they are photographed, which would reduce the bulk of the card cata-

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log radically. Experience with the printed catalog of Library of Congress cards indicates the desirability of including added entries. Although a book catalog still has all the disadvantages which led sixty years ago to its abandonment in favor of the card catalog, the growing dissatisfaction with the latter may soon lead to an experimental return to the older form.

A different attack on the card catalog has been led by Ellsworth and Swank, who favor the use of bibliographies in place of subject catalogs. This cannot at the present time be a complete solution, since sufficiently good bibliographies exist for only a limited number of subjects and those that do exist are rapidly outdated. As a measure to relieve the size of some subject files, however, the proposal certainly deserves a trial. It is not too difficult to add the location of each title to a copy of the bibliography and to note in the catalog "For other materials on this subject consult the marked copy of ——." Although the proposal would not reduce the cost of original cataloging, since it would be more expensive to add a single new acquisition to the bibliography than to make and file a subject card, it would simplify the catalog and make its use easier. A closely related project, the use of a checked copy of the Union List of Serials in place of cataloging completed serials in the usual way, has been found effective at Harvard.

If mechanical bibliography of the sort foreshadowed in Shaw’s Rapid Selector becomes a reality, the problem of keeping subject bibliographies up to date will be vastly reduced. Subject catalogs then need be only sufficiently inclusive to answer calls for material on the undergraduate or quick reference level, and could be weeded at intervals to prevent their attaining any unwieldy size.

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Management in College and University Libraries

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Management, as a field in itself, is generally identified with the last four decades, beginning with F. W. Taylor and time-and-motion study and ending—for the moment—with "operations research."¹ ² Management is a broad area with a vague configuration; no attempt is made in this paper to define it with any precision. Information at hand shows that management in college and university libraries gathers around the focuses of personnel, work measurement, costs, machines, and plant. "Organization," often considered a part of management, and a popular subject in library administration, is the topic of another article in this journal. For the most part, the evidence of interest in management areas is drawn from articles in the library press and a few books, and is limited to the period following World War II.

The management of libraries has never benefited from the wealth of attention devoted to such areas of librarianship as the development of book collections, classification, cataloging, bibliography, and the like. For a long time this inattention was not important; the small size of collections, staff, buildings, and clienteles made for simplicity of operation and demanded no very sophisticated approach to the ways of doing things. Librarians were directed to new methods of management as early as 1911 by the then Librarian of Cornell.³ The Williamson report,⁴ in 1923, spelled out the advantages of training in the techniques of management. In one of the most recent treatments of library management, Leigh sets the stage again for the need of management—though he speaks of public libraries, his views are as true for those of learned institutions:

Like other institutions—especially those not under the constant spur of profit seeking—we might expect public library operations to be com-

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pounded of clear-cut, rational, economical processes and traditional, rule-of-thumb, wasteful practices never subjected to rigid analysis. This is the more likely because of the historical evolution of the public library. Its early leadership had a major background of interest and training in literary, cultural fields rather than in science, technology, and administration. The same tendency survives in the most of the present library personnel.\(^5\)

Leigh develops the argument for management education as follows:

The introduction of these expert techniques of management presents subtle problems of adaptation. It is one of the assumptions of the Inquiry that librarians, like other professional groups, are sensitive with regard to the values of their traditional ways and will be slow to accept changes in accustomed practices recommended by outside specialists. It is also assumed that some changes would be desirable. It is, therefore, of great importance that the skills of management analysis and scientific personnel administration be assimilated within the general administration of libraries and professional training of librarians rather than occasionally presented as an intrusion of outsiders to measure work, to analyze and classify positions, or to establish salary grades.\(^6\)

He is able to report that "In some of the newer programs an attempt has been made to draw into one general course in library administration the essential material formerly in several elective courses dealing with the organization and the operating problems of the several types of libraries."\(^7\) This is hopeful because such a concentration is likely to result in some specialization of instruction and to lead the instructor into familiarity with the literature of professional management. Columbia University School of Library Service offered, in the summer of 1951, a workshop in policy-making, operations analysis, and work simplification directed by R. R. Shaw, Librarian of the U.S. Department of Agriculture, who had recently offered a course in work measurement and standards of performance in the Department of Agriculture's Graduate School. His article, "Scientific Management in the Library,"\(^8\) discusses management concepts for analyzing activity to determine a fair day's work and the "best method"—the classic objectives of early management. Columbia has projected, but has not yet financed, a cooperative management research center.

It will be interesting to see if one of Leigh's management recommendations is accepted by the profession. "The Inquiry studies indicated," he says, "that the greatest possibilities for improvement in the
years ahead depend not so much upon analysis of internal formal structure as of flow of work, definition of duties, disposition of personnel, and simplification of processes.” Traditionall, the organization structure has been the area of greatest management concern in libraries, if the evidence of the literature is to be trusted. It would appear, however, from the writing reported below, that personnel administration already is well entrenched in administrators’ minds as an important management technique, and that the work flow and process study are gaining attention. The process chart was the subject of a Chicago master’s thesis; and a master’s paper was written on the process and personnel of the University of Illinois Library’s Purchase Division.

Little attention, apparently, was paid directly to standards, though Clapp reported briefly on the reactivation of the American Standards Association’s Committee Z39 with a wide representation of library organizations and enlarged terms of reference. It will be recalled that this committee’s one completed piece of work—before the war forced its suspension—was the standard on reference data and arrangement of periodicals. The revived committee has commenced study of standardizing of periodical title abbreviations, of transliterating Cyrillic characters, of bibliographical presentation in serials, and of library statistics.

In his iconoclastic study of organization theory Simon offers what might serve as a text for all discussions of personnel: “In the study of organization, the operative employee must be at the focus of attention, for the success of the structure will be judged by his performance within it.” It is a matter of concern, then, that Wilson and Tauber (whose book reflects professional writing to 1944) concluded that librarians had paid little attention to many important personnel matters. Leigh, more recently, reports that “it seemed evident that public libraries have not yet developed fully the agencies or the patterns for the execution of modern personnel policy.” In 1944 Trent had to report, after a survey of sixteen university libraries, that librarians tend to believe “that the library staff, because of its training, interests, and general cultural background, does not need any kind of personnel system,” despite the fact that library staffs are subject to the kind of human frailties that affect the employees of industry. Yet librarians have been concerned about training and the direction of staffs for years. The American Library Association has formalized the personnel interests of the profession for a long time in a committee or board.
In 1927 the earliest job classification and compensation plan for libraries was published under the auspices of the Committee on Classification of Library Personnel by the Bureau of Public Personnel Administration—the so-called “Telford report.” There is discernible a reflection of good personnel practice in libraries, even though at times or in certain areas the reflection is faint or cloudy.

A broad view of personnel administration in libraries was taken by the tenth Institute of the Graduate Library School at Chicago at the beginning of what was then considered a post-war period. The papers of the institute bring together a group of professional personnel people, who present standard material on the leading concepts of personnel management (career service, selection, job classification, morale) and some librarians of more than usual information and interest in the personnel field. Despite a good deal of “warming-over” the result furnishes librarians with a useful introduction. It should be noted that the volume contains the most suggestive treatment of unions and related library employee groups in O. W. Phelps’ article on organization of employees.

The American Library Association’s Board on Personnel Administration has been active in providing librarians with materials on job classification and pay plans. Its most recent publication in the field is reported to have “come out of an expressed need for such a tool”—a not surprising situation in view of the post-war problems of living costs, expansion of library services, and labor shortages. One application of job classification and pay plan technique is reported in detail for the University of California by Bryant and Kaiser.

Concern for competence in supervision is reflected by Stanford, speaking for the Board on Personnel Administration. He describes the duties and traits of the supervisor, and, noting the failure to treat of this subject in library school programs, argues that the principles and techniques can be taught. Osteen, after a comparison of the executive in-service training practices of large public libraries with those of business agencies, concludes that librarianship could profit by adopting certain techniques in this field. Hirsch reported, in somewhat tentative language, on the successful conclusion of the first year of a limited in-service program at the University of Pennsylvania. However, Wight questions the need for a systematic program of in-service training for professional librarians, given adequate education, pay, intellectual stimulation, and good morale conditions. The
wartime “training within industry” technique is related to library needs for skilled supervision by Heintz.26

As might be expected, the largest library expresses most extensively in its administration the concepts and devices of personnel administration. In 1940 the Library of Congress transferred personnel work from the Chief Clerk’s Office to a new Personnel Office with a broadly defined program.27 The activities of this office afford an example of accepted personnel practice translated into library terms. Even a library of modest size can profit from study of Library of Congress personnel work as recounted in the annual reports of the Librarian, especially those of 1947-48 and 1949-50.28

Employee attitude questionnaires to determine staff views of work conditions and administration do not appear to be much used in libraries. One example is found in the “What Do You Think?” questionnaire designed and administered by the Staff Association of the University of California Library at Berkeley in 1949. Interpretations of the results were reported to the staff; were related to the building program of the library, and to the Bureau of Labor Statistics’ survey of library salaries and working conditions; and were used by department heads for the improvement of administration.29

There is a notable absence of emphasis on incentive devices, perhaps because the most common one, incentive payment, is usually impossible under governmental policy which controls most libraries.

Time-and-motion study, job analysis, process analysis, etc. are terms in management literature which cluster around the focus of work measurement—the analysis of work into elements, either large or small, for study and measurement in time or money. This notion was F. W. Taylor’s great contribution to management, and the foundation of the scientific management movement. The minute analysis of work actions as developed by Frank Gilbreth is more generally applicable to the innumerable repetitive motions of industry than to a great deal of library work, especially that work ideally identified with professional activity. Nevertheless, the manual part of work done in libraries is susceptible to microanalysis, while all activities can be measured in large units of work. A report of what is believed to be the first time-and-motion study of a library process using formal techniques by Battles, Davis, and Harms,30 which appeared in 1943, analyzes the loan routine at Bradley University Library. Price31 reports a later study of periodical routing at the Beltsville Branch of the U.S. Department of Agriculture
Library using a simpler and grosser technique. In recent years library schools, influenced by a growing employment of the attitudes and methods of science, have applied work measurement methods to library situations. Hardkopf studied the application of motion techniques to the preparation processes at the New York Public Library, and Frantz made a motion study of acquisition work at the University of Illinois. Two reports on a time study of the Urbana Free Library came from the University of Illinois Library School. Time-and-motion study methods were employed at the U.S. Department of Agriculture Library in 1944 to speed up the photographic processes. A work simplification clinic, sponsored in 1951 by the University of California School of Librarianship and its alumni association, centered on the flow chart as an analytical tool for examining a process.

University libraries lack a comprehensive, comparative cost study of their operations in any way comparable to the one by Baldwin and Marcus for public libraries. Nevertheless, university libraries have pioneered in exploiting work measurement and unit cost methods, chiefly in the matter of cataloging costs. In 1949 a group of Association of Research Libraries members privately exchanged cataloging cost data developed on the gross unit cost basis used in connection with the catalog inquiry at the University of California at Berkeley. Knapp reported the results of a cost study of the preparation department of a small college library in 1943.

The 1947 report of the U.S. Department of Agriculture Library carries a table showing a decline in the unit cost of circulation and reference combined from 1941 ($1.42) to 1947 ($0.31), an improvement in efficiency attributed to the continued application of scientific management. The gross cost method, by which all library expenditures are distributed over the number of loans made and reference questions answered, is used. This relates cataloging, binding, supervision, etc., as well as the work of loan and reference assistants, to the end-product of the library: loans and answers to inquiries.

The advantage of machines is that they perform repetitive operations more rapidly and accurately than humans do. Their drawbacks are their high initial cost, the need to supply them with a large volume of their particular kind of work if their operating cost is to be kept down, and their limited use. While library work is replete with drudgery, much of it is of a kind which springs from manifestations of the human mind—books, questions—and it is not repetitive in ways acceptable to the machine. Except in the largest libraries there is not enough

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money to pay the purchase price of many machines, nor enough work of their kind to justify them. This, at any rate, appears to be the situation. But whether it is cheaper to buy hours of labor or machines, whether the volume of repetitive work has reached the point of machine justification, are often matters requiring job analysis and cost studies; that is, more arduous observation and calculation than librarians are prepared to make.

In this connection it is interesting to know that certain European experts who examined documentation techniques here in 1950 reported that “it was emphasized that in the United States labor is more expensive than machines and materials, and that efforts are therefore constantly made to mechanize operations as far as possible,” and that “the main reason for using automatic machines is to economize manpower. In Europe the costs of equipment are comparatively more important than the costs of labor.”

There is still a good deal of journal literature on the commoner sorts of office machinery. The American Library Association and some state library associations maintain committees on apparatus useful to libraries. This must mean that the use of machinery is percolating down into the smaller organizations.

The machines which have exercised the greatest fascination over librarians in the past fifteen years are punched card equipment. Actuated by holes punched in cards, these machines identify, sort, and correlate whatever data is represented by the combinations of holes on the cards. These machines exist at present in two types widely separate in complexity. The edge-punched card is characteristic of the simplest form; the apparatus required is little more than a tray for cards and a skewer for sorting them. There is no middle ground between this simple device and the electronic complexities of the machinery required to handle field-punched cards, of which International Business Machines provide the best-known example.

Perry, Ferris, and Stanford furnish a handy summary of punched card use in American libraries. The section on applications to administration reveals that, as in the use of cost studies, university and scholarly libraries are the most active in exploiting these machines. The Perry bibliography is extended in Casey and Perry, Punched Cards; and Klausner’s article in the same work reviews IBM applications to charging files.

An early application of IBM was to accounting in library order departments, at Boston Public Library, the Universities of Georgia and, most recently, California (Berkeley) where a multiple-copy card is
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used. Illinois has made use of the simpler edge-punched system. There are two theses on punched cards. The greatest current interest in this machinery is in its development for the location and correlation of information, a subject outside the scope of this article.

Eleven libraries are collaborating in a two-year experiment with an office-appliance type of camera called the “Photoclerk,” developed by R. R. Shaw, and intended to offer a cheap substitute, in the form of photographic copies on paper, for other ways of duplicating small-size records. It is expected that improvements of processes will result from the use of this machine and from the accompanying analysis of processes.

Attention to building was inevitable after the war, after a long freeze of materials and labor. The post-war period was, until the metal shortages brought about by the Korean War, characterized by great activity in planning new structures and alterations to old. Some librarians, suddenly required to consider plant more than academically, found themselves confronted by questions of fundamental library policy as to collections and service. Many planners felt genuinely handicapped by the absence of tested facts about the habits, behavior, and needs of the users of the library materials. It was apparent, however, as descriptions of the new buildings unfolded in library and architectural press, that the old standard for the large university library building—the California prototype, reflected at Harvard, Michigan, Minnesota, and elsewhere—had been pretty much abandoned in favor of a fluid plan of more intimate character. The Doe library building at Berkeley (1911) reflected a concept of library service based on the forms of material (books, periodicals, etc.) and kinds of library activity (loan, reference, etc.). The University of Colorado building (1940) symbolizes a subject or “divisional” concept of service in which all kinds of materials and service activities bearing on an area of knowledge are grouped together in one place. This concept has had, and is having, a powerful influence on library management.

Two landmarks appeared in this period. In 1944 the Cooperative Committee on Library Building Plans came into existence at the suggestion of Princeton’s President Dodds. Around a core of chief librarians representing fifteen universities with new library buildings in progress flowed architects, engineers, illumination men, and other experts in a series of discussions synthesized in what will for many years stand as the best book on the subject.

The other landmark is the 1946 Library Institute at the University
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of Chicago whose subject was library building. Some of the speakers and many of the ideas advanced were the same as those of the Cooperative Committee. Taken together, these two books sum up the extent to which thinking about library buildings has gone. In a very real way these books state the philosophy of university library service as it exists today.

No account of trends in physical working conditions should omit reference to the program of improving work environment at the Library of Congress reported in its Information Bulletin, and the series of lectures in the relationship between environment and production given in 1950 at the Library of Congress. Summaries of these lectures on noise, color, air conditioning, and accident prevention were released in the form of news stories at the time. Nor should the Librarian of Congress' daring but vain attempt to introduce industrial music into the Card Division be ignored.

Conclusion. There is good reason to believe, from the evidence of the literature cited and in news from the field, that librarians are not unaware of the nature of management, its devices and techniques. It is very probable that, if a sufficiently detailed description of management were constructed and advertised to university libraries, much additional evidence of management activity could be discovered. For example, Yale University Library expects to add a management specialist to its staff in the near future; New York Public Library has carried on management studies since 1946 in the areas of administration, consolidation of operations, technical procedures, and staff organization, sometimes employing professional management specialists for the purpose.

There is a regrettable lack of first-hand acquaintance with management literature, and of orientation in the management field, on the part of library administrators and those who write on library management. Much of librarians' writing on this subject is more descriptive than analytical and, often, more naive than sophisticated. There is a real lack of "bridging" literature; that is, articles that relate the concepts and practices of "professional" management literature to library situations. There is probably a need for some means of directing librarians to those parts of management writing that have application to library work. It hardly seems necessary to add that management is only one of the aspects of librarianship, and that "library work" and an appreciation of the uses of books are of even greater importance.
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6. Ibid., p. 238.


9. Leigh, op. cit., p. 237


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Preparation and Status
of Personnel

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The basic elements of library service are books, staff, and buildings, and in precisely that order of importance. Each is dependent upon the other. Without a properly trained and supervised staff, books and buildings amount to no more than paper and brick. While there have been librarians without formal training who have been among our most outstanding leaders, they have been men who would probably have been successful in any field to which their peculiar talents might have led them. There have been libraries whose staffs have gone about their work joyously and effectively despite low pay and anomalous status; but such libraries do not represent a tradition that may be recommended.

The now classic Williamson report with its twin recommendations that library schools be attached to universities and that advanced studies in library science be encouraged is a foundation stone in the development of education for academic librarianship. Significant steps in the implementation of the Williamson report were the establishment of the Board of Education for Librarianship in 1924 and of the Graduate Library School of the University of Chicago in 1928. In spite of sound achievements by these two agencies and steady improvement in education for librarianship in general, the faculties and officials of American higher institutions have not been in unanimous agreement that the best librarians were necessarily those with formal training. All aspects of the library schools themselves have been subjected to sharp criticism. Not the least important of this criticism has come from librarians and library school professors. Perhaps the most serious indictment of the schools has been the charge that the vocational content of most library school curricula overshadowed the intellectual; that the librarian was successfully insulating himself.

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against a knowledge of the content of books. Such a state of affairs is intolerable in the college and university world.

In 1946 two documents appeared about the same time; and together they may well prove to be as significant as the Williamson report in that both were precursors of far-reaching changes. Danton's *Education for Librarianship; Criticisms, Dilemmas, and Proposals* and Wheeler's *Progress and Problems in Education for Librarianship* identified the basic problems that were to motivate the changes about to take place. From the standpoint of academic librarianship some of the gravest criticisms were precisely those that had been made by nearly all observers for the previous quarter of a century, viz., emphasis on techniques rather than professional and intellectual aspects of librarianship, failure to produce scholarly librarians competent in specific subject fields, failure to produce real leaders and administrators, failure to develop curricula of graduate calibre on the master's level, and the disadvantages of a second bachelor's degree for a fifth year of work.

At the same time nearly all library schools began to re-examine their curricula and degrees. Some effort was made to introduce courses aimed at detailed bibliographical training in broad subject fields (e.g., literature of the humanities, of science and technology, of social sciences), but only two or three of the best supported schools have actually been able to attract authorities in these fields to their faculties. Much more spectacular was the great change in degree offerings: (1) the discontinuance of the old B.S. in L.S. and the offering of a master's degree for the first year of post-baccalaureate professional study, and (2) the offering of a bona fide Ph.D. in library science by three schools in addition to Chicago.

The substitution of the master's for the baccalaureate as the first professional library degree for graduate study implied to a number of institutions (among them, Chicago and Denver, which first introduced such programs) that some professional training should be offered at the undergraduate level. Other institutions felt that such dilution of the pre-professional training of a student in some academic subject could only have an undesirable effect on his preparation, and, indeed, this would also seem to be the attitude of many representative university teachers and administrators with respect to the preparation of their library staff members. By June of 1948 ten of the twenty-three accredited library schools which had heretofore given a fifth-year professional bachelor's degree were offering the master's instead.
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In the next two years the old bachelor's degree was to be virtually forced out of business; and only the University of California at Berkeley still gives the old A.B.L.S. and requires a second year of graduate study for the master's degree (although it was only in 1947 that this institution substituted the bachelor's degree for the certificate in librarianship for the first year of graduate study).

From the standpoint of academic libraries, an even more important step has been the decision to offer a Ph.D. in librarianship at Columbia, and the Universities of Illinois and Michigan. To be sure, for almost two decades these institutions had authorized doctorates with library science as a minor; but the failure of this plan to attract students is clearly illustrated by the fact that only three students at the University of Illinois took advantage of it, whereas twenty-five Illinois students went on to Chicago to study for the Ph.D. in librarianship at that institution.

Illinois first instituted a doctoral program, and in the spring of 1948 the degree of Doctor of Library Science was authorized for that school. Candidates were accepted the following summer. In November 1948 the University of Michigan approved a Ph.D. program in library science, and it went into operation the following semester. It is interesting to note that the Department of Library Science at Michigan had an understanding with the Graduate School that enrollment would be limited for the doctor's degree to ten students in residence at any one time. In the early fall of 1951 a three-fold doctoral program was announced at Columbia: (1) The degree of Doctor of Library Science for students wishing to place a major emphasis on library science, a program to be administered by the Faculty of Library Service; (2) the degree of Doctor of Philosophy for students wishing to divide their time more or less equally between librarianship and subject study and whose dissertation requires both library and subject background, a program to be administered by an interdepartmental committee with members of the Faculty of Library Service included on examining groups set up by this committee; and (3) the degree of Doctor of Philosophy for students whose primary interests are in non-library research and who intend to write a dissertation dealing solely or primarily with subject material, but who also desire to take a minor sequence of library courses as a part of their doctoral work, a program to be administered by the department of major registration.

Several months prior to the approval of the Columbia doctorate,
Illinois had discarded the degree of Doctor of Library Science for the degree of Doctor of Philosophy. In October 1951 Illinois awarded its first Ph.D. in library science. At the date of this writing California is the only one of the five major library schools which has no doctoral program, although the annual report of the dean for 1947-48 reflected that a request for such a program had been made to the Graduate Council of that university.

Has the doctorate in library science, as developed at Chicago, proven to be more desirable than a subject doctorate? Will the new doctoral programs provide better preparation for librarians than they would have received had they come up through a subject field? This is an unanswerable and probably an idle question. It is likely that more librarians will be attracted to doctoral programs in their own professional field than in fields in which they hold only an undergraduate major. On the other hand, we have no conclusive evidence that a Ph.D. in librarianship, or, for that matter, in any other field, is a primary element in a librarian's success. Certainly the administrative officers of Yale, Michigan, Princeton, Pennsylvania, and other major institutions were afflicted by some of these same doubts when they recommended appointments of head librarians in competition with a field which included a goodly number of Chicago Ph.D's.

With regard to the debate concerning the subject matter doctorate for librarians, it may be worthwhile to call attention to a series of articles by German librarians during the post-war years. It is a rather curious situation that the Germans have theorized so extensively concerning education for academic librarianship and yet have never managed to set up a school or faculty similar to our library schools in colleges and universities. Georg Leyh delivered an address before a group of special librarians in Stockholm in 1949 in which he pleaded for a scholarly librarian who would cultivate especially those fields in which a librarian may acquire special competence; and many of these fields are as appropriate to a subject department as to a professional school (e.g., history of printing, history of higher education and research libraries, paleography). Again, in a well-conceived polemic published in the Zentralblatt für Bibliothekswesen Leyh defines some of the specific fields of research for the librarian; and Albert Predeek has even erected a "Systematik der Bibliothekswissenschaft" in which he lists and classifies the various fields of study in librarianship. It is significant to note, however, that Predeek gives a prominent place in his system to "auxiliary disciplines" and that
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Leyh also emphasizes many aspects of library science which have traditionally been taught in other departments. Accordingly, the problem seems to be primarily one of reorganization of instructional practices if we follow Leyh and Predeek. Education for librarianship in the United States and in the U.S.S.R.\textsuperscript{12} has been characterized by just such a reorganization, while western Europe seems to hang on to the notion of educating the librarian in existing university departments. The present writer has expressed himself in another connection as favoring the latter possibility, at least as an alternative to the graduate schools of librarianship,\textsuperscript{13} and the Columbia plan has recognized this alternative. Nevertheless, it must be admitted that only in an independent library school will research on specific problems of librarianship and publications (e.g., \textit{Library Trends}) develop most readily.

Regardless of a librarian's preparation, regardless of whether or not he holds a doctorate in librarianship or in some other field, his position within the academic community is still somewhat anomalous. There has been no comprehensive survey of the academic librarian's status on a national scale; but three limited studies mentioned below reveal little uniformity in practices within specific regions or within specific groups of libraries. One fact is still abundantly and painfully obvious: in most academic institutions the salaries of librarians of all ranks are still distinctly lower than salaries for corresponding ranks in the teaching faculty. A survey conducted in 1950 by a special committee of the University of Kentucky chapter of the American Association of University Professors revealed that in only one of fifteen comparable institutions were library salaries higher for ranks corresponding to associate professor, assistant professor, and instructor. It is likely that even in the exceptional case library salaries were higher only because they contained a differential for a twelve-months' contract as opposed to nine for the teaching staff. Other studies, including two to which reference will be made shortly, indicate the same situation.

There does seem to be a definite trend towards granting of academic rank to professional librarians, even though it is not always accompanied by appropriate salary adjustments. Although complete information as to which institutions give academic rank is lacking, the trend may be identified by the increasing number of announcements in the library press from individual institutions which are adopting this policy. Lundy's study of a group of representative university libraries\textsuperscript{14} indicated that in fourteen institutions the professional library
staff was clearly identified with the teaching and research staff rather than with the administrative and clerical group. In eight institutions librarians were given academic rank with varying reservations and limitations; in seven others institutional librarians were considering the possibility of attaining academic rank; and in the remaining seven academic rank was not considered the most convenient or desirable means of securing the recognition to which the majority of professionally trained librarians would seem to be entitled. In 1948 Spain discovered a somewhat more positive attitude toward faculty rank in 108 Southern colleges and universities. In 62 per cent of the institutions there was faculty status for all professional librarians; in 31 per cent faculty status for some but not all; and in 8 per cent no faculty status for any professional librarian. Spain also discovered that librarians enjoyed privileges comparable to those of the teaching staff in matters such as attendance at faculty meetings, committee work, and tenure, although there was much difference in salary, vacation, and leaves. It should be noted that Spain's group of institutions were, on the whole, much smaller than Lundy's. In the smaller institutions one is not likely to find many scholars of national and international prominence whose earning power and prestige is as great off the campus as on the campus. Although there is little qualitative difference between the rank and file of librarians in a normal college and those in a large university, there is a vast difference between the teaching faculties; and therefore librarians are much more likely to win academic equality in the smaller institution. Powell is even more stern in his statement of this situation: "On every academic library staff I have any acquaintance with, I can count on a few fingers the number of persons who can establish intellectual camaraderie with the faculty. Until this can be done by a majority of a staff, talk of equal rank with the faculty is a waste of breath."

As if to add confusion to the national picture, Gelfand discovered a picture of the librarian in the academic community of the eastern liberal arts college which varies both from Lundy's and from Spain's presentations. After tabulating fifty replies to a questionnaire he discovered definite disagreement among librarians as well as among administrators and teachers as to whether the library is an administrative or an instructional agency. In only 24 per cent of his group was faculty rank accorded to all members of the professional library staff, although 72 per cent of the chief librarians held rank. In direct contradiction to practices in the South as revealed by Spain, relatively few chief librarians serve on the most important college committees, and other
staff members rarely serve on any college committees of any importance. Just as in the Kentucky survey, Gelfand found that most librarians' salaries are lower than teachers' salaries for comparable ranks.

It would seem, therefore, that faculty rank, while often desirable, is no panacea for inadequate salaries and status not commensurate with ability and importance of assignment. There is little difficulty in some instances—for example, in the libraries of New York's five municipal colleges—in giving absolute equality of pay and rank to librarians. On the other hand, the University of Illinois, afflicted with a particularly iniquitous application of civil service to library appointments prior to 1944, has worked out a highly satisfactory classification scheme by which some employees are grouped with teachers, others with administrative officers. But the really significant thing about the Illinois scheme is that it is adapted to the local situation and has actually resulted in salary scales corresponding to those of the teaching staff, in a high sense of professional pride and responsibility, and in acceptance of librarians as equals by their fellow members of the academic community. Still another individualistic approach to the status problem, conditioned to the local situation, has been reported from the University of Utah Library. There seems to be no sure-fire formula for improving the status and salaries of librarians in all institutions.

Perhaps one of the main reasons for the librarian's deficiency in academic respectability and his relatively low salary has been his failure to distinguish between routine techniques and professional and intellectual aspects of his work. Williamson; Munn; Metcalf, Russell, and Osborn; Wheeler; and Danton all pointed out this questionable aspect of library school curricula; and it has carried over from the schools into actual professional work. Danton, whose work properly carries the word "proposals" in its title, is the only critic to offer a constructive suggestion with his concept of three levels of library service, viz., technical or sub-professional, middle service, and administrative-specialist. The concept of the middle service was borrowed from the Prussians, who introduced it generally in the first decades of this century. It should be observed, however, that not all German librarians are in full agreement that the creation of the middle service has solved all or even most of their problems revolving around the definition of professional work.

McDiarmid gave a concrete and suggestive approach to the problem in his address on "Training Clerical and Subprofessional Workers" at the Graduate Library School Conference in 1948. He proposed the
creation of a corps of workers to do those tasks which cannot be economically performed by Danton’s administrative-specialist. Once the latter has been relieved from the performance of routine duties, he will be free to plan and execute his work in a manner that will earn him academic respectability. Some doubt was expressed concerning McDiarmid’s proposal at the time, and so far little has been done to implement it on a national scale. Nevertheless, it would seem worthy of further study and experimentation, perhaps in several parts of the country.

It is important that future research in education for librarianship include the same type of periodic examination of the whole system that has been sponsored by the Carnegie Corporation in the past. The Williamson, Munn, and Wheeler reports are documents of major importance. At the same time the library schools themselves should scrutinize carefully the performance of their own graduates in much the same manner that Danton and Merritt have recently reported on in “Characteristics of the Graduates of the University of California School of Librarianship.” Separate and special attention should be given in such investigations to the records of the Ph.D.’s who will come from Illinois, Columbia, and Michigan in the next few years. The library schools must also be frank enough to examine themselves as institutions and to try to answer the questions that invariably arise when a new library school is proposed or an existing one expanded: What has been the influence of the school on library development within the area it serves? Could the investment in the school have been put to better use in an expansion of a state library agency’s services? Would other university departments and bureaus have been in a better position to conduct the research that will appear in the future in The Library Quarterly and in Library Trends?

On the national level we still know very little about some of the vital aspects of preparation of future librarians. The problem of recruitment remains acute; and it is essential to know why we attracted the librarians who are practicing today, why we do not attract to our ranks still others whom we would like to have as professional colleagues. Comparative studies of library school curricula are needed at regular intervals. We need to know whether more or less uniformity is desirable, and how uniformity or lack of it is caused. In any event there will always have to be minimum standards; and these standards can only be established after careful investigation of the curriculum, the physical facilities, and the qualifications and status of library school
Preparation and Status of Personnel

teachers. These same problems are equally applicable on the international scale in this day when we are establishing American-type library schools in many other parts of the world.

The contradictory and confused nature of available information on status and salaries is a matter for grave concern. However expensive and time-consuming it may be, the periodic compilation of this information would be invaluable. It should include specific data comparing library salaries in a large number of institutions with faculty salaries for corresponding ranks. There should be detailed reports on individual solutions of the status problem in colleges and universities where it was not possible to duplicate other patterns. At the same time the construction of hypothetical classification and pay plans could add to our backlog of information necessary for approaching specific problems. Perhaps the most realistic approach to the status and salary problem is more honest re-examination of the time-honored criteria for success in librarianship such as appears in the Danton-Merritt study. When we know exactly why successful librarians have succeeded, we will be in a better position to train men and women who can demand and get salaries and status denied to a large proportion of professional librarians today.

References

LAWRENCE S. THOMPSON

The financial support of university libraries is a subject of perennial interest to university librarians and students of university library problems. Evidence of this interest is to be found in the frequency with which questions of finance, budget, salaries and book funds come up during the informal discussions in which librarians engage whenever they have an opportunity to meet with their colleagues from other institutions. Similarly such compilations as the annual “College and University Library Statistics” published in College and Research Libraries and the “Princeton Statistics” issued annually in mimeographed form are looked for and examined with keen interest. Librarians use these compilations or parts of them in preparing their own budget presentations, but this seems to be very nearly the end of the matter, if one is to judge by the paucity of articles dealing with the financial support of university libraries appearing in the library periodicals.

In the twelve year period beginning with 1940, annual statistical tables have been presented regularly, first in the A.L.A. Bulletin and since 1943 in College and Research Libraries, with the exception of the two years 1945 and 1946. In conjunction with the tables it has been customary to include a brief discussion and analysis of the data presented in the tables, relating them to the figures of earlier years and drawing some tentative conclusions. The tables themselves, particularly for the year 1949-50, include more analyses than has been customary in the past. Cook, in 1940, compared the data for 1938–39 with those of the preceding five years and concluded that “colleges and universities in this group are beginning to pick up what they have lost. . . .” Richards the following year noted that libraries had spent 4.3 per cent of the university budget as against 4 per cent in 1938–39,
but that university library expenditures in selected institutions had increased only 1.4 per cent while the total expenditures of the same institutions had increased 4 per cent. Purdy,\textsuperscript{5} in 1942, compared the data for 1940–41 and 1939–40 and found that expenditures for salaries and for books, periodicals and binding had increased, although enrollment had decreased. In terms of per student expenditures, the median figures were as follows: books, periodicals and binding, $7.99; salaries, $13.29; and total library expenditures, $23.05. Mohrhart,\textsuperscript{6} in 1948, observed that the ratio of library expenditures to total educational expenditures was decreasing, although educational budgets as a whole were rising steadily. In 1951, Thompson\textsuperscript{7} presented a table showing the increase in median expenditures for salaries; books, periodicals and binding; and total library expenditures for the five years, 1945–46 to 1949–50. The increases were: salaries, 68 per cent; books, periodicals and binding, 38 per cent; and total library expenditures, 54 per cent.

An important article dealing with the subject of library finance is a study by Ellsworth of the library expenditures and the educational expenditures of fifty-three universities for the period 1921–41. His conclusions are as follows:

First, both book and total educational expenditures reflect closely the economic conditions of the country, though they both respond somewhat slowly to prosperity and depression. . . .

Second, 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. . . .

Third, the 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.\textsuperscript{8}

This study should now be projected to 1951, in order to show the trends over the past thirty years.

Parker\textsuperscript{9} in 1951 studied the ratio of library expenditures to total educational expenditures for a selected group of twenty universities and reported that the ratio had declined in all but three of the institutions. For the institutions studied the average ratio in 1939 was 4.35 per cent; that in 1949, 3.3 per cent. A statement which appears to be at variance with Parker's finding is contained in a study\textsuperscript{10} published in the \textit{Bulletin of the American Association of University Professors}. Library expenditures were not the major concern of the Committee which made the study, but apparently library data were collected and
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reviewed, even though they were not included in the published report. The report does, however, contain this statement: "In the majority of instances where separate data were supplied, library expenditure per student has increased in fairly close correspondence to the increase in educational expenditure as a whole." This report appears to be a very thorough piece of work and is recommended to anyone interested. The report stresses the fact that analyses of expenditures must be made on a per student basis in order to show the effect of the great increase in enrollment experienced immediately after the war. The report also surveys various indexes of prices and concludes that "institutional income should have grown somewhere around 72 per cent per student from 1938 to 1948 to permit maintenance of the institution merely at pre-war levels. . . ." Actually, this did not happen in the group of colleges studied. The median per cent for publicly controlled institutions was 61, for privately supported institutions 42. Thus, if these figures are representative, it is clear that colleges and universities have not kept pace with inflation. It could hardly be expected that the libraries would fare any better than the institutions as a whole.

The Biennial Survey of Education in the United States, 1938-40, presents in the section on college and university libraries extensive data for the year 1939-40. The accompanying analysis shows that for college and university libraries the per student expenditure for all library purposes was $16.06; for staff salaries, $8.27; and for books, periodicals and binding, $5.90. These figures include 629 colleges and universities. The chapter on "Library Expenditures and Standards of Support" in College and University Libraries and Librarianship prepared by the College and University Postwar Planning Committee of the American Library Association and the Association of College and Reference Libraries is based chiefly on the U.S. Office of Education data for 1939-40. In analyzing these data, it is brought out that for the top decile of college and university libraries—59 institutions—the per student expenditure for library purposes ranged from $81.81 to $28.41. For this same group of libraries, the study reports a ratio of 3.83 per cent between library expenditures and total educational expenditures.

The annual statistical tables in the A.L.A. Bulletin and College and Research Libraries include the medians for the various types of libraries in the several items reported. These medians are not a very reliable indicator of the changes occurring in college libraries, as
different institutions are included from year to year. Nevertheless, they are of some interest as a gross measure of the operations and conditions of college libraries. The medians for each of the nine years reported are given in Table 1. No data were published for 1943-44 and 1944-45. In 1939 the median expenditures for this selected group of larger college and university libraries were: salaries, $43,059; books, periodicals and binding, $30,497; total library expenditures, $89,435. The comparable figures for 1949-50 were: salaries, $122,033; books, periodicals and binding, $72,218; total library expenditures, $236,603. The percentage increases thus were: salaries, 183 per cent; books, periodicals, and binding, 136 per cent; total library expenditures, 164 per cent. If these figures were representative and reliable, the financial condition of college libraries would be much better than is commonly supposed.

| TABLE 1 |

**Median Library Expenditures of Selected Larger Colleges and Universities, 1939-40 to 1949-50**

<table>
<thead>
<tr>
<th>Years</th>
<th>Salaries</th>
<th>Books, Periodicals &amp; Binding</th>
<th>Total Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1939-40</td>
<td>43,059</td>
<td>30,497</td>
<td>89,435</td>
</tr>
<tr>
<td>1940-41</td>
<td>50,638</td>
<td>32,281</td>
<td>96,930</td>
</tr>
<tr>
<td>1941-42</td>
<td>49,049</td>
<td>28,720</td>
<td>96,757</td>
</tr>
<tr>
<td>1942-43</td>
<td>48,775</td>
<td>35,336</td>
<td>96,831</td>
</tr>
<tr>
<td>1945-46</td>
<td>72,379</td>
<td>52,156</td>
<td>153,489</td>
</tr>
<tr>
<td>1946-47</td>
<td>83,313</td>
<td>65,765</td>
<td>186,543</td>
</tr>
<tr>
<td>1947-48</td>
<td>95,167</td>
<td>67,726</td>
<td>216,850</td>
</tr>
<tr>
<td>1948-49</td>
<td>117,418</td>
<td>82,883</td>
<td>240,291</td>
</tr>
<tr>
<td>1949-50</td>
<td>122,033</td>
<td>72,218</td>
<td>236,603</td>
</tr>
</tbody>
</table>

Increase in Medians 1949-50 over 1939-40

<table>
<thead>
<tr>
<th>Salaries</th>
<th>Books</th>
<th>Total Library Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>183%</td>
<td>136%</td>
<td>164%</td>
</tr>
</tbody>
</table>


However, if we take the same tables and select from them the 30 institutions which provided data for 1939-40 and 1949-50, and consider them in terms of expenditure per student, the results are quite different, as shown in Table 2. The range of per student expenditure
Financial Support of College and University Libraries

TABLE 2
Library Expenditures Per Student in Thirty Selected Colleges and Universities in 1939-40 and 1949-50*

<table>
<thead>
<tr>
<th>Library</th>
<th>1939-40†</th>
<th>1949-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>15.34</td>
<td>19.66</td>
</tr>
<tr>
<td>Arkansas</td>
<td>23.07</td>
<td>32.18</td>
</tr>
<tr>
<td>California, Berkeley</td>
<td>20.70</td>
<td>62.45</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>20.87</td>
<td>27.45</td>
</tr>
<tr>
<td>Colorado A. &amp; M.</td>
<td>11.86</td>
<td>21.87</td>
</tr>
<tr>
<td>Dartmouth</td>
<td>55.25</td>
<td>91.92</td>
</tr>
<tr>
<td>Georgia</td>
<td>21.81</td>
<td>80.76</td>
</tr>
<tr>
<td>Howard</td>
<td>29.54</td>
<td>34.00</td>
</tr>
<tr>
<td>Illinois</td>
<td>30.25</td>
<td>54.38</td>
</tr>
<tr>
<td>Iowa</td>
<td>24.86</td>
<td>40.56</td>
</tr>
<tr>
<td>Iowa State</td>
<td>18.30</td>
<td>23.71</td>
</tr>
<tr>
<td>Louisiana</td>
<td>15.94</td>
<td>40.86</td>
</tr>
<tr>
<td>Michigan</td>
<td>35.58</td>
<td>41.95</td>
</tr>
<tr>
<td>Michigan State</td>
<td>7.99</td>
<td>18.01</td>
</tr>
<tr>
<td>Missouri</td>
<td>16.03</td>
<td>23.92</td>
</tr>
<tr>
<td>North Carolina</td>
<td>24.50</td>
<td>50.18</td>
</tr>
<tr>
<td>Northwestern</td>
<td>36.30</td>
<td>45.35</td>
</tr>
<tr>
<td>Oregon</td>
<td>23.79</td>
<td>44.26</td>
</tr>
<tr>
<td>Oregon State</td>
<td>17.55</td>
<td>34.88</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>16.48</td>
<td>36.35</td>
</tr>
<tr>
<td>Pennsylvania State</td>
<td>13.81</td>
<td>25.92</td>
</tr>
<tr>
<td>Princeton</td>
<td>69.21</td>
<td>110.24</td>
</tr>
<tr>
<td>Rochester</td>
<td>59.44</td>
<td>34.36</td>
</tr>
<tr>
<td>Southern Methodist</td>
<td>17.93</td>
<td>26.44</td>
</tr>
<tr>
<td>Syracuse</td>
<td>14.51</td>
<td>21.21</td>
</tr>
<tr>
<td>Temple</td>
<td>10.43</td>
<td>16.50</td>
</tr>
<tr>
<td>Texas</td>
<td>20.78</td>
<td>34.55</td>
</tr>
<tr>
<td>Washington, St. Louis</td>
<td>12.86</td>
<td>18.59</td>
</tr>
<tr>
<td>Wayne</td>
<td>8.36</td>
<td>25.83</td>
</tr>
<tr>
<td>Wyoming</td>
<td>13.58</td>
<td>24.17</td>
</tr>
<tr>
<td>High</td>
<td>69.21</td>
<td>110.24</td>
</tr>
<tr>
<td>Low</td>
<td>7.99</td>
<td>16.50</td>
</tr>
<tr>
<td>Median†</td>
<td>19.33</td>
<td>33.09</td>
</tr>
</tbody>
</table>

† Computed on the basis of attendance in regular sessions only.
‡ Average of two medians.
in 1939–40 is from $7.99 to $69.21, with a median expenditure of
$19.33; the comparable figures for 1949–50 are $16.50 to $110.24, with
a median of $33.09. The increase in the highest expenditure was 59
per cent; in the lowest, 106 per cent; and in the median, 71 per cent.

If the standard of $25 per student is considered in relation to these
medians, it is apparent that the median in 1939 fell 22.6 per cent below
the standard. The purchasing power of the $25 standard in 1939
could be obtained, in terms of the 58-cent dollar of 1949, only with a
standard of $43.10. The median expenditure per student in 1949 was
thus 23.45 per cent below standard.

Considered in relation to the general price level or cost-of-living
index, the financial support of this group of libraries was relatively
poorer than the relations of the two medians to the standard indicates.
The cost-of-living index for 1939 was 99; that for 1949 was 187.7.
There was thus an increase of 88.7 on the index, whereas the per-
centage increase of the median library expenditure was 71 per cent.
In view of the fact that prices of books and periodicals generally
have not increased as much as the general cost of living, the disad-
vantage to libraries is probably not as great as these percentages seem
to indicate.

Considered in relation to either of these measures, it appears that
the group of libraries included in Table 2 have suffered somewhat
in their relative financial position, but that they have not, as a group,
lost very much.

The libraries included in Table 2 are the larger college and uni-
versity libraries. Similar data on eighteen selected small colleges is
given in Table 3. Here the range in per student expenditures in 1939-40
was from $55.85 to $9.00, with a median of $20.87; in 1949-50, the
comparable range is $58.93 to $12.13, with a median of $26.25. The
increase in the high expenditure is about 5.5 per cent, that for the low
35 per cent, and for the median 25 per cent.

If these percentage increases are related to the comparable figures
for the group of large college libraries, to the recommended standard
library expenditure per student, or to the cost-of-living index, it is
clear that this group of small college libraries has lost ground seriously
in the past decade and, relatively, is providing a poorer quality of
library service. The library expenditures of all these colleges have
increased substantially in the ten year period, but the increases in the
library budgets have not kept pace with the increases in enrollment
and with inflation. It is worth noting that not one of these colleges

[ 110 ]
Financial Support of College and University Libraries

**TABLE 3**

**Total Library Expenditures Per Student in Eighteen Selected Colleges, 1939–40 and 1949–50**

<table>
<thead>
<tr>
<th>Library</th>
<th>1939-40†</th>
<th>1949-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny</td>
<td>23.64</td>
<td>27.05</td>
</tr>
<tr>
<td>Amherst</td>
<td>55.85</td>
<td>58.93</td>
</tr>
<tr>
<td>Beloit</td>
<td>24.19</td>
<td>27.08</td>
</tr>
<tr>
<td>Colby</td>
<td>20.97</td>
<td>38.92</td>
</tr>
<tr>
<td>Colorado</td>
<td>22.01</td>
<td>25.31</td>
</tr>
<tr>
<td>Concordia</td>
<td>9.81</td>
<td>12.18</td>
</tr>
<tr>
<td>Denison</td>
<td>23.16</td>
<td>31.46</td>
</tr>
<tr>
<td>Gettysburg</td>
<td>14.77</td>
<td>16.07</td>
</tr>
<tr>
<td>Lawrence</td>
<td>20.78</td>
<td>19.20</td>
</tr>
<tr>
<td>Middlebury</td>
<td>24.72</td>
<td>34.61</td>
</tr>
<tr>
<td>Morningside</td>
<td>9.00</td>
<td>12.61</td>
</tr>
<tr>
<td>New Mexico State</td>
<td>10.95</td>
<td>32.28</td>
</tr>
<tr>
<td>Wake Forest</td>
<td>12.01</td>
<td>26.18</td>
</tr>
<tr>
<td>Washington and Lee</td>
<td>24.13</td>
<td>26.07</td>
</tr>
<tr>
<td>Westminster</td>
<td>15.89</td>
<td>17.20</td>
</tr>
<tr>
<td>Willamette</td>
<td>19.82</td>
<td>16.29</td>
</tr>
<tr>
<td>Williams</td>
<td>55.38</td>
<td>51.20</td>
</tr>
<tr>
<td>Wooster</td>
<td>19.44</td>
<td>25.92</td>
</tr>
</tbody>
</table>

| High                 | 55.85    | 58.93   |
| Low                  | 9.00     | 12.13   |
| Median†              | 20.875   | 26.125  |


† Computed on the basis of attendance in regular sessions only.

† Average of two medians.

had an enrollment of less than 1,000 in 1949-50, while in 1939 they were all below this figure.

Statistics for College and University Libraries,² compiled and issued annually by the Princeton University Library, reports data on the growth and cost of a group of the largest university and college libraries in the country. Since, with a few exceptions, the same libraries are included each year, and the items reported are few and clear cut, this compilation is most useful in studying the financial status of these libraries. For the purposes of this study thirty large university and college libraries, selected to represent all parts of the country, and
to include both public and private institutions in approximately equal number, were chosen. While the selection has thus been arbitrary, in a sense, the group is believed to be representative of the best general level of support among university libraries. The inclusion of another fifteen or twenty libraries might modify the median figures slightly, but it is doubtful that it would significantly affect the trends.

Data for these libraries in 1950-51 are compared with those for 1940-41. It is true that in some institutions library expenditures in 1950-51 were lower than in the preceding year, but it is also true that enrollment was smaller in 1950-51. Thus, it appears that, in general, the per student expenditure in 1950-51 was as high as that of the year immediately preceding, if not higher. Again, it should be noted that there may be individual institutions in which this is not the case. It is perhaps unnecessary to observe that a more accurate picture might be obtained by calculating the average expenditures of several years, rather than by using the figures for a single year. The objective in this paper, however, is to compare conditions at the end of the decade with those at the beginning of the forties and, for this purpose, the figures for one year suffice.

The data are presented in terms of library support or library expenditures per student, since this method reflects the changes in enrollment occurring in the decade of the forties. There seems to be good reason for preferring expenditures on the per student basis to the method of evaluating the library on the basis of the ratio of library expenditures to total educational expenditures. The larger institutions are now engaged in contract research of various kinds to such an extent that their budgets are distorted and it is difficult to get figures which report "educational expenditures" as they were conceived ten years ago. If all supported research is excluded, the full extent of educational expenditures is not presented; if all contract research is included, much that is not "educational" is included. This difficulty is avoided by the use of expenditure per student. Library support calculated on this basis may tend to enhance the position of the smaller institutions. This is admitted, but since, for the institutions included, enrollments range upward from about 2,000, and since the majority are considerably larger than this, the objection does not appear too serious. Moreover, if the figures for two institutions, one small, the other large, were compared and a conclusion unfavorable to the larger institution were drawn, there might be serious objection to it. If, however, the analysis is in terms of highs, lows, and medians
Financial Support of College and University Libraries

of a group of thirty institutions, it would seem that the criticism of this measurement is largely irrelevant.

Data on enrollment seem to vary with the source. Fairly consistent reports are given annually in *School and Society* in a compilation and analysis prepared by President Raymond Walters of the University of Cincinnati.14 Registration is regularly given in terms of “all resident students” and “full time students.” For some institutions the figures are the same; for others there are very sizable differences. In order to allow for these differences, per student expenditure has been calculated in terms of both enrollment figures. Tables 4 and 5 present data on the library expenditures per student in the thirty universities in 1940-41 and 1950-51.

Inspection of the medians shows that proportionally the increase in salary expenditures has been greater than the increase for books, periodicals and binding. The increases in the medians of the combined figures are just short of 100 per cent in each case. If this percentage increase is related to the cost-of-living index which was at 189 in 1950,

<table>
<thead>
<tr>
<th>Library</th>
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<th>Per Student Expenditure: Salaries</th>
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<td>All Resident Full Time</td>
<td>All Resident Full Time</td>
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<td>Library</td>
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</table>


† Average of two medians.

### TABLE 5

**Library Expenditures Per Student in Thirty Selected Universities, 1950-51**

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<th>Full Time</th>
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<td>25.84</td>
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<td>20.77</td>
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<table>
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<td>88.15</td>
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<td>74.09</td>
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</tbody>
</table>

† Average of two medians.
it seems that this group of libraries, in terms of the median expenditure per student, improved its relative position by about 10 per cent in the decade. It should be emphasized that this conclusion may or may not apply to a given library. Some libraries have strengthened their position more than this, others have done less.

The data in Tables 4 and 5 may be used for a comparison between publicly controlled and privately controlled universities with respect to financial support of libraries. If the universities are divided on this basis these two tables may be adapted to form Tables 7–10, which appear at the end of this paper. The highs, lows, and medians drawn from these adapted tables are given below as Table 6.

**TABLE 6**

**Library Expenditures Per Student in Sixteen Universities Under Public Control**

<table>
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<tr>
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<th>Per Student Expenditure:</th>
<th>Per Student Expenditure:</th>
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</thead>
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**Library Expenditures Per Student in Fourteen Universities Under Private Control**

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<tbody>
<tr>
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<tr>
<td>Median*</td>
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<table>
<thead>
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<th>1950–51</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Low</td>
</tr>
<tr>
<td>Median*</td>
</tr>
</tbody>
</table>

* Average of two medians.
Financial Support of College and University Libraries

These summarizing figures show that the level of per student library expenditure is substantially higher in the private institutions, since in 1940–41 all private institutions exceeded the median full time expenditures of the publicly supported institutions, and in 1950–51 only one of the private institutions fell below the median expenditure in public institutions. In the decade of the forties the median per student library expenditure figured on the basis of all resident students has more than doubled; whereas the median expenditure in terms of full time students has increased 85 per cent in publicly controlled institutions, but only 51 per cent in privately controlled institutions. Another feature disclosed by bringing these data together is that the highest per student expenditure in the publicly controlled institutions in 1950–51 is almost the same as the median expenditure for privately controlled institutions, if the calculations are based on full time enrollment. This is not true, however, if all resident students are considered.

The data presented warrant some tentative conclusions:

1. Selected groups of college and university libraries have maintained or slightly improved their relative position in terms of expenditures per student during the decade of the forties.

2. In general, it appears that it is the libraries in the larger institutions or those in institutions with a long record of high level library support which have shown the greatest increases. Despite some exceptions, this appears to be a reversal of the trend noted by Ellsworth after studying the pattern of financial support in the period 1921–1941.8

3. The libraries in a selected group of small colleges have not only been unable to improve their position on a per student basis, but have lost ground in relation to the rise in cost of living or to the devalued dollar. This confirms the view that privately supported institutions are particularly hard-pressed by inflation.

4. A selected group of private institutions is spending appreciably more for library service per student than is a similar group of publicly controlled institutions. In the forties, however, the public institutions showed a larger percentage increase in terms of full time students than did the private institutions. This finding may also be considered as lending some support to the view that private institutions especially are adversely affected by inflation.
**TABLE 7**

Library Expenditures Per Student in Sixteen Institutions Under Public Control 1940–41

<table>
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<th>Library</th>
<th>Per Student Expenditure: Books</th>
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<tr>
<td>Virginia</td>
<td>15.87</td>
<td>21.28</td>
<td>20.77</td>
</tr>
<tr>
<td>Washington, Seattle</td>
<td>4.02</td>
<td>5.45</td>
<td>7.76</td>
</tr>
<tr>
<td>Wisconsin</td>
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<td>21.28</td>
<td>20.77</td>
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<tr>
<td>Low</td>
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<td>3.43</td>
<td>3.95</td>
</tr>
<tr>
<td>Median*</td>
<td>6.42</td>
<td>9.20</td>
<td>7.06</td>
</tr>
</tbody>
</table>

* Average of two medians.
TABLE 8
Library Expenditures Per Student in Sixteen Institutions Under Public Control 1950–51

<table>
<thead>
<tr>
<th>Library</th>
<th>Per Student Expenditure:</th>
<th>Per Student Expenditure:</th>
<th>Per Student Expenditure:</th>
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</thead>
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<tr>
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<td>Salaries</td>
<td>Books &amp; Salaries</td>
</tr>
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<td>All Resident Full Time</td>
<td>All Resident Full Time</td>
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</tr>
<tr>
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<td>30.18 30.18</td>
<td>54.54 54.54</td>
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<tr>
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</tr>
<tr>
<td>Colorado</td>
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<td>11.77 12.01</td>
<td>18.26 18.63</td>
</tr>
<tr>
<td>Illinois</td>
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<td>31.26 36.09</td>
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<tr>
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<td>12.02 18.97</td>
<td>10.56 16.07</td>
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<td>36.56 42.28</td>
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<td>14.76 14.76</td>
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<td>73.34 74.61</td>
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<tr>
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</tr>
<tr>
<td>High</td>
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<tr>
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<td>7.41 12.01</td>
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<tr>
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<td>18.24 19.66</td>
<td>29.14 33.71</td>
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</table>

* Average of two medians.
TABLE 9
Library Expenditures Per Student in Fourteen Institutions Under Private Control 1940–41

<table>
<thead>
<tr>
<th>Library</th>
<th>Per Student Expenditure: Books</th>
<th>Per Student Expenditure: Salaries</th>
<th>Per Student Expenditure: Books &amp; Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Resident Full Time</td>
<td>All Resident Full Time</td>
<td>All Resident Full Time</td>
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<td>Chicago</td>
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</tr>
<tr>
<td>Columbia</td>
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<tr>
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<tr>
<td>Low</td>
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<td>10.36 18.86</td>
<td>17.74 28.52</td>
<td>30.64 46.78</td>
</tr>
</tbody>
</table>

* Average of two medians.
TABLE 10  
Library Expenditures Per Student in Fourteen 
Institutions Under Private Control  
1950-51

<table>
<thead>
<tr>
<th>Library</th>
<th>Per Student Expenditure: Books</th>
<th>Per Student Expenditure: Salaries</th>
<th>Per Student Expenditure: Books &amp; Salaries</th>
</tr>
</thead>
<tbody>
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<td>All Resident Time</td>
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<tr>
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<td>8.96</td>
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<tr>
<td>Median*</td>
<td>21.32</td>
<td>24.41</td>
<td>39.04</td>
</tr>
</tbody>
</table>

* Average of two medians.
References


12. Ibid., p. 27.


Public Relations For
College and University Libraries

ROBERT W. ORR

IN RECENT YEARS there has been, on the part of many types of public-service organizations, a growing awareness of the importance of good public relations. Municipalities and other governmental agencies, for example, have become increasingly sensitive to the need for public relations programs in promoting good will and understanding on the part of those who bear the tax load. Many large industrial corporations also recognize the benefits in good will and the financial success which can be achieved through such programs. There is comparatively little in print, however, to show that college and university libraries hold public relations programs in the same high regard.

Lyle and Temple have discussed in considerable detail some of the numerous media which can be used in public relations programs. Other accounts, such as Watkins's short article on college and library publications, and such papers as those by Bauer, Ostvold, and Parker are quite helpful in suggesting important activities. The latter states that before a university community can be library conscious, it must subscribe to a number of ideas and concepts concerning the nature of the library: (1) The book collections are for use; (2) teaching without books is difficult; (3) the library is composed of more than books—it contains films, maps, manuscripts, microcards, and reference tools such as catalogs, bibliographies, indexes, and abstracts; and (4) the librarian is a teacher and the library is a teaching department of the school. No one has yet written a detailed case history of the over-all public relations program of any given college or university library. This lack is to be deplored, and may be due to the fact that there does not seem to be a clear understanding among librarians

Director, Iowa State College Library.
of the exact scope of public relations. More study and investigation in the broad area of public relations programs for college and university libraries is plainly indicated.

Every agency or organization serving any segment of what is broadly termed "the public" is engaged in public relations activities, whether it is aware of it or not. It should also be clear that such activities include much more than mere publicity. According to Temple, publicity is but one phase of public relations. Good library public relations is good library service—publicly appreciated, to paraphrase one succinct definition.

If good public relations is, in fact, good public service publicly appreciated, then the fundamental requirements are those elements which are essential for good library service, including, among others: (1) a friendly and enlightened library administration; (2) adequate book collections; (3) a well-qualified, interested, and courteous staff; and (4) a building adequate in size and designed for convenience of use. Given these resources, any library is basically equipped to provide the library service which is the foundation of a good public relations program. Without such resources or their appropriate utilization in providing effective library service, no other activities of a public relations nature can be depended upon to achieve a substantial and lasting measure of public appreciation for the library.

Library service, no matter how competent, does not in itself make an effective public relations program. There must be other activities designed to provide information about the library and to show readers in what ways the library is indispensable to them.

The effectiveness of public relations programs for college and university libraries has been furthered by the changing nature of library service itself. This, in turn, grew out of the gradual change from the idea that the library's principal role is one of preserving book collections to the concept that every appropriate emphasis should be placed on book use. This evolution in the philosophy of the library's function and its resultant implementation on a broad scale in this country has been of the utmost significance from a public relations standpoint.

The media which can be employed to inform library users about the library are many and varied. Each of them has a potentially worthwhile contribution to make to the over-all public relations program. Because of space limitations, only a selected few of these media are considered in this paper. In many instances the subjective opinions of the author have been injected into the discussion because the avail-
able literature is either wholly lacking or seriously deficient in descriptions and evaluations. The need for study and investigation in the whole field of public relations has already been noted. The need for studies of the several media is present to a serious degree.

In this paper it is assumed that “the public” for college and university libraries is comprised principally of the student body and the faculty, including such special groups as administrative officials and the library committee. However, townspeople of the community should be included in this primary group whenever the library also serves as the public library. Through appropriate channels, the library should also direct its public relations activities toward the governing body of the institution. The libraries of land-grant colleges and universities, and of other state-supported institutions, such as teachers’ colleges, should also include the people of the state and the state legislature in their public relations activities. Other groups which all college and university libraries should reach in their public relations programs include, for example, the alumni, the faculty and students of library schools, and appropriate members of the library profession generally.

Perhaps the most important public relations asset of the library, next to effective library service, is a staff which mingles freely on a friendly and helpful basis with the faculty and students and which welcomes opportunities to discuss formally and informally the resources and services of the library. Such activities may comprise a formal lecture at which a member of the library staff, a visiting librarian, or an author, meets the faculty members or students to discuss books or library matters.

There are many opportunities for the librarian to talk with members of the faculty about the library. One of the earliest of such opportunities which presents itself at the beginning of each academic year is that of addressing faculty members at the opening meetings of major faculty groups. Library seminars to which new faculty members and graduate students are invited are also helpful in promoting good public relations. Departments or divisions sometimes request permission to bring new staff members to the library during orientation programs. Such requests should be eagerly seized upon by the librarian as matchless opportunities to make new friends for the library.

Advantage should also be taken of every opportunity to appear before classes of graduate students to discuss use of the library with reference to specific subject fields. Faculty and graduate students often belong to departmental clubs, and the alert and cordial librarian
will on occasion be invited to talk to such groups. Another opportunity for good public relations occurs when a department head or other member of the faculty brings a prospective staff appointee to the library to talk with the librarian and to examine the library resources available for research and instruction in the individual’s special field of work.

There are also many opportunities for the librarian to meet undergraduate students. Members of the circulation and reference staffs have desk schedules, and, for this reason, are not always available for the informal contacts which the librarian and other general administrative staff members can make if they will take the time to be present occasionally in the public lobbies and on the readers’ side of the public service desks. Often tactful assistance extended to a perplexed student will secure a permanent friend for the library and will result in many good words being spoken for the library at times and at places when no librarian would ever be present.

It is sometimes customary for divisions to conduct orientation programs of one kind or another for Freshman students. Meetings of this kind furnish a real opportunity for the librarian to demonstrate that he is made of flesh and blood, and that the library is a friendly and indispensable institution, eager to be helpful.

As opportunities arise, the librarian and his staff should engage in public relations work with others besides faculty and students. In one college community during the past year, the superintendent of schools made arrangements with the librarian for all public school teachers to visit the college library to learn about the book collections and to see how the library was prepared to help them in their school activities. Tours of the library were made, and each teacher attending the meetings was given a reader’s card.

Random illustrations of public relations through contacts of librarians with faculty, students, and others, have been given. Although it would be difficult to establish any trend which might exist with respect to such activities, it is known that some college and university libraries are much more active in these respects today than they were formerly.

The annual report of the college or university library is a medium of public relations which is spectacularly unsuccessful in reaching a significant percentage of the public served by the institution issuing it. Little progress has been made in changing either the content or method of presentation of the annual report so as to derive any ap-
preciable increase in public relations value from it. One cannot help but wonder how many faculty members and students ever have the opportunity or the interest, for that matter, to read the librarian’s annual report.

In a significant study of 500 libraries of institutions of the liberal arts type, Russell and others found that in many instances the distribution of the annual report is severely limited, and that, furthermore, librarians expect very few of those who do receive the report to actually read it. According to Stone, “The writer of the report must have a definite public in mind, because it is their interests and needs which help in determining the content.” Fay, as have others, stresses the value of the librarian’s report as source material in education on the college level for serious investigators. It may be that the answer lies in the issuance of two reports, one a comprehensive report made available to serious investigators and others interested in detailed information, and the other an abridged, popularized edition for widespread distribution to faculty members and students in behalf of good public relations. Certainly the typical report—which usually begins with what is sometimes a tiresome recital of the names of donors and of recent acquisitions of limited interest and which limits material about library services and use to the back pages, if indeed they are emphasized at all—is so lacking in appeal that from the public relations point of view it is practically worthless.

College and university librarians would do well to look to their colleagues in public libraries and to public relations experts for suggestions on how to revamp effectively their reports in terms of public relations possibilities. While covering the basic facts and trends relative to such topics as circulation and reference work, the Newark, N.J., Public Library report to the Board of Trustees for 1942-45 achieves a fresh approach in design and topography. There are numerous informative articles available on this subject. Shugart, for instance, says, “The psychology is simply this: If a story is worth telling it is worth selling, and selling calls for strategy that will make the reader (any reader) enjoy and follow the report page after page.” Crosby believes that “The objective of a good report is to portray the library as a tremendously important, useful, and human institution.” Finally, according to Marcus, “no report is likely to be read widely unless it is compellingly interesting in its presentation and contents.”

Along with the discussion of annual reports as a medium of public
relations, mention should be made of a relatively new type of library organ which has been inexplicably ignored in the literature—the administrative staff bulletin or newsletter. Examples of such bulletins are *CU News*, University of California; *The Library at Iowa State*, Iowa State College; *Library News*, University of Minnesota; *UCLA Librarian*, University of California at Los Angeles; *Library Information*, University of Washington (Seattle). The *Information Bulletin* of the Library of Congress is perhaps the forerunner of all administrative staff bulletins, and is the only one which has achieved the status of a professional periodical of national interest. Although written primarily for the information of members of the library staff, the administrative staff bulletin has challenging possibilities for use in the public relations program. Much of the information normally contained in these bulletins, if effectively presented, is well suited for this purpose. The systematic release of library information on an informal basis at least once a month in an administrative staff bulletin, in combination with the publication of an annual supplement, makes possible a more timely and effective method of reporting than can be achieved solely through the infrequent and formalized annual or biennial report. The reports of at least two of the recent surveys of college and university libraries have included the recommendation that an administrative staff bulletin be issued.\textsuperscript{17,18} The practice of issuing such organs will undoubtedly become more widespread in the future.

As a public relations medium, the administrative staff bulletin should go to the president, to the deans and other high administrative officials, to members of the library committee, to the alumni secretary, to the student newspaper, and to the college information service, as well as to interested faculty members and student groups. The bulletin should also be sent to such off-campus destinations as libraries, library schools, and former staff members. This writer knows of at least one instance where there is convincing evidence that the president regularly reads the administrative staff bulletin and that the alumni secretary, the college information service, and the student newspaper obtain news items for their own publications from this source. Such indications of use show clearly that the administrative staff bulletin can be a significant factor in the public relations activities of the library.

Another publication which has real if more limited possibilities is the report of the library survey.\textsuperscript{19} Comprehensive surveys of college and university libraries in their present form are generally considered
Public Relations for College and University Libraries
to date from 1939. In that year Wilson and others 20 surveyed the University of Georgia Libraries and wrote a report that in content and method of presentation has become established as a standard. Included among other types of survey reports is a brief one consisting largely of recommendations and containing few tables or exhaustive analyses of various aspects of library organization, policies, procedures, and operation.18

Any type of survey report, when circulated to those primarily concerned with its contents and when publicized effectively, constitutes excellent public relations material. The survey report is invaluable to the librarian in supporting his recommendations to the president and, through the president, to the board of trustees or the legislature. It also provides information of great value and interest for faculty members, students, and others, including the library committee and the friends of the library organization.

The value of carefully planned and expertly executed library exhibits has long been recognized. As is the case with so many public relations media, actual library exhibits have seldom been described in the literature. Reagan 21 reports that because of a dearth of published information she found it necessary to resort to the questionnaire method of obtaining information for her study of library exhibits in liberal arts colleges. She found that only 2 of 731 exhibits about which she obtained information had been publicized in the general library literature. Despite the lack of published information, it can be assumed that every college or university library attempts to maintain at least a minimum program of exhibits.

Two of the factors which tend to limit the number, scope, and complexity of exhibits are a lack of suitable space and equipment, especially in older buildings, and a shortage of available personnel for this time-consuming activity. Happily, however, exhibit materials are becoming more plentiful. Photographic exhibits, perhaps the most popular of all types of exhibits as far as students are concerned, are available from many sources for no more than the cost of transportation. Such exhibits include the annual News Pictures of the Year, sponsored jointly by the School of Journalism of the University of Missouri and the Encyclopaedia Britannica; Life photographic exhibitions; and the Traveling Print Show of the Photographic Society of America. Many worthwhile exhibits can be borrowed from business and industrial firms. Individual faculty members and college departments can, in many instances, supply materials of widely varied character which
can be integrated effectively with books and other library resources in exhibits that will command widespread attention.

As new library buildings are constructed, the increasing availability of better display facilities thus provided will act as a stimulus to libraries to develop their exhibit programs. New library buildings not only have more bulletin boards, tables, and cases, but ample floor space in strategic locations as well. Moreover, the exhibit areas, without exception, are much better illuminated in new buildings than they ever were in older structures. With better facilities being provided and the supply of inexpensive exhibit materials becoming more plentiful, many libraries are certain to make greater efforts than they previously made to improve their programs of exhibits as one means of maintaining good public relations.

Another medium which has attractive potentialities for public relations purposes is the motion picture made by or for college and university libraries for such purposes as showing library facilities and their arrangement within the building, giving instruction in the use of the library, and illustrating the role of the library on the campus and the means employed to attain the library's objectives. There is even less in print about such films than there is concerning exhibits. In a statement bearing on library services in land-grant colleges teaching agriculture, Jones says that "Films on the arrangement of the library were used by Tennessee, Nebraska, and Wyoming universities, Prairie View A. & M. College of Texas, Alcorn A. & M. College, Mississippi, Colorado A. & M., Oklahoma A. & M. and Maryland State College." Just how applicable these films may be for public relations purposes the author is unable to say, but the fact remains that only a few motion picture films relating to college and university libraries have apparently been made, and not all of these are described in the literature.

Mention should be made of two films which have been made at the University of Illinois. The film "Found in a Book" was produced in the spring of 1936 by the administration class of the University of Illinois Library School. Using two Freshmen as characters, the film is designed to interest high school graduates in the use of library facilities. In 1942 the University of Illinois Library released the film "Contact with Books" to replace the earlier film. It shows the use of the university library by students. The information presented is intended to be applicable to almost any college or university library. It is understood that a new library film is being planned at the Uni-
versity of Illinois and that the library of the North Carolina Women's College is also considering the production of a motion picture.

For public relations use, college and university librarians can profitably study such a motion picture as "Library on Wheels," produced by the National Film Board of Canada to tell the story of the Fraser Valley Union Library and to stress the importance of books not only to the Valley people but to Canadians in general. Another excellent public relations film is the one titled "Books and People, the Wealth Within," which was produced for the Alabama Public Library Service Division by the Southern Educational Film Production Service. This film shows the Alabama State Library Extension Agency in action, with particular emphasis being placed upon means by which the agency is able to help local communities in establishing county library service.

Films of the quality of the two mentioned above have not been employed extensively as a public relations medium by college and university libraries. One of the deterrents to the production of such films is the relatively high cost. Lack of qualified personnel and availability of production facilities undoubtedly play a part in keeping the number of such films produced to a minimum. It seems likely, also, that slides and film strips, which can be produced less expensively and which have certain advantages in convenience and flexibility of use, will continue to be preferred to motion picture films in many instances. There is no indication that college and university libraries in any considerable number are likely to undertake the production of motion picture films.

Radio has been used by libraries for more than a quarter of a century. An early account of the status of radio broadcasting by college and university libraries was published in 1935. During the following decade, there was little increase in the number of libraries participating in radio programs. A survey made in 1946 revealed that less than one-fourth of the land-grant college and university libraries, for instance, were producing or directing radio programs of any description. This finding was all the more surprising because direct participation in radio broadcasting by libraries of institutions of higher education has largely been confined to those of land-grant colleges and universities. This group of institutions has an obligation to engage in extension education which reaches beyond the confines of the campus to include the whole area of the state. Many of these institu-
tions own and operate their own educational radio stations as a part of their extension work.

The radio programs for individual libraries, including the institutions of the University of Utah, University of South Carolina, University of Illinois, and the Iowa State College, have been described in the literature. In general, it can be said that college and university libraries use radio as a medium for popular education and information, for stimulating interest in reading and discussion, and for publicity purposes. There is considerable doubt, however, as to the effectiveness of such radio programs in so far as reaching the faculty and students directly is concerned. If they are broadcast during daytime hours, the principal audience for such programs probably is comprised largely of housewives. The results of a survey of listeners to the book programs broadcast by WOI in cooperation with the Iowa State College Library were published in 1940.32

College and university librarians have been relatively indifferent to the opportunities available for direct participation in radio programs. It may be that librarians question the value of radio programs in terms of the personnel requirements and the staff load involved. L. C. Branscomb indicates that the public relations value of the radio programs broadcast over WILL, the radio station owned by the University of Illinois, may be somewhat incidental. There is no reason to believe that experience in this regard at the University of Illinois is not typical for college and university libraries in general. Lyle says that participation in radio “requires part of the time of a member of the staff who has faith in the value of the project, enthusiasm for its advancement and development, and some knowledge of recent scientific studies of the effects of radio on reading.”33

The newest of the media available to libraries for use in public relations work is television, by which is meant the production of television programs by or for libraries rather than the placing of television receivers in libraries for the use of readers. It is recognized that the latter use of television does have its public relations advantages. Because of the “freeze” which was placed in effect by the U.S. Federal Communications Commission on the licensing of additional television stations in 1948, only limited areas of the country are served by commercial stations at present and Iowa State College is the only institution of higher education that owns and operates an educational television station. Most libraries, therefore, have had little or no opportunity to experiment with television for public relations or for any other purpose.34

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A survey made by the Television Committee of the American Library Association's Audio-Visual Board revealed that thirteen of more than thirty public libraries replying had produced or were producing or sponsoring television programs of one kind or another and that only one of more than forty college and university libraries replying had done so. According to the findings of the survey, the opinions of college and university librarians vary from a feeling of unconcern about television as a medium for book-related programs and other forms of direct participation to the belief that television offers almost unparalleled opportunities for educational, library, and general cultural purposes. The potentialities of television for library public relations as such were not covered in the survey.

Until librarians have gained experience in producing or assisting in the production of television programs, the public relations value of such activities for libraries can only be conjectured. Librarians in the meantime would do well to study the statement of the needs and potentialities of educational television published by the Joint Committee on Educational Television. That television has real possibilities as a powerful force in public relations can readily be surmised by observing the respectful attention paid to it by public officials and candidates for political office. It should also be noted that some public librarians who are using the limited commercial facilities available to them, according to the survey report mentioned above, are of the opinion that television does hold great promise as a medium for public relations.

Television has been characterized as a monster who consumes all the manpower he can get. Librarians should acquaint themselves with the almost incredible demands made by television for personnel possessing a variety of highly specialized talents and skills and with the many man hours of time required for the planning and production of even a single television show. Programs telecast over network facilities and widespread distribution of kinescope copies of library shows may offer at least a partial solution to the financial and personnel problems of libraries wishing to make use of television. It appears to be only a matter of time until libraries make routine, if limited, use of television facilities directly or indirectly for educational and public relations purposes.

The principal need at present relative to public relations for college and university libraries is for facts in the form of published information. Descriptive accounts of the use being made of the various media, as well as of case studies of the over-all programs of selected libraries,
might well be published as the first step in providing such information. Secondly, the inauguration of a comprehensive program of research in this field of activity is long overdue. It is particularly important, for example, that the potentialities of the individual media be studied and evaluated with respect to their applicability in given situations. These measures should go far in providing the body of knowledge needed by those who are responsible for public relations activities in college and university libraries.

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Building Planning and Equipment

ERNEST J. REECE

Much has been written about college and university library buildings in recent years, and this article merely attempts to bring the salient considerations together in topical arrangement. Current trends are taken to mean developments since about 1940, and for the most part they turn out to relate to North America. In dealing with them no sharp distinction between college and university structures has been practicable; and in order to be fully suggestive the paper takes account of the thinking on the subject as well as of what already has been embodied in wood and steel and stone. Its most comprehensive sources are the books and articles listed at the close, although it draws also upon many scattered items and upon information which may not have found its way into print.

The history of physical provision for college and university libraries of course is pertinent to recent happenings, but it is largely unwritten and can be touched only lightly here. In America it seems to have begun with the nooks and spare rooms utilized when collections were rudimentary and when patrons and their needs were few. Harvard elaborated on these in 1841, perhaps taking a hint from England, when it introduced its spacious and "church-like" Gore Hall with a system of tiered alcoves. This became a model for several other libraries, to the general regret as it finally appeared. Nevertheless, the juxtaposition of readers and books thus sought prevailed until a generation later, when Harvard with its growing collection was forced to follow the example of some European non-academic libraries and to add a stack. From then on the separation of reading and storage facilities gained, as instanced between 1880 and 1890 in new structures at the University of Michigan and at Dartmouth, Colgate, and Wabash colleges. The ways of relating books and readers varied, as experimentation pro-

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ceeded and as librarians contended for utility and convenience against the frequently opposing aims of architects, but it is clear that a new order had begun.

Some of these layouts looked cumbersome, and eventually something resembling the conventional Carnegie Public Library plan of the early 1900's was tried. This happened at Carleton College in 1897, and later at Hebrew Union College and the University of Oregon. The plan divided the reading area into two equal parts, separated by the entrance area and circulation desk. While making supervision less easy and interposing a noisy traffic lane between the parts, the arrangement offered few advantages and it failed to become a prototype.

A way seen to meet its weaknesses was to locate the main reading room on a second level, giving it right of way and suitable architectural interpretation across one facade. The reading room was balanced wholly or partially by a stack unit opposite, the intermediate portion of the floor then being devoted to service desk, public catalog and stair-well opening. The ground floor was utilized for entrance corridors, miscellaneous facilities, and lesser reading rooms. Examples of such a scheme at Grinnell College in 1905 and between 1910 and 1920 at the Universities of Missouri and Michigan suggested a more definite pattern than had been discernible since the days of simple, single rooms, and one which exercised much influence. It was by no means exclusive, and it was applied in various ways according to the sizes of buildings, the number of public rooms included, and the quarters sometimes imposed for non-library activities, but it recommended itself to a good many planners and it served well.

If 1940 is a fair dividing line between past and present, the decade preceding it still must be thought of as foreshadowing and even comprising much that came after. Those ten years brought tentative formulations based on lessons handed down from earlier periods. Underlying all was a sharpening realization that the duty of a library is to support the program of its institution, and that to have a chance of doing so its building must possess the workability librarians began to insist upon in the 1880's. This meant putting the structure close to the "scholastic center" of the campus, on a plot providing light, quiet, and room for extension, and planning it so as to assure convenient and economical interior arrangement, with an eye to adaptations and artistic aspects and barring extraneous features.

In reasonable measure the edifices of the 1930's embodied these principles. At the same time their projectors had to think anew of de-
mands for space. As they did so, capacity estimates rose, accompanied by continued concentration upon multi-tiered, enlargeable stacks, the survival of great reading halls and reserved book rooms, the spread of browsing rooms, and interest in departmental offices for staffs. With buildings having to be bigger, elevators and book lifts appeared more necessary. Also, the criteria for artificial lighting, air treatment, and noise control evolved by experts began to be considered, and there was increased concern about fire protection. Architects as well as librarians showed some appreciation of functional planning, and of the relation of library buildings to their surroundings.

As will have been gathered, what has happened since 1940 rests on concepts which are not new, but which have been refined and established in this period. The central idea, carrying further the fidelity to institutional purposes already mentioned, is that a building must fit actively the total program. Only thus can the library be truly a "teaching instrument," serving at all levels and for various disciplines, and supply the materials and conditions requisite for research, for administrative functioning, and for such off-campus demands as are entertained. Further, if the aims and activities of a college or university alter, its library will change and building requirements be modified accordingly. Suggestive expressions of the prevailing view are that the emphasis is "not on housing books but on housing students using books"; and that a library building is a means and not an end, and hence to be designed as one of the work-places on a campus.

Besides promising effectiveness, such an approach to planning finally outlaws all effort to make a library building primarily an ornament, an object of pride for donors or governing bodies or alumni, or a catch-all for sundry non-library facilities. It also renders clear that as institutions vary, each building project is individual. In summary, librarians at last are sure about the physical needs for their work, and architects are coming to view these requirements as an aspect of the functionalism many of them preach for buildings generally.

Moreover, librarians are alert and articulate because they know they will be severely handicapped unless they can have appropriate quarters and equipment. Novel and expanded activities for students and faculties depend upon spaces suited to the purposes. Individualized and enriched teaching and the extension of research call for collections differing from many of the past in size, matter, proportions of titles, location and arrangement. These in turn require adaptations in housing and storage. The very form of organization requisite to
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success may hinge on the building. Pressed upon by all this, the heads of libraries more and more are disposed to assert their needs, especially when told how much present-day engineering can help toward meeting the conditions they face.

Against the background sketched above, and with recognition that the present began in the past, what marks the efforts and results of recent years? To begin with, planning has come to revolve around readers, whose claims for materials and services are becoming increasingly heavy and varied. Norms for the number of student population to be seated, for instance, have risen in a few decades from ten per cent to fifty or even sixty per cent. Moreover, the allowance of square feet per person desirable in reading rooms has gone up, especially where informal arrangement is intended. At the same time, it has become a truism that access to collections must be easier than before.

These standards have suggested larger capacities, as evidenced at their maximum in the proposal at the University of Iowa, with a total student-faculty population probably around ten thousand, to accommodate five thousand people. More significantly, they seek to put users close to the materials they require. Quarter for departmental libraries and the study associated with them are approved without the old misgivings. Distinct rooms, and in one case a separate library building, for undergraduates have appeared in large universities. Stacks are contrived conspicuously and spaciously, as at the University of Massachusetts even before 1940, and as proposed for Kenyon College, so that patrons can enter and linger comfortably in them. Open divisions for consulting the resources in the major fields of knowledge have been set up, following an early pioneering trial at Brown University, the leading later instances being at the Universities of Colorado and Nebraska and Rockford College. Finally, ample study areas are placed in what once might have been exclusively stacks, illustrations being found at Colorado State College, Rice Institute and Bradley University; and book ranges adjoin or are sprinkled over spaces that look like reading rooms, as happens at Harvard's Lamont Library and at the Women's College of the University of North Carolina. Supplementing such arrangements are listening rooms, phonograph tables and projection rooms, and well-appointed waiting sections near service points, such as that at Washington State College.

The motif in much of this of course is a revival of the one obtaining in the early college libraries, before stacks and the segregation of books in them were thought of. It encourages students to examine
and use their study materials at will, and, where desired, in consultation with their instructors or with librarians. As the idea has spread great reading rooms have tended to be outmoded and reference departments to be divorced from those that remain, while reserved book sections have assumed less importance.

To the somewhat general features just listed are added reading rooms concerned with restricted subjects, another feature in the Holland Library at Washington State College. Again, there commonly is generous allowance for independent work by faculties and advanced students in stalls, carrels, cubicles, private studies, typing cells and film-reading facilities for individuals—often near the book store—and various conference and seminar rooms for groups. Less utilitarian demands have brought wide provision for leisure reading, whether the conventional browsing room, a section in a general reading room such as Greenville College has set aside, or, going back to a 1938 example at the University of Virginia, a part of a central hall. Related features appearing here and there are lounges, conversation and smoking rooms, and outdoor reading terraces. Quarters for exhibits are general, and those for periodical reading frequent. Auditoria are gaining a place, being introduced at some mid-west universities. Accessory conveniences for the public represented are coat rooms, not necessarily attended, and telephone booths.

The arrangements for users outlined above indicate in part what has been done about books. On the one hand considerable portions of the stock have been dispersed from storage to reading rooms and service points, under a variety of plans. The fresh impetus to departmental libraries, stimulated perhaps by need for space and by discovery that centralized management is practicable, may entail an increased degree of scattering. Yet this is only carrying an old idea further, admitting at last the merit of such collections where there are major segregated units of instruction, such as those in the laboratory sciences and professional schools. The truly significant relocations of material occur at some of the institutions whose chief preoccupation is undergraduate teaching and study. They have done the most to mingle students and books; and when they make reading and book spaces contiguous or merge them, there remains slight occasion for a stack and it may dwindle to little or nothing.

On the other hand storage more or less pure continues necessary, in differentiation from the stock spread out for all, where collections of unrestricted scope and size grow up for research or other purposes.
For best administration it is desired that the reservoir be central, concentrated, controlled, and susceptible of increase. No single pattern of arrangement has emerged, however, although there are some clear tendencies. Except perhaps where the utmost compactness is imperative the old multi-tiered self-supporting stack is giving ground to that of the slab-floor type, with free-standing ranges, making possible readier approach for users and greater exchangeability both within the enclosure and with other parts of a building. Ceilings are apt to be low, to conserve space; portions of stacks commonly can be walled off at convenience with movable grills; and, for the sake of a clear deck and easy cleaning, there is some interest in having cases hang from above, rather than stand upon floors, as in the annex to the Library of Congress. The tower plan of Yale and Cambridge universities has lost popularity, apparently being judged “inefficient, inflexible, and uncongenial to modern library principles”; and the scheme of placing stacks in vertical relation to reading sections, perhaps borrowed from public libraries, arouses doubts lest it limit future capacities.

“Books” now being a generic term, the care of materials must include such items as maps, prints, graphs, type-scripts, autographic documents, slides, models, and multiform photographic products and sound records. All of these are having to be stored and rendered available, with safety to themselves and satisfaction to users, and often with the help of containers, devices and cabinets unknown a few years back. Because experience with them is scant they still present problems, some of which may take considerable time to resolve. While various institutions have had to improvise to care for non-book items, the University of Houston has put into its new building an elaborate original installation to accommodate films and sound recordings.

Looking quantitatively at the provision for materials, librarians are perplexed. Past rates of growth incline them to raise potential capacities anywhere from fifty to two hundred per cent, and in calculating areas and cubage for stacks to count on housing fewer volumes per foot than formerly. At the same time they hope that condensed forms of record will reduce the space required for conventional stock, and some look to collaboration among libraries to retard the speed of acquisitions generally. Amid the uncertainties the consensus still is to specify generously.

Time was when a new library building could be accepted with only a cubby-hole or two for the behind-the-scenes use of those who were to oversee and conduct its work. Such an error is less likely today,
since here again the interests of clients determine what is requisite, and it is seen that appropriate service can not be assured unless operative functions are efficiently provided for. This implies not alone space for the usual bibliographical tools and library equipment, but convenient arrangement of furniture and personnel, and economical flow of work—for administrators, specialists, technicians, those who deal with the public, and custodians. It necessitates quarters for the securing, repair and handling of non-book materials, such as the photographic laboratories now common; footage and connections for the business machines required in various departments in the modern library; for communication; and for fumigating devices. Some auxiliary features once slighted also are taken for granted, notably ample rooms for receiving, shipping and extension activities, with loading platforms, and adequate space for supplies, housekeeping materials and miscellaneous storage. As in the case of books, an increment of at least fifty per cent over past allowances is advocated for staff quarters as a whole, with emphasis on offices because of long-standing inadequacies there. In addition to provision for work areas, it is expected that staffs will be supplied all that is reasonable in the way of conference places, rest rooms, lockers, lavatories and refectories.

To locate the elements of a building correctly now appears almost as important as to have the proper ones. The ends desired are to save time and effort for patrons and staff, to reduce and control crowding, to confine noise, and if necessary to protect the library’s holdings. A foremost principle is to place a major service floor at ground level, to include on it those portions of the structure frequented in largest numbers, such as delivery halls and undergraduate reading rooms, meanwhile pushing to remoter regions nad perhaps to upper stories, the more special and less used departments. A partial and satisfactory exception to this is to assign reserved book rooms, when they remain, to a basement, with their own approaches, as is well achieved in the plans for Queens College, New York City.

Companion measures for minimizing traffic lines are to group sections which call for much movement from one to the other, and, where that is not feasible, at least to keep them on the same floor. This applies, for example, to reference and bibliography rooms, and to acquisitions and preparation departments where they are not combined. A corollary effort, this time in the interest of quiet, is to avoid locating reading rooms in such a way that they must be crossed to reach other points. Finally, it may be advisable to arrange all public parts with
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a view to close oversight of them. and of the passing to and from them. Similar precepts are advised and followed in the placing of equipment and activities within rooms.

Some long and arduous lines of movement are apt to remain even after parts have been related advantageously, since buildings are larger than once was the case, and compromise is inevitable in carrying out any project. However, they are being simplified by elevators for patrons and staff, with escalators receiving consideration; by lifts and conveyors for books; and by wire and tube systems for communication.

Librarians realize now that the wisest disposition of elements can be right only while given conditions last. Moreover, they are wary about future contingencies because of the numerous changes they already have observed, such as those in the claims of readers, the responses necessary to users' demands, the forms of library resources, the ways of treating stock, and systems of administration. The classic lesson is the experience of Princeton University which, during the years its building project was being studied, found it necessary to draft a succession of differing schemes to meet evolving viewpoints of the faculty and library staff. They know, furthermore, that obsolescence is as likely to arise from faulty distribution of space as from its exhaustion.

Adaptability and the avoidance of rigid assignments of sections can postpone obsolescence, hence has become a first principle. An early proposal, which only half met the problem, was to build inexpensively and with a view to replacement after twenty to twenty-five years, perhaps by capitalizing the sum a more permanent edifice would have cost. Another was simply to reduce or eliminate inside walls in an otherwise conventional structure, following the "open plan" in public libraries.

The preferred solution, however, turns out to be unit construction, currently referred to as "modular," with uniform spacing of supports horizontally and of levels vertically, and with only exterior walls, piers, and utilities immutably fixed. Normal story heights are kept low, although susceptible of multiplying; floors are strong enough to support whatever may be placed upon them, including stacks; divisions can be created by means of shiftable partitions or panels, or of book cases or furniture; and space allotted to a particular function or body of material can be reassigned to others with little effort or expense. Thus, following the example of loft structures, the utmost in flexibility
is attained, bad guesses cease to be calamitous, and pleasing effects are achievable. All this may be accomplished at a cost which proponents assert need not be greater than for a traditional building, and which in any case probably could be justified by gains in usefulness. It would be too much to say that this scheme of construction prevails in actual buildings; but the idea seems predominant. A fair number of institutions has adopted it more or less fully, the most aggressive supporter being the University of Iowa.

With pressure for space insistent, to plan liberally is not enough. Despite the numerous proposals for limiting, compressing and dispersing collections, every possible measure for rendering extension easy and inexpensive seems imperative. Moreover, plans for enlargement patently should be made when a building is being designed. Additional merits appear therefore in the unit method; for if a structure is rendered adaptable through this it will be expansible as a matter of course, assuming the ground available is adequate. Sections which are uniform lend themselves to accretion without raising constructional or engineering difficulties, and shifts of contents and people naturally can be made to the new parts as simply as within the former walls.

At least one other avenue of growth has won favor. A few small and relatively simple buildings consist essentially of groups of wings, only slightly divided internally and not necessarily of uniform size, placed in ninety-degree relation to each other and perhaps joined by lesser blocks at the angles. Since each of the semi-independent sections tends to be restricted to some particular purpose, extensions can be made with little interior adjustment. Knox and Agnes Scott Colleges pointed the way to this device before the 1940's, and Carroll College and others have followed.

New measures for preserving order and protecting stock are having to be considered, in consequence of freer access to collections, the scattering of users to various rooms, and the growth of student bodies. It may prove practicable to disregard them in case time shows that conditions in libraries generally are becoming more quiet, and that fewer books are disappearing, as has been claimed under the divisional plan at the University of Colorado. There is some apprehension, however, that turnstiles and facilities for inspection at egress will be indispensable if losses are to be kept within tolerable limits. Institutions tend to shrink from such means and their annoying effects. Also, since building codes often insist upon a large number of exits, policing costs
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may be excessive. The problem is the more aggravating because, as was discovered at Columbia University years back, stacks may have to be equipped with so many doors as to vitiate immediate control of major collections. While some administrative questions remain to be answered and their implications for buildings therefore are not clear, it evidently is desirable to keep the points of surveillance few and, as implied in an earlier paragraph, to have them as efficient as possible. This may seek to discourage mutilations as well as to lessen improper withdrawals.

With the aid of architects, librarians have been giving attention to some of the innovations in construction displayed in the general building field, such as thoroughgoing insulation, increased use of welding, and more dependable water-tightening of roofs. They have been more attracted, however, by the features particularly associated with the unit plan. Conspicuous among these are so-called “dry construction,” standardized parts, transferrable members, abandonment of lofty rooms and windows, incorporation of wiring and ducts in piers, combining of light and/or air sources with the capitals of columns, and prefabrication—the last especially for its potential savings. All these have been much talked and written about; and they have been sufficiently adopted, with or without the unit arrangement, to help in giving a few structures novel form and to suggest that a new vogue is being set. There has been some utilization also of floor-to-ceiling windows, as at Houston and the Massachusetts Institute of Technology; and on the other hand interest in a windowless library, although no school so far has come to that.

Novel materials also are becoming evident, for a variety of reasons. Some commend themselves for lightness, others for durability, and a few for economy, while some contribute to the light supply, to safety or comfort, or to flexibility. Examples are precast blocks for bearing walls and partitions; acoustic compositions for ceilings and walls; plastic products for panels, light fixtures and hardware; and glass of various types for partitions, walls and doors. If evolving methods are imparting to buildings a fresh form, the materials becoming available may in time give them a new face. The two, joined with the know-how to employ them, inspire the claim that nothing which would enable a building to fulfil its requirements is now impossible, and that to get what they wish libraries have only to command the resources at hand.

This may be true where other hindrances are absent. There have
been fears, however, that building codes framed years back, to fit the only conditions envisaged then, may hamper the application of structural devices subsequently developed. If there have been serious instances of this in connection with libraries, they have not come to notice. A greater present hazard is restriction of supplies, which basically altered the plans of one major library a few years ago and again threatens as of 1952. Such shortages can affect materials both old and new, and force the use of one in substitution for another more extensively than would be preferred.

Most of the items making up library stock today are not irreplaceable or of more than intrinsic value, and yet the loss of a collection embracing thousands of them can be a calamity. Destruction by fire has occurred in enough instances to hold that danger before librarians, and demand for the smoking privilege has made them doubly aware of the perils. Happily, safety features are inherent in much modern construction. Also, fire doors have been utilized to shut off stacks; chemical extinguishers have found some adoption; and a sprinkler system has been installed in part of a building, although it supposedly is realized that where books are concerned water can do as much damage as flames. Security against fire caused by bombs, as well as against bombs themselves, occupied the minds of the heads of research libraries through the war period, the precautions chosen being isolated locations and concrete shelters for sequestering treasured materials.

Prevailing views about the insides of buildings are traceable to several origins. They represent revulsion from the surpassingly plain and neutral effects long dominant in libraries, conviction that a carefully chosen environment may tranquillize or stimulate occupants and train their tastes, and realization that walls and ceilings can make or mar a lighting scheme. More than whim and imitation accordingly lies in the eager advocacy and adoption of bright and varied colors. In addition they have been employed to differentiate divisions of a building from each other, so that patrons may more easily keep their bearings and learn their way about in the wide-ranging quarters to which they have access. In all such effort, as otherwise in recent structures, simplicity is intended, since anything verging on the bizarre might defeat the purposes sought. Accompanying the enhanced use of color has come that of draperies, and in minor degree the selection of building materials which are friendly to desired hues or serve well as media for them.

Choice of floors is getting close attention because it is seen to in-
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fluence the success of a building project in several vital ways. Floors may go far to determine how quiet the rooms and halls can be; they may help or harm the lighting; they may embellish or impair the scheme of interior decoration; and they may have some effect upon initial costs and a great deal on expense for maintenance. One guide in their selection emphasized today is that requirements differ from part to part of a building, and that there is no reason floor specifications should not be varied to match, particularly where structures are large and many of their sections specialized and separated. Thus concrete may suffice for some basement rooms; stone flags or terrazzo or ceramic products may be requisite where wear is heavy and yet pleasing appearances are desired; asphalt tile may serve well in work rooms, and even in some public portions if economy is forced; linoleum stands out as the chief all-purpose material, for use in numerous situations and where funds are neither meager nor lavish; and rubber recommends itself for the maximum merits consistent with pliancy, and where cost is not a great consideration. After the use of glass and colors, perhaps no aspect of recent buildings is more notable than the striking and efficient floor surfaces they display.

At last it is being admitted that if students, scholars, and librarians are to work with print they must be able to see print, for long periods and without discomfort. It is being learned too that while liberal supplies of light are required there is much more to adequate illumination than a given number of foot-candles. Of equal importance are proper distribution of the light and the avoidance of glare and strong contrasts. With the best of theoretical installations, furthermore, there may need to be particular provision for individuals. Finally, while natural lighting has its values, it is less essential than formerly in view of present-day artificial systems, and in some sections of a building it may make the control of illumination difficult or even be a detriment to the contents, besides necessitating “space-eating courtyards and lightwells” and complicating the treatment of facades.

In approaching the problems of lighting those responsible for library buildings seem alert to the standards furnished by engineers, and to the need for such wiring as will permit increases in loads. Library planners are pressing for higher levels of illumination and for electrical systems which will assure these. They tend to prefer adequate overall illumination rather than to introduce separate individual installations. So far there is no clear choice as among direct and indirect lighting and those in between, nor among incandescent, fluorescent and mixed
sources. In practice, however, little use is made of indirect lighting, perhaps because of its cost in current, and the vote seems predominant for fluorescent tubes, despite some indictments and prejudice against them. The building at Skidmore College probably was the first to adopt fluorescent luminaires exclusively. Others have utilized them more or less heavily, but some have stuck to filaments, in one case at least doing so after prolonged weighing of the factors involved.

As with lighting, librarians have been finding what has to be done to air to make it fully agreeable to people and books. Experience and observation have taught them too that the processes are costly if they include cooling, moistening, drying, and sterilizing, as well as heating, and cleaning. Consequently, while a fair number of new buildings claim air-conditioning, probably in few is it more than partial. Apparently the need has not seemed great enough to warrant complete installations, especially at the sacrifice of other features. Each case must be decided according to the local situation. Current views seem to call for complete air treatment in buildings and sections devoted to rarities, and possibly in stacks and assembly rooms; and for cooling and dehumidifying equipment in warm and wet climates. Otherwise planners are apt to be content with heating, humidifying, and cleaning systems, window ventilation, and such selected individual devices as may prove urgent in particular circumstances. Librarians who consider air-conditioning at all are unlikely to forget that space and construction should allow for whatever forms of it may be desired at any time in the life of their building.

The noises that once were a minor annoyance have grown into a menace as libraries have found themselves in the midst of teeming communities and heavy traffic and have themselves become generators of more or less disturbance. Hence it is felt imperative to limit the sound entering a building or originating or transmitted within it. Interest accordingly has strengthened in the sources of noise, in the sorts and levels that can be tolerated, and in the means for keeping its effects within reasonable bounds. Double windows and acoustical treatment of walls and ceilings have been utilized, the latter widely, and insulation of floors and walls is available. Apparently no complete or infallible correctives for noise are at hand, and librarians presumably realize they can not hope for perfect protection, particularly with such funds as ordinarily are at their disposal. Enough is known and sufficient devices are on the market, however, so that wise plan-
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Planning should save an institution from injurious conditions, once it decides what is necessary.

If planning to meet demands means as much as supposed, librarians hardly could fail to apply it to the furnishings for their structures. Consequently they have begun to study such things as the dimensions, lines and finish of chairs, and the width and design of tables. Frequenters of libraries are more likely than previously, therefore, to find seats which fit the human form, and are quiet and not apt to damage equipment with which they come into contact; tables which are small, which are capable of unregimented arrangement, and which interfere little with other furnishings and the movements of people; desks which are open beneath and free from dust-collecting features; and pieces generally which are consistently simple, informal, graceful and diversified. Some of the furniture favored is of lounge type; some of it employs shapes characteristic of so-called modern design; and much of it utilizes woods other than the traditional oak and mahogany, with light, non-glaring finishes, and bright and varied colors in the upholstery. All-metal furniture has appeared but has no great vogue, perhaps because of the weight and coldness of steel and the expense of aluminum. Glass is prominent in exhibit cases, and is appearing on counters. Standardized lines are thought advantageous for original cost and economical replacement; and “built-in” equipment has come to be avoided because it lessens flexibility.

The staple and traditional requirements for the locating of library buildings, already referred to, have undergone no great change, nor has the fact that choices often are pre-determined. A quiet site may be a little less imperative since ways are at hand to reduce and deaden noise, and one assuring good natural light not so important as dependence on artificial illumination increases. Whatever emphasis is new has to do with the placing of a building on its plot in such a way that access and traffic to it will be the most easy and natural, and the best use can be made of the daylight if that is sought. Suitable orientation can be a leading consideration in picking a site.

In view of current aims library buildings might have turned solely utilitarian and perhaps plain or even repellent in appearance. On the whole they have escaped this because of what they owe to the general amenity of a campus and to the esthetic education of students. Planners desire that new structures have “architectural beauty,” of a kind growing from the fulfillment of purposes. Simple exteriors, unpreten-
tious interiors, rooms that are free from stiffness and even possess charm, and features generally that proclaim the ends and uses of the building—these are the effects sought, even where an archaic architectural form or devotion to unit construction renders it difficult. It is true that some singular results can be found, such as the fan-shaped design at the Oregon College of Education, the structurally odd circular reading room at Florida Southern College, and the box-like and seemingly stilt-mounted edifice at the University of Panama; but these are no more typical than were some of the Gothic curios of earlier years. Most of the new buildings make a good deal of horizontal lines, flat roofs and other ear-marks of "modernism," but have more than justified themselves in such examples as those at George Pepperdine and Fairmont State (West Virginia) colleges, the University of Oregon wing, the University of San Francisco, and the Department of Agriculture at the University of Minnesota.

Concern for harmony with the physical environment also has become more pronounced, whether to be achieved by following the previously approved style; by softening contrasts through judicious placing and suitable landscaping; or by starting boldly with a new motif to which it is hoped later neighboring buildings will conform, as was the intent at Gustavus Adolphus College. Where a regional or local architectural form prevails there may be little occasion to consider anything else, providing it is consistent with practical requirements. Such adaptations are notable at a number of institutions in the American southwest, particularly in New Mexico; and in Mexico itself in the many-storied structure at the University of Sonora.

The need for making funds go as far as possible is nothing new, but has been accentuated by war and post-war conditions. Even in advance of present exigencies there appeared such expedients as erection of an initial unit to serve for all purposes until a complete building could be financed, as was done at Skidmore College; and planning with a close view to inexpensive management and upkeep, which governed the placing of some reading rooms in so large a building as that of Tulane University. Later has come recourse to inexpensive building materials, such as the cinder block utilized for exposed walls at American International College. High prices doubtless have prevented the undertaking of some deserving and even necessary projects. Probably too the prospect of sustained operating costs, particularly with salaries on the rise, has deterred some institutions from programs and building arrangements which would call for larger and more
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extensively prepared staffs. Endowments which would help at this point seldom are reported, although Princeton University has offered a contemporary example.

Remodeling is no more popular than formerly as a resolution of building needs. Indeed, the devotion to clear and definite purposes may make it more unwelcome than ever, and the attempt to accomplish it more irksome and unsatisfactory. Sometimes, however, a renovation, perhaps with additions, has to be the answer, based usually upon the principles, methods, and materials commonly invoked for new structures. With this approach it has proved possible to rebuild and expand acceptably in a number of cases, notably at Mount Holyoke College before 1940 and continuing since then at Connecticut College for Women, Bates and Simpson Colleges, and the Ohio State University.

Comprehensive reconstructions are apt to entail a good deal of shifting of furniture and materials, and careful scheduling of operations to keep them going smoothly amid changes and confusion. These, together with the large-scale moving called for when a new edifice replaces an old, are being studied and practiced to the point of becoming an art. The planning which goes into them and the gadgets invented for carrying them out are ingenious aspects of present-day library management. Some entertaining illustrations of their use have occurred recently at California Polytechnic Institute, the University of Washington, and Rollins College.

The developments recited have been fostered by a new and positive attitude to planning, and this in turn has been accompanied by increased attention to buildings in print, by activities relating to them on the part of professional organizations, by extensive conferring among architects and librarians, and even by the setting up of an agency to proffer paid advice. It has been evidenced further by earnestness and collaboration on the part of institutional representatives, other than librarians, in attacking their local problems.

The ideal today is to start with a clean slate, perhaps drafting a schedule of procedure and a check-list of possible items. Then there can be considered the aims, the operations implied, and the accommodations necessary, all with regard to the needs of users.

Such a process entails visualizing the requirements as expressed in capacities, forms of organization, facilities, and theoretical relationships and controls. It may involve study of tasks, equipment, and lines of traffic and work-flow, and lead to considering space standards and
determining areas. Further, it must look to the future as well as to current conditions. The importance of such effort is attested by the decade devoted each to the Dartmouth College building and to the Lamont Library at Harvard, and by the twenty years of planning which went into the Firestone Library at Princeton.

Those who take their task thus seriously often consult librarians and building committees elsewhere, and examine other buildings to ascertain what will and what will not work. They have been reminded too that it may be worth while to inspect public buildings other than those of libraries.

With these preliminaries has come commonly the preparation of formal programs, to set forth desiderata, priorities and preferences, together with the general information and details the designer may need. Aside from their obvious uses, such statements can be indispensable in getting ready for conferences with architects. Representative examples have been produced at Antioch, Goucher, and Santa Barbara Colleges, and at the University of Pennsylvania and the Massachusetts Institute of Technology.

Several parties may share in drafting a program, but all are likely to recognize the librarian as the one who must furnish the bulk of the data and direction. They seem to know by now that without the librarian a building can easily fail to be successful. This is a far cry from leaving him out of the deliberations, as happened sometimes to his predecessors of former generations.

Pursuant to his work on the program the librarian may become the most constant spokesman for his institution on building matters, as he supports and elaborates what he has specified. Incidentally, a code of responsibilities tends to grow up, so that librarian and architect can make their respective competences fully effective in their joint task. Both participants these days seem to realize how essential such team work is, and that ordinarily a project allows ample latitude to each.

Probably no one would hold that a library structure made even “from the best elements of existing . . . buildings would be adequate.” Much remains to be done in studying what it is suitable for college and university libraries to undertake, and then what housing will best forward their purposes.

Persons exploring library problems have commented on the gaps in such knowledge, which involve curricula, methods of instruction, the types of facility appropriate to the work of a particular college, the reading interests of students, the size and contents of library collec-
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tions, the effects of various kinds of rooms upon use in a given institution, and the relative costs and benefits in such features as divisional libraries and special subject rooms. They point out that there exists no scientific basis for evaluating library buildings and therefore for planning them. And it may be inferred from previous paragraphs that the problem of growth calls for systematic investigation.

Criteria would be useful for estimating space allowances, particularly in such units as delivery halls and circulation rooms, and in those sections which may have to function in new ways if electrical and mechanical selectors become generally used. There are questions too about flexibility, and whether it should be applied to a building as a whole; and the same about expansibility, since even it must have limits.

There also are insufficiencies to be overcome on the constructional side. As already indicated, the possibilities here are fairly well established and available, except possibly on such matters as air-treatment, lighting, and the costs entailed in the unit method. Presumably for want of familiarity with known resources, however, or of funds or assurance to employ them, libraries have lagged in utilizing the contributions of engineering. This is recognized as the more unfortunate because of what that science may be able to do to correct the mechanical omissions which have handicapped administration and service in the past.

A dominant theme must be manifest to all who examine the thinking and developments of recent years. Librarians of the 1940's and 1950's have sought above all else to define the task of their institutions and to shape their buildings so as to get it done. This effort naturally has shown in their platforms of work, in the accommodations they have specified for readers, materials and staff, and consequently in the arrangements and fittings they recommend. It gives to functionalism the direction and meaning without which that much-bruited principle would have little application to the rearing of library buildings.

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Some Questions on Three Cooperative Projects

EDWIN E. WILLIAMS

Most ideas on library cooperation can be traced back a long way, and one could chronicle years of practical experience with exchanges, inter-library lending, and bibliographical enterprises of many sorts including cooperative cataloguing.\(^1\)\(^-\)\(^3\) The three projects to be considered here embody suggestions of considerable antiquity, but Farmington Plan books have been coming to the country for only four years, the Midwest Inter-Library Center opened its doors during 1951, and the Northeastern Regional Library is still only a proposal. In the hope that an attempt to look objectively at the dangers ahead may benefit such youthful undertakings, this article—unlike the traditionally optimistic treatments of cooperation that stress past successes and future opportunities rather than failures or difficulties—will devote itself to questions.

Both the Farmington Plan and the movement toward central libraries assume that the major research collections ought to coordinate their efforts better than they have done in the past; both are attempts to add to total resources and to reduce the duplication of infrequently used materials. These objectives and the assumptions on which they are based will not be questioned; a librarian who does question them may find his doubts productive only of frustration if he can neither abolish areas of instruction and research nor hope to acquire everything that some present or future member of his faculty might want.

The Farmington Plan began on a small scale in 1948 without a capital investment; even a modest launching would have been much more difficult if there had not already been a Union Catalog in Washington and a well-established system of inter-library loan supplemented by photographic reproduction. Though it now brings books to Ameri-
can libraries from seventeen countries instead of from the original three, it is still an infant in size compared to what it might become. It does not cover serials, public documents, materials not in the book trade, juvenile literature, music scores, pre-college textbooks, sheet maps, theses, or translations from one modern language into another.

A library that participates in the plan must spend a certain amount of its book funds, and, inevitably, of its funds for processing and storage, on publications it would not have selected had it been buying solely on the basis of present and potential needs of its own community. Just how much the plan is costing any institution would be very difficult to determine. One would have to ascertain which of the books that come on Farmington would not be bought otherwise—perhaps very few of those dealing with subjects in which the library is particularly interested. Even if no deductions of this sort are taken into account, the present costs may not seem intimidating; during 1951 the participating libraries spent approximately $34,000 for the 17,000 volumes supplied to them under the Farmington Plan, but their total expenditures for books, periodicals, and binding came to more than eight million dollars that year. Illinois, receiving more Farmington books than any other library, spent $4,400 for them; Harvard, which was in second place in 1951 and may be first during 1952 when it will cover law from seventeen countries instead of only five, spent about $3,550; the New York Public Library, Yale, Columbia, Chicago, New York University, Minnesota, Catholic University, and Purdue spent more than one thousand dollars each; eight others spent between five hundred and one thousand dollars each; twenty libraries spent between one hundred and five hundred dollars each; and the remaining sixteen spent less than one hundred dollars each. Only Catholic University spent more than two per cent of its total book funds for Farmington purchases; the figures for Illinois, New York University, Brown, Dartmouth, and Massachusetts Institute of Technology were more than one but less than one and one-half per cent; and Farmington receipts accounted for less than one per cent of the amount spent by each of the other forty-eight participants on books, periodicals, and binding.

Extension of the plan ought to produce more alarming figures eventually, but it can be argued that the largest libraries, buying for

*The countries now covered are Australia, Austria, Belgium, Bolivia, Denmark, Ecuador, France, Germany, Italy, Mexico, the Netherlands, Norway, Peru, Portugal, Spain, Sweden, and Switzerland.
potential needs, must do a good deal of selection by guesswork, and suffer little from a reduction in the funds available for wagering on obscure titles that seem promising. The plan's supporters are convinced, of course, that scholars and libraries of the nation as a whole will be better off if one copy of each current publication is brought to the country and individual bets are made only with the money left after this has been done. At best, however, such arguments may prove only that the project ought to be undertaken by someone, not that a specific library will benefit because it participates instead of letting others do the job. An individual may be convinced that the Army is essential, yet doubt that it would do him good to enlist.

Since there is no selective service law behind the plan, any participating library may be asked difficult questions. A member of the faculty may want to know why a collection cannot be bought for his use when the library is spending money for "marginal" material that admittedly is likely, if ever used, to be wanted by a scholar from some other campus. Prospective donors or those who authorize budgets may ask why, in view of the same circumstances, more funds ought to be provided for books or other library purposes. The questioner may not be silenced completely by a reply that the library ought to do its share in furthering a good cause and that Farmington purchases take a small percentage of a great library's budget; a great library will already be lending many more books than it borrows and serving numerous visiting scholars from less fortunate institutions. Then why, the critic may ask, should it, rather than libraries that are already indebted to it, have volunteered to assume Farmington responsibilities? It might seem reasonable to ask such questions even if Farmington books were given to libraries, since money is required to process, store, and lend them.

The plan has operated independently of central libraries, which could be established if there were no Farmington Plan. If both plan and central libraries are to exist, however, it is natural to propose that infrequently used materials acquired under the plan be forwarded directly to institutions created to house such material. If it is cheaper to store books at a center than at home—and it surely ought to be cheaper if the central library's building is a gift—then any Farmington Plan library ought to be able to save money by having some of its receipts under the plan go directly to the center. Yet this procedure might not make it easier to answer questions of the sort suggested above; a professor or an appropriating body might find it very hard
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to understand why the library spends money on books that do not even come to it, but go to an institution miles away and nearer to other communities of scholars than to its own.

Up to now, the Farmington Plan has called on libraries to buy some relatively obscure books and let outsiders use them. Great libraries have been used to doing this, but the plan required explicit promises, which they had not made before. It will be a still more distinct break with tradition if libraries start to buy for a geographically separate institution, and will deprive participants of most of the prestige that comes from maintaining an outstanding—even though rarely used—collection in any subject.

Perhaps one ought not to assume that tradition, the emotions, and other seemingly extra-logical considerations have no bearing on the problem. Has any sponsor of central libraries been so unrealistic as to propose that rare book collections be consolidated? There may be rational grounds for the suggestion, particularly at a time when some librarians are thinking of shipping many of their rarely used treasures to non-metropolitan locations where they would be relatively safe from air raids; one could argue that selling the duplicates from a bibliographical Fort Knox might help to solve a few financial problems. The fact that such a proposal is unthinkable may support the theory that budgets and research needs are not the only factors determining the limits of library cooperation.

The new Midwest Inter-Library Center and the proposed Northeastern Regional Library have been referred to as central libraries, but that term may need some explanation. There seems to be general agreement that the New England Deposit Library, at least so long as it remains only a cooperatively financed warehouse, will not qualify for membership in the new species. A central library must normally eliminate duplicates when multiple copies of any work are deposited, and the remaining copy must either become the property of the center or be deposited there permanently; otherwise a member would have no assurance that a copy of each book that is contributed will always be available for use when needed. A true central library, it is also agreed, must have an acquisition program of its own, for, as noted apropos of the Farmington Plan, it would obviously be uneconomical to require that infrequently used material new to the region pass first through the hands of a member institution.

Achievements and hopes of the Midwest Inter-Library Center have been described in its monthly Newsletter and in a number of recent
articles by its director, R. T. Esterquest. Whatever further activities the new institution may decide to undertake later on, acquisition and storage of jointly owned materials may fairly be called the basic ones, for an office—or a bibliographical center of the sort established at Philadelphia, Seattle, or Denver—could operate an inter-library communication system and the centralized acquisition and cataloguing plans that have been proposed; these do not presuppose a great inter-library book collection housed in its own building.

The Midwest center is off to a good start, with foundation grants totalling one million dollars to pay for a building that will hold more than 2,500,000 volumes and to cover some of the costs of organization. Assessments to support operations for the fiscal year 1950-51 had to raise only $30,000; they were based on book budgets, the number of doctorates granted annually, and proximity to Chicago. The largest assessment, paid by the University of Chicago, was $4,700.64. Prospective increases can hardly be estimated until it has been decided what the center will undertake to do. At least, however, if it seems reasonable to doubt that the members would have paid for the building themselves, it may follow that a problem will arise when the original storage capacity is exhausted and funds must be obtained for a second unit. Even now the objection can be made that, if any library chose to give its infrequently used materials to the center but not to join, it could obtain most of the benefits of membership without paying the annual assessments.

This, of course, raises pretty much the same problem of fairness versus contributions to the general welfare that has been treated as a Farmington Plan question. Fees for use of the center by non-members (or for use of Farmington Plan books by non-participating libraries) might seem to offer a solution, but they would create serious complications. If, like the charges libraries make for photostats and microfilms, they merely covered some of the direct costs of a transaction, they would by no means suffice to make non-members pay their share; equity would demand fees so large that they would be a real hardship for the scholar. Moreover, if material on the shelves of member libraries can be consulted by visitors or borrowed by other libraries without charge, it would seem illogical to make outsiders pay for the use of those holdings that happen to have been transferred to Chicago. If the citizens of a state have traditionally been entitled to free use of books in the library of the state university, they may reasonably expect also to borrow without charge books in a center of which the state uni-
versity is a proprietor. Since a majority of the members are state institutions, taxes ultimately must provide most of the center’s funds. Though it undoubtedly would have been much more difficult to arrange, it might have been more logical for the states directly—instead of through their universities—to have established the center as a library for all scholars of the area and, since midwestern scholars call on libraries in other regions, of the country.

The leading members of a Northeastern Regional Library would be privately endowed institutions. One can argue that it would be as reasonable for them to charge fees for use of their library resources as to charge tuition for the instruction they give; likewise, since they spend more on each student than they collect from him, such fees need not be set at prohibitive levels based on full cost-accounting. There are always some books too fragile, valuable, or popular to be sent away on loan, and libraries in large metropolitan centers sometimes find fees or other restrictions necessary to prevent outsiders from making such heavy use of the library as to interfere seriously with its use by members of the institution. Subject to minor reservations like these, however, scholars have traditionally been entitled to visit libraries and borrow from them free of charge; the tradition may be illogical, but abandonment of it might be a grave mistake. A university that has been given millions of dollars for its libraries cannot fail to appear meanly selfish when it first starts to charge for each visit by a non-affiliated scholar or for each volume it lends him. Such a library hopes, of course, to receive more millions from its generous friends, and must consider the effect of its fees on these potential gifts. Any fees, essentially, will penalize institutions that have smaller libraries because they have been less successful in attracting gifts. This is fair enough from one point of view, but adoption of that point of view would make it very hard for a library to justify its participation in the Farmington Plan or a central library.

Perhaps questions of equity have been absurdly overemphasized here; few projects could be undertaken if one had first to make sure that there would be a perfectly fair apportionment of burdens and benefits. Rationing and community funds can succeed in spite of black markets and avarice; the danger they face is that non-cooperation may become contagious if too many persons ask, “Others are getting meat, why shouldn’t I? Others give nothing, why should I give?” Perhaps so few librarians and other university officials will be guilty of this attitude that the perils suggested above are wholly imaginary.
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It is to the credit of the Midwest center if its example has led many librarians to assume that anything done in the Northeast ought to be along the same lines. Nevertheless, a paper devoted to questions should try to suggest reasons for doubting that assumption.

In the first place, if no money should come to the northeasterners from an outside source, or if they should be given money to be used for any purpose they might wish, are they sure they would want to erect a building? An inter-library office, it has been pointed out, might be able to handle the cooperative acquisition and processing work that has been proposed in the Midwest. It is also possible that the northeastern libraries could agree to send all their infrequently used public documents to one member of the group, all old textbooks to another, and so on. Each would need to provide for inexpensive storage, but this might be done individually or through local institutions like the New England Deposit Library as cheaply as in a regional center. Is the question of a building fundamentally one of fund-raising strategy, or is it easier for libraries to relinquish books to a center than to one another? If a building can be obtained by gift, it will almost certainly be accepted, and perhaps funds can be raised for a building more easily than for anything else, yet the same theory might be used in arguing that it would be easier for members to finance their own individual storage buildings than to pay for other features of a cooperative program. Likewise, if the advocate of a center asserts that it is easier, because of traditional and human factors, to give material to a center than to a rival library, his opponent may reply that the same factors make it easier to pay for the storage of infrequently used material if it is individually, instead of collectively, owned and housed.

A second series of questions might begin with this: Is it a sound assumption that the country’s second central library ought to be a regional one? Regardless of the sources of its support, if a super-library is built up by the New York Public Library, Harvard, Yale, Columbia, Pennsylvania, Princeton, Cornell, and their neighbors, it must inevitably serve scholars nationally, for it will contain a great many books that are to be found nowhere else in the United States. If it is to be explicitly national in character, one can hardly fail to think of the possibility of operating the new institution as a part of the Library of Congress. This annex presumably would not be established in Washington, if it were in a rural setting it might include stack space available for rental to rare book collections during periods of insecurity, which promise to continue or recur for some years.
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If the northeastern project is really national, there is another possibility—so ridiculous, no doubt, that it would occur only to a former Californian who once supposed (and even thought the map backed him up) that Illinois, Pennsylvania, and Massachusetts were all somewhere off in the northeastern corner of the nation—viz., the northeasterners might consider trying to move in on Chicago's central library.

Distance, of course, may raise fundamental and difficult problems in any cooperative project, though it has been ignored by the Farmington Plan, which provides only that a copy of each book come to a library somewhere in the country. Distance causes trouble because it costs time or money, if not both. In communication by telephone or wireless, time disappears from the picture, and, by the fastest available transportation, two small towns in the same region may be further apart in time than San Francisco and New York; distance does, however, materially affect telephone tolls and the price of tickets. When it comes to first-class mail, on the other hand, three cents will take a message anywhere in the country, but the extra miles may require extra days. Rates for book-post also disregard the postal zones. One can therefore very nearly eliminate the factor of time, even in travel by individuals, if one is willing to pay for doing so; one can get books and messages (but not persons) from one coast to the other as cheaply as from one suburb to the next if one is willing to take the time. Distance is a problem that has grown less serious and that may continue to shrink.

Still, if the pride of individuals in their own institutions must be taken into account when planning cooperative ventures, regional pride may also need to be considered. More great libraries are located near the main railway line from Washington to Boston than exist anywhere else in the hemisphere; the country's second major group of research libraries is the one centered somewhere in the Chicago area. Possibly the Midwest, because it was in second place, found a regional library more attractive than any other section will. The South, the Mountain States, and the Pacific Coast are a little too far behind the Northeast in library resources to rival it for some years to come whatever they do. The midwestern institutions, one might assert, saw an opportunity to catch up by collective action much more quickly than they could have hoped to do separately, and this may have helped to reconcile them to the prospect, as pointed out by Ellsworth and Kilpatrick,¹¹ that their central library would in time overshadow the individual libraries that created it. Perhaps the desire to stay ahead will supply
the Northeast with an adequate incentive; perhaps there is enough regional consciousness and pride there to make it easier for libraries to plan an ostensibly regional rather than admittedly national institution. At least it can be predicted that they will want most of the books that leave their individually owned shelves to remain within a few miles of salt water.

The problem is certainly national, but strategic considerations may, and probably should, determine the next step. If money were available, there could be a discussion of how best to use it; if one plan and only one were obviously desirable, there could be an attempt at least to raise the necessary funds. As it is, however, there are several plans that may be adequate, and good reasons exist for asserting that the best of these to choose is the one that has the best chance of attracting the necessary financial support. The author would be gratified if he could convince even himself that he knows what ought to be done. Instead, unfortunately, he must end with a summary that leads only to a further question.

Summary. Major libraries, some privately endowed and some tax-supported, are trying to increase the country’s total resources for research by taking part in the Farmington Plan, which requires a type of sacrifice in behalf of the general welfare somewhat different from the contributions that these libraries have been accustomed to make. Midwestern institutions are supporting an inter-library center that ought to benefit both the region and the nation; it, too, requires them to pay for something that may help others as much as it helps them and, in addition, limits their individual ambitions. Librarians of the Northeast hope to make a comparable attack on the problem of resources and costs; the present holdings of that area are so important that scholarship throughout the country can be directly and quickly affected by what is done there. Those who will have to give up something—the largest libraries—must decide how far they can go, and will no doubt make the plan, but all the research institutions of the country, if they agree that the plan is good, can expect to benefit from it. Need it be assumed that those who will volunteer to give books must also be entirely responsible for obtaining the money?
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