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of its holdings in 1810. A new one appeared in 1827, with supplements of
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were, in order of size, Harvard University, the Philadelphia Library Com­
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Consequently the catalogue here reproduced, which was begun when
William F. Poole became Librarian of the Athenaeum in 1856, has more
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The work proceeded slowly. Charles A. Cutter, who succeeded Poole as
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single alphabet. When Charles R. Lowell, who was employed upon it
from 1857, died suddenly in 1870, Cutter took over the editorship.

January 1, 1872 having been set as the date beyond which no new book
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Part I, A-C, was completed in 1874, it was 1882 before Part V, T-Z
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Editorial

Besides noting a change in cover format, we hope that readers of this journal will detect other changes. While we intend to continue reporting the results of scholarly research of interest to academic librarians, we want to place more emphasis on current affairs. Problems confronting academic librarians deserve a thorough airing: the younger professional's struggle to achieve recognition and promotion, for example, or the increasing obstacles to financing academic libraries, or the implications of automation in academic library administration and services.

In this issue we have initiated a discussion of four aspects of academic status. There are more than two sides to any problem, and this journal is open to those who can contribute in a literate and intelligent fashion, preferably both at the same time.

Letters to the editor will be a regular feature. We encourage and will publish substantive replies, pro and con, to papers which have appeared in the journal. We assume that authors are prepared stoutly to defend their views, their methodology, and their facts when they submit a manuscript for publication.

Members of the profession will be invited to prepare guest editorials on issues about which they feel strongly. And on occasion the editors may ride a favorite hobbyhorse.

We expect to review more books than in the past, and we will list on the "Books Received" page those current titles which we will not review but which deserve notice. We will continue to reprint relevant ERIC abstracts. Library doctoral students are urged to submit summaries of their research; our only requirement is that the topic be of interest to academic librarians and that the manuscript be pruned of deadly dissertationese.

The principal objective of College & Research Libraries is to report the results of scholarly research. We hope this does not preclude the possibility of its being interesting, even exciting. During Eric Moon's tenure as editor of Library Journal, though many often disagreed with him, his journal was not dull. A number of people have asked us what we would like to see this journal become. Our answer: more interesting.

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Academic Status for College and University Librarians—Problems and Prospects

Academic librarians will achieve and deserve full academic status only after they cause changes in the bureaucratic structure of libraries and in library education, and when they provide professional service on a scholarly level.

College and university librarians have not enjoyed overwhelming success in their efforts to secure full academic status. With only a few exceptions, the benefits of academic status have been superficial; substantive areas—salaries, research support, self-direction on the job, voice in academic policy and practice, peer evaluation—have not really been touched. The reason is because librarians have had great difficulty in demonstrating to the academic community, and frequently even to themselves, that they perform a function justifying full academic status.

The situation is now changing. Not only do the new information demands and problems of the academic community provide an opportunity for the librarian to assume a role that is as sophisticated, demanding, and necessary as any other within that community, they require that he do this or step aside so someone else can take over this function. Furthermore, it is becoming clear that full academic status will not be simply an outgrowth but a necessary concomitant of his assumption of this role. Consequently, this is an opportune time to look once again at the problem of academic status for librarians, to gauge how it may be achieved, the obstacles that remain, and what is in store for librarians if they do not achieve it.

Any consideration of academic status must begin with an appraisal of the academic community, its structure and value system. John J. Corson, in his analysis of college and university organization, notes that it has “two structural arrangements operating to a large degree on a parallel basis,” each of which fulfills a different function. On the one hand, there is the “academic” segment, composed primarily of faculty members, and organized into departments and schools. These are the specialists who perform the primary teaching, research, and public service functions of the institution. They are “not a subordinate level of workers operating under a structure of hierarchical authority [but they] exercise individual and collective responsibility for the conduct of the learning and research process.” They evaluate each other’s performance through review committees and, meeting together as a council or senate, they determine

Mr. Smith is Head, Search Division, Acquisition Department, at the University of California at Berkeley.
the educational policy of their college or university. 5

The second or “nonacademic” structure is quite different. It follows the classic “line” organizational pattern of a bureaucracy. 6 It includes managerial, clerical, and maintenance personnel who keep the records, operate the business offices, and perform custodial functions. Such personnel carry out, according to well-established routines, decisions made by administrators. This double structure is coordinated by the president, chancellor, deans, and department chairmen—administrators with academic backgrounds or practicing academics who also perform a part-time administrative role.

This structure and the roles of its component elements have evolved over time, characterized by steadily increasing specialization and diversification. Until 100 years ago, the professor was “an intellectual generalist who might at once profess natural history, ethics, and theology while remaining a Latin or Greek scholar.” 7 College faculties were small and performed most of the institution’s managerial as well as educational functions.

During the past century, however, both the nature of the college or university and the role of the professor have undergone significant changes. Educational institutions have become “pluralistic” combinations of “diverse structures, programs, and personnel.” 8 The faculty member has changed from a generalist to a specialist. There has been “a progressive decline of his character-developing function along with a strong tendency for the research and informational functions to part company and form two separate callings.” 9 His orientation has become primarily “professional as opposed to institutional.”

One of the most significant outgrowths of this situation has been the appearance of a growing number of professional specialists, researchers, counselors, program developers, and many others who perform highly skilled functions that were once carried out by the faculty as part-time activities or which did not exist until recently. These specialists occupy a kind of no-man’s-land. While the sophistication of their work is unquestioned, and while their contribution to the educational, research, and public service activities of their institutions is becoming more pronounced and essential, they have not generally been accepted as full-fledged members of the “academic” community. 10 The trend, however, seems to be in this direction. Certainly the academic community is coming to recognize that successful education, research, and public service in the modern world require an increasing array of highly qualified personnel, all of whom make essential contributions to the academic enterprise.

Among such personnel, librarians occupy perhaps one of the most ambiguous positions. Originally a custodial function carried out by faculty members in spare moments, academic librarianship has become a full-time occupation requiring special graduate education. 11 Yet despite its educational requirements, librarianship has not been widely accepted as an academic activity. Much of this is due to the approach that librarians have taken to their responsibilities.

By concentrating their efforts on the more routine aspects of library operation, by emphasizing institutional goals, and by adopting bureaucratic organizational patterns, college and university librarians have effectively aligned themselves with the nonacademic segment of their communities. Even librarians who have most vigorously advocated their acceptance as full-scale academics have recognized the serious defects in the image they present to those who must accept them into partnership. They note, for instance, that most faculty are unable to distinguish between members
of the clerical and professional library staffs when they contact them. Unfortunately, the full implications of this situation—the need to realign functions within the library and to concentrate on expanding sophisticated professional service—have only recently been clearly perceived. Prospects for such changes seemed remote in the past; they now appear not merely attainable, but necessary. There are several reasons for this.

Fundamental changes are taking place in modern education. With the growing stress on self-direction and research for the undergraduate student, instruction is moving beyond the confines of the classroom and into the informal conference, the laboratory, and the library. At the same time, faculty and graduate research is becoming increasingly complex, with a rapidly growing volume of material to absorb in every field, even as the urgency to cover that material and accomplish the research quickly also intensifies. Social demands continue to broaden the areas of research and instruction.

Such developments have brought a new importance to traditional library activities. The great volume and variety of scholarly and informational publication that is a direct outgrowth of contemporary research is making bibliographical control both more demanding and more necessary.

Major advances are being made in descriptive bibliographical control by inter-institutional cooperation. Hopefully, these will be extended and supplemented by more of what one writer has termed “exploitive control . . . the ‘special’ library serving a group of scholars accustomed to talk to each other, and staffed by persons approaching the type of the bibliographical consultant rather than the bibliographical aid.” Such consultants can provide service tailored to a library’s specific clientele, such as the compilation of special bibliographies and information about new publications, and can fill in the gaps in more formal bibliographical coverage through publication. In this respect, the bibliographical consultant would also become a bibliographical scholar.

The explosion of knowledge and publication is also making in-depth reference or information service a prime necessity in sophisticated educational and research programs. With the growing emphasis on individual study, libraries will be expected to provide such service to scholars and students who are becoming less bibliographically self-sufficient even within their specialties. Moreover, as information developments make a moderate skill in library research almost a necessity for every educated person, academic librarians must assume a more formal instructional role in their colleges and universities, teaching students at least its more rudimentary principles.

One of the most heartening developments in academic librarianship is the increasing assumption of collection-development responsibilities by librarians. Not only are faculty members increasingly reluctant to continue to bear this responsibility in addition to their teaching, research, and committee work, but collection development is itself becoming so specialized and demanding that it is unmanageable for anyone except an expert who combines a knowledge of the field with a specialty in its bibliography and in library practice. Indeed, a corps of such specialists who work within each of the scholarly disciplines as well as together in developing the overall library collection program can rationalize that program and tailor it to the needs of the institution in ways never possible before.

Such developments are making it possible not only for the academic librarian to assume substantially important functions within the academic community but to achieve full partnership there. As
he provides formal classroom instruction in library research and more personalized informal instruction through in-depth reference, as he shoulders the responsibility of bibliographical scholarship, as he cooperates actively in research and education programs through collection development and specialized bibliographical coverage, he moves toward full parity in the teaching, research, and public service functions. Under such circumstances, as Charles E. Bidwell recently noted, "some of the endemic problems of academic librarianship will be swept away; for example, the indifference of the faculty or the marginal status of the librarian." Moreover, the librarian will do this not by aping the faculty but by performing a complex and necessary service that no one else in the academic community is qualified to provide.

Yet serious obstacles remain. A crucial problem is the bureaucratic structure of libraries, which emphasizes institutional goals and loyalties. Professional service functions must be made clearly primary, and distinguished from nonprofessional, secondary institutional functions. Librarians must transform their hierarchical, bureaucratic junctions with each other into collegial, professional relations.

This means that decision-making in such matters as collection development, bibliographical control, and information service must be within the discretion of the individual expert practitioner, acting within a collegial framework, and restricted only by the most necessary institutional restraints. Supervision of professional activity must be abandoned and replaced by general administrative coordination and peer evaluation. Rewards must be based primarily on professional accomplishment, not bureaucratic position; academic benefits must be substantial enough to attract, keep, and develop topflight personnel.

A second problem is evident from a recent study, which showed that the profession does not generally attract the highest level of student, that it is unable to keep many of the best that it does attract, and that it contains a high proportion of people who have little commitment to advancing their field of activity—women for whom librarianship is a secondary function, men who have tried several fields before settling into one which presents fewer challenges or who sought such from the beginning. Considered in relation to faculty and research personnel, what is most wanted is the dynamic, creative individual who is serious about the work he does, its importance, and his own decisive role in performing it.

This means librarians who do not simply accept direction or depend upon routine but who will question what they do and how they do it, and who will attempt to enlarge and perfect their field, its theory and practice. It also means librarians who will involve themselves with the rest of the academic community not as handmaidens but as partners.

A third problem involves changes in library education. The Committee on Research Libraries of the American Council of Learned Societies, in its report to the National Advisory Commission on Libraries, noted that "an increase in the number of trained librarians would not necessarily meet the distinctive requirements of research libraries." Rather, library schools must begin to "produce the rare hybrid that every research library seeks, the librarian-scholar, either by divided graduate programs or by courses in librarianship specifically designed for linguistic or area specialization."

This statement has several implications for academic librarianship. First, it stresses the need for more librarians with specialized knowledge. Unfortunately, it perpetuates an old shortcoming by its altogether too-limited view of
the kind of specialization that the modern academic library needs. Library schools must, of course, produce graduates who are much more knowledgeable in subject and area bibliography, but they must also produce specialists who have a sophisticated knowledge of the bibliography of maps, government publications, and other special materials. They must also produce graduates who are knowledgeable in scientific management, organization theory, social psychology, and other pertinent fields so that they can administer the complex activities of the modern academic library.

Second, the statement points up the need for more stress on substantial theory in library education. Where, in the past, library schools have placed emphasis on cataloging practice, they should now stress the theory and practice of bibliographical control, of which cataloging is only one increasingly narrow and routine part. Where they have taught lists of reference titles, they must now stress the theory and practice of information service, including the evaluation of client needs and the techniques of locating the information that most suits those needs.

Third, the committee has highlighted the importance of interdisciplinary education. Neither library schools nor graduate subject programs are presently educating the “scholar-librarian” that the research library needs. Only coordinated programs, in which the subject field provides the subject education and the library school the bibliographical and information-process training, will answer this need.

Finally, the committee’s statement raises once again an old bugbear of library education: quality vs. quantity. For a number of years, in the mistaken belief that libraries require a vast herd of additional professional personnel, the schools have produced a large number of poorly educated graduates. Academic libraries do not need a great many additional professionals. If anything, they have too many librarians now: most of them spend the bulk of their time doing clerical work which nonprofessional personnel can perform equally well for substantially less money. What academic libraries do need is fewer but better-educated librarians who can step into the collection-development, substantial-reference, and bibliographical-consultant positions that are now largely unfilled.

Library educators have demonstrated an awareness of these problems for some time; however, they have moved rather slowly toward solving them while they have continued to debate their merits. Now some important steps are being taken to improve library education through more emphasis on divided programs, particularly within the compass of the developing sixth-year specialist programs. Such efforts must be accelerated. At the same time, the old fifth-year programs should be abandoned or drastically revised for academic librarians. Certainly, the generalist approach is no longer applicable to the education of the sophisticated specialists that research libraries require.

Even if the problems of organization, personnel, and education are solved, academic librarians will still have to overcome the strong tendency toward exclusivity within the academic community. Those who have academic status keenly remember the long and difficult education they underwent to gain admittance themselves, and they highly esteem the substantive work they do to maintain their position. An academic’s perfectly proper jealousy does not make it easy for others, who may have somewhat different qualifications and functions, to become full-fledged members of the academic club.

Faculty members have, however, demonstrated a willingness to welcome as colleagues those librarians who pos-
sess bibliographical expertise in specific fields, particularly when such expertise is scholarly and is based on substantial formal education, including graduate work. Thus, for example, a librarian specialist in African studies, with advanced degrees in that field as well as in librarianship, who is involved in an area studies program—coordinating collection development, extending bibliographical control tailored to the program, instructing students in how to do research in the literature, and doing research himself that is oriented toward improving the control or use of the literature—is functioning as a full academic peer of the African studies faculty. Furthermore, the librarian soon makes it evident that he is a very essential part of the program. Where librarians have functioned in this way, faculty response, which may have been quite skeptical at first, has become enthusiastic. Furthermore, in studies of faculty attitudes toward library service and the status and role of librarians, it is this kind of librarian that they have requested and it is this kind of librarian that they have been willing to recognize as a full-fledged academic colleague.

College and university administrators must also approve the granting of academic status. This is usually the last and decisive step, and it may also prove to be the most difficult, because administrators rightly perceive higher costs in higher status. It will be crucial to have faculty support: influential pressure, based on an awareness and appreciation of high-quality service from specialist librarians, may well determine the outcome.

Academic and professional library organizations will have to provide more active support; it is unfortunate that these associations have not done more to help librarians deserve and achieve full academic status.

Obviously the changes outlined in the preceding pages are not going to be easy. They will require considerable commitment, planning, risk taking, and a willingness to relinquish old ways. On the other hand, perhaps the greatest strength in the academic librarian's drive for improved status, as Goode noted in a somewhat different context, is that many of the crucial decisions are in his own hands. The reorganization of libraries, the revision of library education, the expansion of professional service and the reallocation of responsibilities within libraries—these are matters that are largely within the province of the profession. Some expansion of benefits to librarians, such as more time for research, more professional involvement, additional leaves, some salary adjustment, are also possible in most academic libraries without outside approval. It certainly is true that as long as librarians treat each other as nonprofessional and nonacademic bureaucrats, they will retain just that status within the academic community.

It is time, also, that librarians recognized that academic status is much more than a matter of position or benefits. It is closely tied to their present and future role in higher education. Unless they assume responsibility for providing the bibliographical and information service that is crucially needed in colleges and universities, others will be called in to do this and the librarian's status problem will be solved once and for all in a way that he does not want.

References
1. The literature on the academic status of librarians is voluminous. A good recent survey is provided by Florence Holbrook, "The Faculty Image of the Academic Librarian," Southeastern Librarian, XVIII (Fall 1968), 174-193.
5. Corson, p. 35.
6. Ibid.
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12. Jane Forgetson, "The Staff Librarian Views the Problem of Status," College & Research Libraries, XXII (July 1961). The librarian's "actual status is... frequently ambiguous, with students and faculty alike regarding him as some kind of superclerk or administrative aid." (p. 275) "The faculty members are not alone in their doubts as to the librarian's role. The librarians themselves are confused, and so are the college administrators." (p. 280)
15. Ibid.
16. Patrick Wilson, Two Kinds of Power: An Essay on Bibliographical Control (Berkeley: University of California Press, 1968), p. 150. He makes a very useful distinction between "descriptive" and "exploitive" bibliographical control. See also his description of "bibliographical therapists" who diagnose... the perhaps unfelt needs of scientific workers and the general public (and) satisfy those needs with suitable doses of literature." p. 144.
17. Ibid., p. 145. "A proper bibliographical policy would be one that was not passive, in the sense of providing the means by which those who felt a certain interest could satisfy it, but active, in the sense of supplying, unasked, those writings most likely to furnish what would improve the quantity and quality of work. This would be a policy for the most rational exploitation of writings, for the rationalization or making completely rational of the use of writings."
18. Proceedings of the Conference on the Research Library Sponsored by Daedalus and the Council on Library Resources (Boston: House of the American Academy of Arts and Sciences, 1968), Herman Fussler: "Take, for example, so mundane a matter as the competence of the scholar in his own bibliographical disciplinary areas. The evidence suggests that it is poor, and that the scholar is not really exploiting his own libraries very efficiently." p. 20.
A director of libraries in a large university whose librarians have academic faculty status with explicit titles naming various levels of professorship describes what responsibilities he feels are his toward the library faculty, and conversely what is expected academically of them.

After "full academic status" for a professional library staff has been achieved, then what? The author does not mean any quasi-form of academic status such as "with the rank of," or "Librarian III, equivalent to Assistant Professor," but rather the whole package, for example: "Life Science Librarian: Associate Professor of Library Science" with a budget line listing the position in some such code as 5112, meaning Associate Professor, Instructional Staff, twelve months appointment.

All this designates a position to be filled by an individual who is wholly academic, not quasi-academic and/or quasi-administrative (and/or—God forbid—quasi-clerical or technical). It implies tenure, with the rigid ladder of time and specific qualifications required for achievement of that status. It implies sabbaticals and the relinquishment of a professional’s duties to other librarians, while he or she—for six months or a year—is off on some demonstrably significant scholarly activity, and the key word here is "demonstrably." It means writing proposals for funds, follow-up scrambling for grants, publishing results, accepting committee work for state or national associations, and participating in the round of standard internal academic endeavors. Above all it means being interested in the actual education of his institution's students.

Nobody who knows academic librarians as well as this author has any doubt of their ability to carry on all these academic activities, and to do so in a way to equal and probably out-perform most of the faculties in the academic departments of their institution. The ability is one thing; the readiness, the provisions, the arrangements, the flexibilities, both personal and intra-departmental, may well be something else.

In some respects a director of libraries does act like a dean or department head, depending on how large or small his professional staff is. In personnel matters (and most of this discussion will concern what may be called such) he recruits, evaluates performance, proposes salary increases, and decides on the rare dismissals. In general these are always done with intensive but informal senior staff consultations, and with prior discussions and also informal approvals arranged with his own vice-president or president. His activities in such matters differ from those of the usual dean’s or department head’s principally in that they are generally spread over a wider range of clerical and service-type staff.

Mr. Moriarty is Director of Libraries and Audiovisual Center, Purdue University.
than such fellow academicians. If these latter have more than a few secretaries, some technicians, and a limited number of other such assistants working for them, these are unusual cases. The overwhelming majority of their staffs are faculty people. The present-day library director's domain may include over 50 percent nonacademic staff and this proportion may increase to as much as 75 percent in the near future. One result may be a library director's tendency to feel more strongly about the needs and importance of his clerical and service staffs than do deans or academic department heads about theirs, which could tend to dilute somewhat the fanaticism a proper academic head should feel for his faculty. It is the author's observation that the successful dean or department head is one who pampers his faculty, rides roughshod over institutional procedures on their behalf, and in general sees their achievements as the justification of his work. Academic library directors have dabbled at this institutional ramrodding, but in the main, "doing their thing" seems to mean library buildings or growth of library collections. If librarians as faculty members are to match their peers in other departments, what will library directors need to do? The answer is not singular: a number of things, some pleasant, some difficult, will have to be done. One of the prime responsibilities will have to do with recruitment and retention of staff. This divides at least into two types of problems. One will be with young professional library school graduates. As these neophytes join a staff with full academic status they will have to understand that their stay might be short. If they plan to go on for the doctorate, it will almost surely be short. If they do not plan to go on for the doctorate, it will mean a five-year period of work and then a ceiling to promotion. The AAUP rules require the granting of tenure after seven years in a position. Few institutions want any large number of tenured individuals at instructor level on their faculty, and so an individual faculty member ineligible for promotion to assistant professor, which usually requires the doctorate or considerable progress toward it, must be advised in writing at the end of five years that he will not be granted tenure. This seems rather hard-boiled. Most younger librarians do not in their early performance clearly give evidence as to what area in the field brings out their best quality, they are not generally eligible for institutional subsidy to pursue higher education (if indeed their director believes any such education is desirable), nor are the young persons always in library positions from which they can be spared easily for a service point of view. Young librarians usually believe, of course, that job mobility is a good thing, but neither they nor most library directors want to force mobility on them. Forced mobility, by whatever name called, will be an almost certain consequence of accepting total faculty status. The reason for all this is that in most institutions, faculty promotions are reviewed and in fact decided by an overall campus-wide faculty committee who will expect the librarian candidates for promotion to match the faculty-type achievements of candidates from other departments. So a director of libraries faces the problem of living with such constraints on his control of personnel.

Besides dealing with newly recruited staff, an academic library director will have on his conscience his current staff, who will be in various transitional stages of readiness or unreadiness for faculty status, and in whose interests he must plan and act. Even if "only graduates of accredited library schools" are on the staff, some of these may just have professional degrees of the fifth-year bachelor grade. Such degrees do have considerable prestige among the library professionals but are not necessarily impressive to presidents, vice-presidents,
and faculty committees on promotions. And even the current fifth-year master’s degree carries only modest weight with such people.

For those of the staff under thirty-five a director has his work cut out. He must give them guidance, counsel, and a channel for acquiring advanced academic work. For the senior staff, professional activities such as securing and carrying out grant programs, consulting, publishing articles, holding association offices, and teaching in library schools are what a director should seek for senior staff whose promotions he must “sell” to his institution. When a grant opportunity arises, shall a director “hog” it for himself, share it, or divert it to a librarian colleague? One of the latter two must be his choice, if he is serious about faculty growth. When a national, regional, or state nominating committee chairman calls him, should he say “yes” for himself or try to push a capable person on the staff? Should he publish with footnote acknowledgements to his staff or should he list co-authors? Should he consult alone, or as a team with one of his assistants? All of these questions would seem to call for the second alternative, if the library director is to be a faculty colleague among an able professorial staff, rather than a “boss.”

In his relations with the president of his institution, the president’s office group, the other department heads and the professoriate generally, the director must with conviction and even to the point of being humorless, emphasize and continually explain the distinctive, intellectual, and specifically educative aspects of library work. The “image” is far from what it should be and a lot of hard work will be required to improve it. Of course the “bumbling professor” and the “mad scientist” are not exactly complimentary pictures either, and have had to be faced down, even in academe. So no countenance should be allowed about the “old maids” in the library, about the “stuffly library staff,” or about “sub-sub-librarians.” The director should himself respect the staff and use every device of personal example, public relations, and academic etiquette with the institutional community to elevate the regard for the professors on the library staff.

Every faculty perquisite should be pushed. When there is eligibility for sabbaticals, a librarian staff member’s way to take one should be “greased.” If foreign travel is partially subsidized, an appeal for a librarian’s attendance at an international congress should be strongly advocated. Every opportunity should be seized by a director to see that his own people fully enjoy whatever faculty benefits are available.

And the director must not act as he should just to seem to “help” his colleagues on the library faculty. His consulting with them on decisions must be “for real,” not pro forma. He cannot avoid ultimate responsibility, but he must share the development of programs and the excitement of any power and achievement accessible to his position.

These then are some of the attitudes and actions incumbent upon a library director on behalf of a fully recognized librarian faculty. It goes without saying that some directors already have created this environment. But are they as universal and expected in academic library directors’ performances as they are in those of other deans?

What corresponding attitudes and actions will have to mark the behavior of a library’s professorial staff, if academic status is to be a success? First and foremost there will have to be an active concern for the educational environment available to all levels of students. This will have to be more marked, specific, and involved than is now sometimes felt and practiced by college librarians. An understanding and participation must be achieved in curriculum development
efforts, and in what students are doing during their day-to-day studying and use of library materials. Catalogers and order librarians will have to come to share more directly in these educational concerns, and so will librarians in circulation and general services. Probably departmental librarians in universities already experience a good deal of this educational involvement and will find in it nothing new.

Considerable tact and the development of communication practices and etiquettes are called for in barging into the college or university academic program. This does not mean it should not or cannot be done. In most schools certain departments, notably the English and mathematics faculties, often are subject to considerable pressure to teach special courses to satisfy particular needs of the journalism or engineering faculties. There are channels through which these pressures can be exerted and still retain general institutional peace. The library professors will have to apply and accept pressures in order to see that the maximum educational potential of the media we serve is realized. This will mean more originality, more imagination, more scholarship, and more aggressiveness than are presently displayed by most professionals. It will also mean libraries will have to be changed; some of our pet systems may have to be jettisoned; and libraries will be more expensive inevitably, and not just because of buildings and materials. The tough campaigns to win needed funds will have to be fought not just by library directors alone as is now often the case, but also by library professors, fully supported by library directors. Unquestionably any education, maturity, and character we librarians may bring to an academic institution will find full scope. And the reason for this is not just changes needed for librarians; the reason is the greater individualism of future academic learning. The student of the future will not be the scrounger for course credits, which term describes too many of today's registrants. He will demand of librarians both services and guidances which today are only rarely offered or available. And he will get them.

The library professors, with the scholarship and authority which are needed today, will be mandated tomorrow. We present practitioners must ask for full and unequivocal status for such professors or we will never be able to recruit the quality of people required. Just one hundred years ago, we lost Daniel Coit Gilman, who was librarian of Yale during the 1860s. Why? Because he got fed up with stoking that library's stove. He went on to the presidency of the University of California and subsequently founded graduate education in the USA as president of Johns Hopkins. We will never attract the future Gilmans to develop rightly our library science, or when we do, we will not keep them, if we subject them to second-rate academic status. There should be no compromise; we should never settle for "with the rank of" or for "Librarian Grade I" or VI or higher. Twenty-five years in the academic world has taught me that lesson. If you do, then some young and new business manager does not understand, and a librarian rated as Librarian III does not get a travel grant reserved for professors. Or a new president comes into office and appoints a campus-wide committee for some key purpose and forgets to name any librarian member. The oversights, the "pin-pricks" brought on by any quasi-status are pointlessly but cruelly demeaning; they sour able people; they make present librarians only halfhearted recruiters of new professionals; or, as in the past, they drive able librarians out of the profession. I urge full academic rankings by title based on qualifications and performances which merit them, as the correct and only finally satisfactory goal.
Fringe Benefits for Academic Library Personnel

This paper reports the results of a survey on fringe benefits provided by college and university libraries. Sixty-five of 120 questionnaires were returned from college libraries across the country. Benefits treated are: vacations, sick leave, faculty rank, salaries, sabbatical, yearly increments, raises on merit, time off for funerals, voting, and jury duty.

Benefits for library personnel, as in other kinds of organizations, are constantly being evaluated in the light of their usefulness to personnel. Many library administrators have not become aware of the need for good fringe benefits in recruiting and maintaining library staff. An assiduous search of library literature on benefits for academic librarians did not reveal a sufficient amount of information to assist one in formulating a policy.

While public school librarians have identified with teachers, academic librarians have for years attempted to identify themselves with college faculty, in order to gain the quite considerable benefits that could come from faculty status—including short hours, time for independent research, grants for study programs, long vacations, tenure rights, as well as association with such prestigious groups as the American Association of University Professors. As faculty, also, librarians would come under the protection of the accrediting agencies, which can sink a school's reputation if it mistreats its faculty members.¹

Liberal fringe benefits will lessen (but not eliminate) recruiting problems. As fringe benefits have become increasingly important, periodic reviews have been made within private employment, government, and senior colleges and universities that facilitate comparison and improvement of their fringe benefits.²

This article came about as the result of a survey conducted to assist in formulating a more sophisticated benefits policy for library personnel at Alabama Agricultural & Mechanical College. Of 120 questionnaires sent to academic libraries across the country, sixty-five were returned. The distribution of replies was representative, with small and large, private and public, institutions well represented, ranging from Benedict College and Delaware State College, with enrollments of less than 2,000 students, through Hampton Institute and Iowa State (under 5,000), to North Dakota State and Wyoming, on up to Purdue and Illinois and California. No attempt is made here to capsulize the entire survey.³

Library staff is described as professional and nonprofessional: professional staff is defined as possessing a master's

¹ Mr. Wright is Branch Librarian, Rochester Public Library.
degree in library science, and nonprofessional includes all other staff. There did not seem to be a great amount of difference in benefits offered by large and small institutions. The only significant difference was in the hours of operation, with larger institutions requiring longer hours. It appears that academic administrators are working diligently to improve benefits of library employees. With the increasing unionization of library employees, administrators might be well advised to get their houses in order.

Benefits of Major Interest

Library employees seem to place greater importance on vacation, sick leave, faculty rank, and salaries as compared with sabbaticals and several other items.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>SICK LEAVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Professional (Percent)</td>
</tr>
<tr>
<td>10-15 days</td>
<td>38</td>
</tr>
<tr>
<td>1 month</td>
<td>19</td>
</tr>
<tr>
<td>60-90 days</td>
<td>2</td>
</tr>
<tr>
<td>As needed</td>
<td>23</td>
</tr>
<tr>
<td>No policy</td>
<td>17</td>
</tr>
<tr>
<td>Cumulative Sick Leave (Percent)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>62</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
</tr>
<tr>
<td>No policy</td>
<td>17</td>
</tr>
</tbody>
</table>

The majority of institutions grant from ten to fifteen days sick leave for both professionals and nonprofessionals, with days computed on a day-per-month basis. Most Alabama and predominantly Negro colleges have no policy whatsoever regarding sick leave. Only 4 percent give a bonus day for staff members who had no sick days the previous year.

It should be pointed out that 100 percent answered "yes" to the question of providing for staff to attend professional meetings. It was not clear in their answers as to whether all expenses are paid, or if time off, only, is allowed. Most academic libraries provide for one or two staff members to attend meetings at the school's expense, but it is usually limited to the library's administrators, with other members of the staff attending at their own expense.

There should be a policy to permit attendance at professional meetings which includes all levels of the library staff. A suggested method is a rotating system whereby members of the staff are selected on the basis of a combination of factors—years of service with the institution, attendance at previous meetings at one's own expense, contributions to professional literature, and most certainly, membership in the organization. In March, 1969, institutions of higher learning in the state of Alabama that are under the direction of the State Board of Education were informed that no employees of these institutions were to attend any more meetings at state expense until further notice. A policy of this nature certainly imperils recruitment and retention of a competent staff.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>PAID VACATION TIME FOR 12-MONTH EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Alotted</td>
<td>Professional (Percent)</td>
</tr>
<tr>
<td>2 weeks</td>
<td>10</td>
</tr>
<tr>
<td>3 weeks</td>
<td>6</td>
</tr>
<tr>
<td>1 month</td>
<td>65</td>
</tr>
<tr>
<td>5 weeks</td>
<td>19</td>
</tr>
</tbody>
</table>

It is interesting to observe that 65 percent of the professionals received one month of vacation time and 19 percent received as much as five weeks depending on length of employment, while 69 percent of nonprofessionals received only two weeks. In almost every case, professionals received more vacation than nonprofessionals. In some instances, librarians were employed on a nine to ten month basis and were not therefore considered for a paid vacation.
TABLE 3
LENGTH OF EMPLOYMENT BEFORE VACATION

<table>
<thead>
<tr>
<th>Time Allotted</th>
<th>Professional (Percent)</th>
<th>Nonprofessional (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>6 months</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>7-11 months</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>1 year</td>
<td>36</td>
<td>42</td>
</tr>
</tbody>
</table>

It seems clear from Table 3 that the length of employment before vacation varied sharply between professionals and nonprofessionals, with 28 percent of the professionals receiving some vacation immediately, compared to only 16 percent for nonprofessionals. However, the most common length of employment before any vacation for both professional and nonprofessional staff was one year.

TABLE 4
OTHER IMPORTANT BENEFITS

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Yes (Percent)</th>
<th>No (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Librarians with faculty rank</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>Salaries commensurate with faculty</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Sabbaticals commensurate with faculty</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>Yearly increments</td>
<td>98</td>
<td>2</td>
</tr>
<tr>
<td>Raises on merit</td>
<td>79</td>
<td>21</td>
</tr>
</tbody>
</table>

There were other items which were of interest, and it was found that fewer libraries had any policy at all regarding these benefits. It seems clear from this table that the majority answered "yes" to the questions, but not as great a majority as we would hope for. A 100 percent "yes" to each of these benefits would not be unreasonable.

It should be noted that where employees received 1 to 4 days off for funerals, it was never more than one day for funerals of friends. It is significant to observe that most libraries do not have any policy on time due to attend funerals; it might be that library administrators do not consider them as they do other days off, and are willing to arrange for employees as much time as needed for such unfortunate circumstances. However, it would make for consistency in dealing with staff to have some type of policy.

TABLE 5
TIME OFF FOR FUNERALS OF RELATIVES AND FRIENDS

<table>
<thead>
<tr>
<th>Time Allotted</th>
<th>Relatives</th>
<th>Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prof. (Percent)</td>
<td>Nonprof. (Percent)</td>
</tr>
<tr>
<td>1 hour-1/2 day</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1-4 days</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>Week plus</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>As needed</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>No policy</td>
<td>51</td>
<td>45</td>
</tr>
</tbody>
</table>

TABLE 6
JURY DUTY

<table>
<thead>
<tr>
<th>Time Allotted</th>
<th>Professional (Percent)</th>
<th>Nonprofessional (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 2-3 weeks</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Salary cut if paid</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>As needed</td>
<td>76</td>
<td>76</td>
</tr>
<tr>
<td>No policy</td>
<td>19</td>
<td>19</td>
</tr>
</tbody>
</table>

TABLE 7
VOTING

<table>
<thead>
<tr>
<th>Time Allotted</th>
<th>Professional (Percent)</th>
<th>Nonprofessional (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 hours</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>1 day</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>As needed</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>No policy</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Holiday</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

It is the consensus of college administrators that a call for one to serve as a juror is a responsibility, and most are given as much time as needed to serve. Only 2 percent cut salary if the staff member is paid to serve.

For voting time, 52 percent had no policy on the amount of time one should have, and 28 percent gave as much time as needed. Giving as much time as needed and having no policy at all could result in having too many key members of the staff away at the same time; it would be well to have a very liberal policy on the amount of voting time.
Summary and Recommendations

It is clear from this survey that benefits for college library personnel are varied and somewhat limited. A large number of colleges reported no policy on many benefits that are generally considered important to employees. It appears that many library administrators are in the process of presenting recommendations to college administrators on fringe benefits and have no frame of reference to assist in these recommendations. Since, to my knowledge, this was the first nationwide study on fringe benefits to academic personnel, a number of questions about fringe benefits cannot be answered. Further study is needed to answer these questions. Some of them are:

1. How do fringe benefits for academic librarians compare with those of private and governmental employees?
2. What are the effects of fringe benefits in recruiting and maintaining library staff?
3. What are the benefits most desired by academic library personnel?

If these questions are answered in a future study, library and college administrators will be able to formulate more rational and relevant benefit policies.

References

3. Free copies of the completed survey may be obtained from the author, Rochester Public Library, 115 South Avenue, Rochester, New York 14604.
Teach-in: the Academic Librarian’s Key to Status?

One way librarians have of meeting the responsibilities of faculty status is through involvement in the formal instructional programs of their own or other institutions. The author surveyed the population of the academic institutions holding membership in the Association of Research Libraries in the Winter of 1968/69 to determine how many librarians were involved in formal teaching programs. Only 2.75 percent of the total professional FTE staffs do any formal teaching.

As more and more institutions award faculty status to the staff librarian, the participation of the librarian in non-library activities assumes new importance. Academic status presumes both privileges and responsibilities. Such responsibilities may include membership on academic committees pertaining to curriculum planning and development, student admissions, faculty selection, and institutional governance. There is the obligation to engage in research, to publish, and to take an active part in the work of professional associations. Another way for the librarian to fulfill his faculty responsibility would be through the mechanism of the formal instructional program of the institution.

However, since the professional literature in the field sheds little insight on this problem, an instrument to tap relevant primary source data was developed for this study. The instrument, consisting of ten questions, was administered by mail in the winter of 1968/69 to the population of the seventy-one academic institutions holding membership in the Association of Research Libraries. Fifty-seven libraries (80.3 percent) responded to the questionnaire, three refused to respond, and eleven libraries failed to respond. However, of the responses received, one questionnaire was lost and another was received after the questionnaires had been analyzed and the tabulations completed, thus reducing the number of usable responses to 55, and thus yielding a final response of 77.5 percent.

The letter which accompanied the first mailing of the questionnaires stated the purpose of the study and stressed the importance of the respondent’s using care and accuracy in the answering of the questions. Almost all of the questions had been deliberately designed to be open-ended, with the exception of one which required a “yes” or “no” response. “The validity of the study,” the letter stated, “depends upon the consistency of definitional meanings, which can only become apparent in the explanations given in the answers to the questionnaire.” A follow-up letter, which
also repeated the same precautionary message, was mailed approximately one month later to those libraries which had failed to respond to the initial mailing. The libraries participating in the study were all promised copies of the analysis of the responses to the questionnaire.

The first three questions attempted to develop the contextual framework for the study, i.e., to obtain data on the participation of librarians in the formal instructional programs of their institutions. The first question, for example, probed the matter of academic appointments of the library staff; question two examined the topic of title and rank; and question three dealt with the similarities or differences in the criteria for the appointment, promotion, and tenure of the librarian as compared with the faculty.

Question four, a two-part question, attempted to come to grips with the essence of the problem, asking whether the library's professional staff did in fact participate in the formal teaching program of the parent or other institutions. The next four questions, which were to be answered by only those libraries whose professional staff participated in the institution's formal teaching program, solicited information on the type of appointment held, the courses being taught, the method of compensation for the librarian, and the compensation, if any, for the library. The final two questions, which were to be answered by all the respondents, dealt with the librarian's involvement in less formalized instructional programs, such as conducting orientation lectures and tours, delivering lectures on specialized bibliography upon request, and training library interns.

Data Analysis

The explication of the first question by the respondent was essential to avoid the generally loose interpretations of the term, "academic appointment." When this question was analyzed, it seemed apparent that in most cases deliberate care had been exercised by the respondent to distinguish between the concepts of "academic status," "faculty status," and "professional appointments." (See Table 1.)

<table>
<thead>
<tr>
<th>Question 1: Do the members of your professional staff have academic appointments? Explain.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Academic Status</td>
</tr>
<tr>
<td>Faculty Status</td>
</tr>
<tr>
<td>Professional Appointment</td>
</tr>
<tr>
<td>Faculty Status, if teaching; otherwise professional appointment</td>
</tr>
<tr>
<td>Administrators, faculty status; others, academic status</td>
</tr>
</tbody>
</table>

Such responses as "All librarians on this staff have faculty status and full faculty rank," or "Librarians having a master's degree from an accredited library school and no experience are appointed to the rank of instructor; department heads with second master's degrees or equivalent in subject fields or long experience are given faculty status and are appointed to the rank of Assistant Professor" were coded as meaning "Faculty Status." The response "Academic, yes; faculty, no" was coded as meaning "Academic Status"; and "They are considered professionals but not faculty" was placed in the category, "Professional Appointment." Apparently, this question would have been stronger if it had not been open-ended; some ambiguity may have been eliminated if the categories "Academic Status," "Faculty Status," and "Professional Appointment," together with their accepted definitional meanings, had been supplied.

The second question (see Table 2), dealing with the problem of title and rank, revealed that nearly half of the librarians held both librarian title and librarian rank, while less than one-third held librarian titles and professorial rank.
TABLE 2

<table>
<thead>
<tr>
<th>Title and Rank of Librarians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 2: Does your professional staff have librarian title and rank? Or, professorial title and professorial rank?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Response</td>
</tr>
<tr>
<td>Librarian title, with Librarian rank</td>
</tr>
<tr>
<td>Librarian title, with professorial rank</td>
</tr>
<tr>
<td>Title and Rank Dependent upon Appointment</td>
</tr>
<tr>
<td>Professorial title, with Professorial rank</td>
</tr>
<tr>
<td>Librarian title, with no specified rank</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>

At one institution where the librarians held professorial title and professorial rank, that respondent stated flatly, "It has been difficult to secure promotion in rank from the University Promotion and Tenure Committee because the membership of this committee in some instances have not thought librarians to perform academic type functions. One member of the committee expressed it this way: 'Librarians perform services for academic personnel. They are not academicians!" Therefore, while it may appear that, as a class, librarians are making gains in the province generally considered sacrosanct by the faculty, the bias of the faculty toward librarians remains.

The responses to the third question, interpreted within the framework of the responses made to the previous two questions, appeared to support the assumption of the questionnaire's internal consistency. Question three asked whether the criteria for the appointment, promotion, and tenure of the professional staff of the library were the same as the criteria for the appointment, promotion, and tenure of the faculty. The responses (N=55) showed that in 47.3 percent of the libraries sampled, the criteria were different; in 27.3 percent, the criteria were the same; and in 21.8 percent of the libraries, the criteria were similar. One respondent professed not to know the criteria for the faculty, and 9.1 percent of the respondents ignored the question altogether. One library, claiming the criteria for the appointment, promotion, and tenure of librarians to be the same as for faculty, responded, "A dossier is prepared containing such information as the personal history of the candidate, academic degrees, appointments, research and publications, consultation opportunities, membership in professional organizations, and community service." On the other hand a respondent claiming the criteria to be similar but not identical, pointed out that there were the "same formal requirements of service, personal characteristics, research, and publication, but that instead of teaching ability and scholarship, [the librarian is required to show] professional ability as evidenced by vigorous pursuit of library problems and the promotion of their solutions; effective administrative performance in the area of responsibility; and creative development in the position."

The first part of the fourth question required a "yes" or "no" response relative to the involvement of the library staff in the institution's formal teaching program. Although 61.8 percent of the libraries responded that members of their staffs were involved in the formal instructional programs of their institutions (another 16.4 percent stated that involvement was "intermittent" or "only occasional"), this response should be viewed with some caution. Admittedly, while there are some members of the staff who engage in teaching, this should not be interpreted as meaning that a large segment of any library staff teaches. There was no involvement at all in teaching according to 21.8 percent of the sample.

As for involvement in the teaching programs of outside institutions (question 4 b, Table 3), again the responses should be interpreted cautiously. While at first glance the response reveals that the librarians of more than one-third of the institutions engage in outside teach-
ing activity, careful examination of the data shows that the teaching is done during sabbaticals or summer vacations, or at nearby institutions (or only “upon occasion”).

TABLE 3
TEACHING IN OUTSIDE INSTITUTIONS

<table>
<thead>
<tr>
<th>Question 4b: Do the professional members of the library staff participate in the teaching programs of outside institutions?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>

The question of joint appointments was the rationale for including question five (see Table 4). In one of the libraries

TABLE 4
JOINT APPOINTMENTS

<table>
<thead>
<tr>
<th>Question 5: Do the library staff members who also have teaching assignments in academic departments hold joint appointments?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response</strong></td>
</tr>
<tr>
<td>Hold joint appointments</td>
</tr>
<tr>
<td>Do not hold joint appointments</td>
</tr>
<tr>
<td>Not applicable</td>
</tr>
</tbody>
</table>

where the teacher-librarian did not hold joint appointments it was noted that the courses taught were “library-related” and were “part of the duties of the librarian concerned.” In another library which also disclaimed “joint” appointments, each staff member arrived at his own “arrangement”—in terms of salary, rank, and courses taught—with the academic department concerned. A large midwestern institution reported that “the teacher-librarian works four hours daily in Reference and teaches two courses in Library Science, with one-half salary paid by the library and one-half by the academic department.” It should be emphasized, however, that upon careful examination of the data, it became apparent that such situations applied to only a few librarians in each institution, or that the joint appointment was of a temporary nature, or that it applied to the library director alone. It is also interesting to note that the librarian singled out the most frequently as holding a joint appointment seemed to be the Law Librarian.

The method of compensating those teaching librarians who did not hold joint appointments was also investigated.

TABLE 5
COMPENSATION TO THE LIBRARIANS FOR TEACHING

<table>
<thead>
<tr>
<th>Question 6: If joint appointments are not held by the library staff who also teach, how are these individuals compensated for their teaching?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response</strong></td>
</tr>
<tr>
<td>Librarian paid additionally</td>
</tr>
<tr>
<td>Librarian given preparation time</td>
</tr>
<tr>
<td>Library compensated for extra help</td>
</tr>
<tr>
<td>No compensation, no time off</td>
</tr>
<tr>
<td>No response or question not applicable</td>
</tr>
</tbody>
</table>

There appeared to be considerable maneuverability with regard to compensation for extra teaching responsibilities, in the absence of a joint appointment. In some instances, for example, the teaching librarian was rewarded by the library with time off for course preparation; in other cases, the librarian was paid additionally, or student help was given to offset the librarian’s time spent away from his department, or, again, the individual was given neither compensation nor time off for preparation.

The counterpart to the question on compensation to the librarian was the question of compensation to the library. Little additional insight was gained from the data other than to learn that in 38 percent of the cases, the library was not compensated and that in 54 percent of the cases, the question was either not relevant or not answered.

One respondent stated, “The library is not compensated in any financial way when its staff members teach courses for academic departments. Nor are we given any additional staff to make up for time lost. However, we feel our compensation comes in the form of greater
acceptance of library staff members by the rest of the faculty.” Another respondent stated: “If a joint appointment is made, then there is a salary adjustment. Otherwise, the library is not compensated financially but hopefully reaps the benefit of ‘good will.’”

The respondents were asked in question eight to identify their librarians teaching at the time of this survey, by the title of their library position, the rank held, if any, in the relevant academic department, and the courses taught. This question yielded some of the most interesting information in this survey. When the data was tabulated, it was found that 123 librarians, 112 of whom held faculty rank, were teaching 138 courses in 28 academic departments. On the basis of the ARL Academic Library Statistics, 1967–1968, the fifty-five libraries participating in the study had a total professional staff of 4,473 FTEs. On the basis of this figure (which is probably understated), only 2.75 percent of the professional staff is involved in teaching. It was also apparent that 70 percent of the librarians, engaged in teaching, held the rank of department head or some higher administrative post. Of the 30 percent remaining—i.e., those representing the bread-and-butter librarian—86 percent were subject bibliographers. With the greater proportion of teacher-librarians coming from the upper administrative level, it was not an unexpected finding that 52 percent of the total population of the teaching staff should hold academic titles of Professor or Associate Professor. The remaining 48 percent was almost equally assigned to the Assistant Professor or the Lecturer/Instructor ranks.

Predictably 93 of the 138 courses taught by the academic librarian were in the subject field of librarianship. In addition to such traditional library courses as book selection, cataloging, and reference, these subjects included library administration, archives and manuscript management, government documents, information science, and media instruction, all taught for the Department or School of Library Science. There were also courses in the subject bibliography of such disciplines as chemistry, Chinese, engineering, history, Islamic studies, Japanese, music, medicine, and nuclear engineering, taught within the appropriate academic departments. Courses in such subject areas as architecture, botany, business, education, English literature, journalism, law, research methodology, social work, and sociology completed the librarians’ repertoire.

The last two questions (see Tables 6 and 7), recognizing that the greater part of the “teaching” function of librarians is generally done informally in the library setting, attempted to examine the degree to which such programs as library orientation tours and library intern programs are structured. In both questions, the respondent was encouraged to supply as many options as applied to his library.

**TABLE 6**

<table>
<thead>
<tr>
<th>Informal Instructional Programs of Libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 9: List and discuss the types of informal instruction programs such as orientation tours and orientation lectures in which your staff systematically participates.</td>
</tr>
<tr>
<td><strong>Public Service Programs</strong></td>
</tr>
<tr>
<td>Conducts lectures, tours, conferences, upon request</td>
</tr>
<tr>
<td>Offers planned orientation lectures and tours</td>
</tr>
<tr>
<td>Offers bibliography courses and/or lectures to beginning graduate students</td>
</tr>
<tr>
<td>Has video tape, film, TV programs</td>
</tr>
<tr>
<td>Check theses for correct bibliographical format</td>
</tr>
<tr>
<td>Offers no formal program of any kind</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>

**Summary**

This study was undertaken to examine the participation of the academic librarian in the formal instructional pro-
TABLE 7
LIBRARY/INSTITUTIONAL COOPERATION

Question 10: Does your library cooperate with your institution's academic departments by employing or training library interns, graduate assistants, etc.?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>64.6</td>
</tr>
<tr>
<td>No</td>
<td>30.8</td>
</tr>
<tr>
<td>No response</td>
<td>4.6</td>
</tr>
</tbody>
</table>

gram of his institution. It confirmed the general finding in the literature that the status of the librarian is at best ambiguous. Of the fifty-five ARL libraries participating in this survey, less than 31 percent claimed faculty status for professional staff, and 45 percent claimed that their staffs held librarian title and librarian rank. In nearly two-thirds of the libraries surveyed, the criteria for the appointment, promotion, and tenure of the librarian differed from the criteria for the faculty. Although 60 percent of the libraries reported that some members of their staffs were involved in the formal instructional programs of their institutions, this meant less than 2.75 percent of the total professional FTE staffs of these libraries were involved in teaching. There appeared to be little consistency among these libraries with regard to joint appointments and the method of compensation to the librarian.
Standards for University Libraries

The following tables present data obtained on behalf of the Association of Research Libraries.

Interest in and demand for library standards have long been characteristic of American librarianship. During the past decade, and in a few instances earlier, statements of standards have been developed for public, school, college, junior college, state, and special libraries.

Rather oddly, however, the United States has developed no code of standards for university libraries. The Canadians and the British have been more daring; the Canadian Association of College and University Libraries in 1965 issued a Guide to Canadian University Library Standards, and in 1967 a subcommittee of the British Standing Conference on National and University Libraries issued a statement on standards for university libraries. Neither the Canadian nor British codes are exactly applicable to conditions in the United States, though they contain useful suggestions.

Why, considering the fact that the need for a generally acceptable statement of standards for university libraries has long been recognized, has little progress been made? To many, the practical difficulties have appeared insurmountable, chiefly because of the diversity of institutions. The "institutional environment" and "mission" of individual universities vary greatly and standards applicable to comprehensive universities may be invalid for specialized institutions. A basic dilemma is the lack of definition of the term "university" itself. The annual compilation of enrollment statistics in the nation's colleges and universities, published in School and Society, includes about 160 institutions under the heading of "Universities and Large Institutions of Complex Organization," though many others are labeled "universities," perhaps for prestige purposes or with hopes for the future.

It is readily apparent, therefore, that any attempt to set up criteria applicable to old, well established private universities, large general state universities, former state and teachers colleges, and the many new "instant" universities is full of pitfalls and complications.

A factor not to be overlooked is the fear, especially among librarians of major institutions, that minimum standards may come to be regarded by university administrators and control boards as maximum standards, thereby impeding the growth of a given library. The same criticism could be made, of course, of public, college, and other library standards. There can be little doubt, however, that the overall effect of standards has been to upgrade libraries, providing substandard institutions with yardsticks by which to measure their deficiencies.

An urgent reason for developing university library standards is that any failure on our part to take action will result in having the job taken away from us.

Mr. Downs is Dean of Library Administration, and Mr. Heussman is Library Administrative Assistant, in the University of Illinois Library.
### TABLE 1

**FINANCES: Total Library Budget, 1968–69; Average Annual Expenditures, 1965–68**

<table>
<thead>
<tr>
<th></th>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library budget, 1968–69</td>
<td>50</td>
<td>147,464,633</td>
<td>2,949,293</td>
<td>970,835</td>
<td>1,918,357</td>
<td>2,529,461</td>
<td>3,770,971</td>
<td>8,500,000</td>
</tr>
<tr>
<td>Library expenditures, 1967–68</td>
<td>50</td>
<td>141,258,935</td>
<td>2,825,179</td>
<td>1,213,743</td>
<td>1,727,075</td>
<td>2,452,836</td>
<td>3,547,627</td>
<td>8,545,393</td>
</tr>
<tr>
<td>Average annual library expenditures, 1965–68</td>
<td>50</td>
<td>122,076,147</td>
<td>2,441,523</td>
<td>1,055,368</td>
<td>1,500,000</td>
<td>2,023,594</td>
<td>2,932,465</td>
<td>7,605,880</td>
</tr>
</tbody>
</table>

### TABLE 2

**RELATIONSHIP OF TOTAL LIBRARY EXPENDITURES TO TOTAL UNIVERSITY EXPENDITURES FOR GENERAL AND EDUCATIONAL PURPOSES, 1967–68**

<table>
<thead>
<tr>
<th></th>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total library expenditures, 1967–68</td>
<td>50</td>
<td>141,258,935</td>
<td>2,825,179</td>
<td>1,213,743</td>
<td>1,727,075</td>
<td>2,452,836</td>
<td>3,547,627</td>
<td>8,545,393</td>
</tr>
<tr>
<td>University general and educational expenditures, 1967–68</td>
<td>50</td>
<td>4,019,632,084</td>
<td>80,392,641</td>
<td>18,140,016</td>
<td>50,652,000</td>
<td>66,492,520</td>
<td>118,044,290</td>
<td>170,757,773</td>
</tr>
<tr>
<td>Library’s percentage</td>
<td>50</td>
<td>3.5</td>
<td>1.6</td>
<td>2.8</td>
<td>3.6</td>
<td>4.8</td>
<td>8.6</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 3

**RELATIONSHIP OF TOTAL LIBRARY EXPENDITURES TO SALARIES AND WAGES; BOOKS, PERIODICALS AND BINDING; GENERAL EXPENSES, 1967–68**

<table>
<thead>
<tr>
<th></th>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total library expenditures, 1967–68</td>
<td>50</td>
<td>141,258,935</td>
<td>2,825,179</td>
<td>1,213,743</td>
<td>1,727,075</td>
<td>2,452,836</td>
<td>3,547,627</td>
<td>8,545,393</td>
</tr>
<tr>
<td>Salaries and wages</td>
<td>50</td>
<td>80,832,234</td>
<td>1,616,645</td>
<td>681,019</td>
<td>978,685</td>
<td>1,300,033</td>
<td>1,969,416</td>
<td>4,987,358</td>
</tr>
<tr>
<td>Percent, salaries and wages</td>
<td>50</td>
<td>57.2</td>
<td>43.6</td>
<td>55.5</td>
<td>56.0</td>
<td>61.8</td>
<td>67.8</td>
<td></td>
</tr>
<tr>
<td>Books, periodicals, and binding</td>
<td>50</td>
<td>47,685,800</td>
<td>953,716</td>
<td>391,241</td>
<td>600,983</td>
<td>835,357</td>
<td>1,239,112</td>
<td>2,175,961</td>
</tr>
<tr>
<td>Percent, books, periodicals, and binding</td>
<td>50</td>
<td>33.8</td>
<td>21.2</td>
<td>29.4</td>
<td>36.5</td>
<td>40.3</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td>General expense</td>
<td>50</td>
<td>10,149,072</td>
<td>202,981</td>
<td>52,295</td>
<td>95,425</td>
<td>149,103</td>
<td>245,363</td>
<td>1,055,988</td>
</tr>
<tr>
<td>Percent, general expense</td>
<td>50</td>
<td>7.2</td>
<td>2.5</td>
<td>4.7</td>
<td>5.5</td>
<td>13.5</td>
<td>28.5</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 4

**STUDENT PER CAPITA EXPENDITURES FOR BOOKS, PERIODICALS, AND BINDING, AND FOR TOTAL LIBRARY EXPENDITURES**

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total enrollment (FTE)</td>
<td>50</td>
<td>994,740</td>
<td>19,895</td>
<td>4,719</td>
<td>11,840</td>
<td>16,775</td>
<td>28,369</td>
</tr>
<tr>
<td>Total library expenditures</td>
<td>50</td>
<td>141,258,935</td>
<td>2,825,179</td>
<td>1,213,743</td>
<td>1,727,075</td>
<td>2,452,836</td>
<td>3,547,627</td>
</tr>
<tr>
<td>Per capita, total library expenditures</td>
<td>50</td>
<td>142.01</td>
<td>54.77</td>
<td>99.34</td>
<td>128.07</td>
<td>236.90</td>
<td>568.56</td>
</tr>
<tr>
<td>Expenditures for books, periodicals, binding</td>
<td>50</td>
<td>47,685,800</td>
<td>953,716</td>
<td>391,241</td>
<td>600,983</td>
<td>835,357</td>
<td>1,239,112</td>
</tr>
<tr>
<td>Per capita for books, periodicals, binding</td>
<td>50</td>
<td>47.94</td>
<td>20.39</td>
<td>35.40</td>
<td>46.61</td>
<td>70.13</td>
<td>224.54</td>
</tr>
</tbody>
</table>

### TABLE 5

**RESOURCES: VOLUMES, VOLUMES ADDED, CURRENT PERIODICALS, AND MICROFORMS**

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total volumes, June 30, 1968</td>
<td>50</td>
<td>99,459,415</td>
<td>1,989,188</td>
<td>890,666</td>
<td>1,164,142</td>
<td>1,456,684</td>
<td>2,103,723</td>
</tr>
<tr>
<td>Gross no. of vols. added (3 year average)</td>
<td>46</td>
<td>4,767,687</td>
<td>103,645</td>
<td>37,268</td>
<td>60,001</td>
<td>79,867</td>
<td>130,523</td>
</tr>
<tr>
<td>Net no. of vols. added (3 year average)</td>
<td>49</td>
<td>4,566,297</td>
<td>93,190</td>
<td>11,182</td>
<td>64,296</td>
<td>75,652</td>
<td>119,773</td>
</tr>
<tr>
<td>Current periodicals received</td>
<td>47</td>
<td>692,543</td>
<td>14,735</td>
<td>5,649</td>
<td>9,100</td>
<td>11,050</td>
<td>17,049</td>
</tr>
<tr>
<td>No. of microforms</td>
<td>47</td>
<td>15,957,577</td>
<td>339,523</td>
<td>7,641</td>
<td>160,392</td>
<td>349,423</td>
<td>455,498</td>
</tr>
<tr>
<td>Microfilm reels</td>
<td>44</td>
<td>1,228,543</td>
<td>27,921</td>
<td>2,452</td>
<td>13,947</td>
<td>22,930</td>
<td>41,632</td>
</tr>
<tr>
<td>Microfiche, microcards, microprint</td>
<td>43</td>
<td>13,693,569</td>
<td>318,455</td>
<td>5,189</td>
<td>170,686</td>
<td>320,918</td>
<td>439,060</td>
</tr>
</tbody>
</table>

### TABLE 6

**RELATIONSHIP OF ENROLLMENT TO NUMBER OF VOLUMES AND TO NUMBER OF CURRENT JOURNALS**

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment</td>
<td>50</td>
<td>994,740</td>
<td>19,895</td>
<td>4,719</td>
<td>11,840</td>
<td>16,775</td>
<td>28,369</td>
</tr>
<tr>
<td>No. of vols.</td>
<td>50</td>
<td>99,459,415</td>
<td>1,989,188</td>
<td>890,666</td>
<td>1,164,142</td>
<td>1,456,684</td>
<td>2,103,723</td>
</tr>
<tr>
<td>Vols. per student</td>
<td>50</td>
<td>99.99</td>
<td>30.35</td>
<td>60.07</td>
<td>83.56</td>
<td>143.76</td>
<td>665.29</td>
</tr>
<tr>
<td>No. of current periodicals</td>
<td>47</td>
<td>692,543</td>
<td>14,734</td>
<td>5,649</td>
<td>9,100</td>
<td>11,050</td>
<td>17,049</td>
</tr>
<tr>
<td>Enrollment</td>
<td>47</td>
<td>959,314</td>
<td>20,411</td>
<td>4,719</td>
<td>13,299</td>
<td>16,903</td>
<td>28,651</td>
</tr>
<tr>
<td>Periodicals per student</td>
<td>47</td>
<td>.72</td>
<td>.24</td>
<td>.46</td>
<td>.68</td>
<td>1.33</td>
<td>4.59</td>
</tr>
</tbody>
</table>
**TABLE 7**

**PERSONNEL**

<table>
<thead>
<tr>
<th></th>
<th>No. of</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional staff</td>
<td>50</td>
<td>4,439</td>
<td>88.8</td>
<td>33</td>
<td>56</td>
<td>73</td>
<td>99</td>
<td>227</td>
</tr>
<tr>
<td>Nonprofessional staff</td>
<td>50</td>
<td>7,681</td>
<td>153.6</td>
<td>98</td>
<td>154</td>
<td>184.5</td>
<td>297</td>
<td>653</td>
</tr>
<tr>
<td>Total staff</td>
<td>50</td>
<td>12,120</td>
<td>242.4</td>
<td>126.7</td>
<td>72.068</td>
<td>113.000</td>
<td>193,351</td>
<td>446,628</td>
</tr>
<tr>
<td>Percent professional</td>
<td>50</td>
<td>36.6</td>
<td>26.7</td>
<td>33.1</td>
<td>42.0</td>
<td>51.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly wages</td>
<td>49</td>
<td>6,680,305</td>
<td>136.332</td>
<td>29.164</td>
<td>113.000</td>
<td>446.628</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work hours/week professionals</td>
<td>50</td>
<td>1,922</td>
<td>38.44</td>
<td>35</td>
<td>39</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work hours/week clerical</td>
<td>49</td>
<td>1,594</td>
<td>38.66</td>
<td>35</td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 8**

**RELATIONSHIP OF TOTAL STAFF AND PROFESSIONAL STAFF TO ENROLLMENT**

<table>
<thead>
<tr>
<th></th>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment</td>
<td>50</td>
<td>994,740</td>
<td>19,895</td>
<td>4,719</td>
<td>11,840</td>
<td>16,775</td>
<td>28,369</td>
<td>48,285</td>
</tr>
<tr>
<td>Professional staff</td>
<td>50</td>
<td>4,439</td>
<td>88.8</td>
<td>33</td>
<td>56</td>
<td>73</td>
<td>99</td>
<td>227</td>
</tr>
<tr>
<td>Enrollment/professional staff</td>
<td>50</td>
<td>224.09</td>
<td>41.64</td>
<td>158.36</td>
<td>225.24</td>
<td>362.96</td>
<td>675.72</td>
<td></td>
</tr>
<tr>
<td>Total staff</td>
<td>50</td>
<td>12,120</td>
<td>242.4</td>
<td>98</td>
<td>154</td>
<td>184.5</td>
<td>297</td>
<td>653</td>
</tr>
<tr>
<td>Enrollment/total staff</td>
<td>50</td>
<td>82.07</td>
<td>16.42</td>
<td>49.05</td>
<td>89.05</td>
<td>133.98</td>
<td>275.14</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 9**

**RELATIONSHIP OF NUMBER OF SEATS FOR READERS TO TOTAL ENROLLMENT**

<table>
<thead>
<tr>
<th></th>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment</td>
<td>50</td>
<td>994,740</td>
<td>19,895</td>
<td>4,719</td>
<td>11,840</td>
<td>16,775</td>
<td>28,369</td>
<td>48,285</td>
</tr>
<tr>
<td>Enrollment</td>
<td>49</td>
<td>986,745</td>
<td>20,138</td>
<td>4,719</td>
<td>12,570</td>
<td>16,903</td>
<td>28,510</td>
<td>48,285</td>
</tr>
<tr>
<td>Number of seats</td>
<td>49</td>
<td>162,074</td>
<td>3,308</td>
<td>955</td>
<td>2,276</td>
<td>3,000</td>
<td>4,391</td>
<td>7,808</td>
</tr>
<tr>
<td>Seats/enrollment (percent)</td>
<td>49</td>
<td>16</td>
<td>05</td>
<td>12</td>
<td>16</td>
<td>26</td>
<td>26</td>
<td>62</td>
</tr>
<tr>
<td>Students per seat</td>
<td>49</td>
<td>6.09</td>
<td>1.60</td>
<td>3.84</td>
<td>6.15</td>
<td>8.41</td>
<td>20.65</td>
<td></td>
</tr>
</tbody>
</table>
### Table 10
Relationship of the Area of Shelving for Books to the Total Volumes Held in the Library

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of vols.</td>
<td>50</td>
<td>99,459,415</td>
<td>1,980,188</td>
<td>890,666</td>
<td>1,164,142</td>
<td>1,456,684</td>
<td>2,103,723</td>
</tr>
<tr>
<td>No. of vols.</td>
<td>37</td>
<td>74,389,379</td>
<td>2,010,524</td>
<td>890,666</td>
<td>1,175,048</td>
<td>1,445,229</td>
<td>2,357,148</td>
</tr>
<tr>
<td>Book shelving area</td>
<td>37</td>
<td>5,609,643</td>
<td>151,612</td>
<td>24,070</td>
<td>82,278</td>
<td>121,582</td>
<td>215,729</td>
</tr>
<tr>
<td>Vols. per square foot</td>
<td>37</td>
<td>13.26</td>
<td>7.42</td>
<td>9.70</td>
<td>13.70</td>
<td>16.81</td>
<td>49.95</td>
</tr>
</tbody>
</table>

### Table 11
Relationship of Area Assigned to Staff to the Total Area of the Library, and Number of Square Feet Per Staff Member

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff area</td>
<td>34</td>
<td>1,144,798</td>
<td>33,671</td>
<td>8,800</td>
<td>18,310</td>
<td>29,328</td>
<td>44,191</td>
</tr>
<tr>
<td>No. of staff members</td>
<td>34</td>
<td>8,343</td>
<td>245.38</td>
<td>98</td>
<td>162</td>
<td>185</td>
<td>293</td>
</tr>
<tr>
<td>Square feet per staff member</td>
<td>34</td>
<td>137.22</td>
<td>22.72</td>
<td>97.21</td>
<td>146.68</td>
<td>179.76</td>
<td>328.76</td>
</tr>
</tbody>
</table>

### Table 12
Space: Air-Conditioned and Carpeted

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-conditioned space</td>
<td>35</td>
<td>8,345,073</td>
<td>238,430</td>
<td>29,732</td>
<td>128,250</td>
<td>204,600</td>
<td>363,563</td>
</tr>
<tr>
<td>Carpeted area</td>
<td>33</td>
<td>829,513</td>
<td>25,136</td>
<td>300</td>
<td>6,234</td>
<td>13,478</td>
<td>48,308</td>
</tr>
</tbody>
</table>

### Table 13
Circulation and Public Service

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recorded general circulation</td>
<td>43</td>
<td>24,150,549</td>
<td>561,641</td>
<td>127,723</td>
<td>284,658</td>
<td>464,153</td>
<td>697,013</td>
</tr>
<tr>
<td>Recorded reserve circulation</td>
<td>40</td>
<td>8,462,190</td>
<td>211,555</td>
<td>15,369</td>
<td>59,714</td>
<td>166,569</td>
<td>342,633</td>
</tr>
<tr>
<td>Recorded general and reserve circulation</td>
<td>45</td>
<td>38,360,615</td>
<td>852,458</td>
<td>193,043</td>
<td>502,269</td>
<td>760,779</td>
<td>1,156,456</td>
</tr>
<tr>
<td>No. of hours open per week</td>
<td>50</td>
<td>4,877.25</td>
<td>97.55</td>
<td>74</td>
<td>89.5</td>
<td>100.0</td>
<td>106</td>
</tr>
</tbody>
</table>
### TABLE 14

**STUDENT PER CAPITA CIRCULATION—SUMMARY**

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Enrollment</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>50</td>
<td>994,740</td>
<td>19,894</td>
<td>4,719</td>
<td>11,840</td>
<td>16,775</td>
<td>28,369</td>
<td>48,285</td>
</tr>
<tr>
<td>43</td>
<td>934,806</td>
<td>19,414</td>
<td>4,719</td>
<td>8,811</td>
<td>16,393</td>
<td>28,651</td>
<td>48,285</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>24,150,549</td>
<td>561,641</td>
<td>127,723</td>
<td>284,658</td>
<td>464,153</td>
<td>697,013</td>
<td>2,395,029</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>25,850,720</td>
<td>361,779</td>
<td>137,892</td>
<td>295,723</td>
<td>484,188</td>
<td>817,038</td>
<td>2,935,029</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>38,360,615</td>
<td>852,458</td>
<td>193,043</td>
<td>502,269</td>
<td>760,779</td>
<td>1,156,456</td>
<td>2,517,704</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Enrollment</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>897,499</td>
<td>19,944</td>
<td>4,719</td>
<td>10,065</td>
<td>16,393</td>
<td>28,510</td>
<td>48,285</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>38,360,615</td>
<td>852,458</td>
<td>193,043</td>
<td>502,269</td>
<td>760,779</td>
<td>1,156,456</td>
<td>2,517,704</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 15

**SUMMARY DATA ON LAW LIBRARIES**

<table>
<thead>
<tr>
<th>No. of Libs.</th>
<th>Total Enrollment</th>
<th>Total Amount</th>
<th>Average</th>
<th>Range Low</th>
<th>First Quartile</th>
<th>Median</th>
<th>Third Quartile</th>
<th>Range High</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>17,248</td>
<td>574.93</td>
<td>296</td>
<td>363</td>
<td>501</td>
<td>607</td>
<td>1,707</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>944.88</td>
<td>31.50</td>
<td>13.0</td>
<td>21.0</td>
<td>27.15</td>
<td>40.0</td>
<td>72.0</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>205,290</td>
<td>53,273</td>
<td>97,676</td>
<td>162,570</td>
<td>202,300</td>
<td>1,132,935</td>
<td>2,395,029</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>6,158,704</td>
<td>357,07</td>
<td>130</td>
<td>520</td>
<td>996</td>
<td>2,000</td>
<td>7,500</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>54,196</td>
<td>1,806.53</td>
<td>300</td>
<td>520</td>
<td>996</td>
<td>2,000</td>
<td>7,500</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>3.14</td>
<td>0.6</td>
<td>1.3</td>
<td>2.5</td>
<td>3.8</td>
<td>10.5</td>
<td>21.1</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>6.28</td>
<td>1.75</td>
<td>3.5</td>
<td>5.25</td>
<td>8.0</td>
<td>21.1</td>
<td>38.9</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>268.10</td>
<td>8.94</td>
<td>1.00</td>
<td>3.00</td>
<td>5.75</td>
<td>13.0</td>
<td>38.9</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>456.55</td>
<td>15.22</td>
<td>4.00</td>
<td>7.00</td>
<td>11.25</td>
<td>20.0</td>
<td>56.5</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>46.78</td>
<td>15</td>
<td>30</td>
<td>46</td>
<td>75</td>
<td>111</td>
<td>183,009</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>2,179,245</td>
<td>72,642</td>
<td>27,000</td>
<td>42,225</td>
<td>72,099</td>
<td>91,896</td>
<td>183,009</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>126.35</td>
<td>42.49</td>
<td>96.42</td>
<td>118.86</td>
<td>171.74</td>
<td>314.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>3,139,581</td>
<td>104,653</td>
<td>25,198</td>
<td>41,763</td>
<td>68,139</td>
<td>156,111</td>
<td>393,386</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>182.03</td>
<td>69.16</td>
<td>90.67</td>
<td>137.34</td>
<td>252.47</td>
<td>419.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>2,852.25</td>
<td>98.35</td>
<td>67.00</td>
<td>89.75</td>
<td>98.00</td>
<td>104.75</td>
<td>168.00</td>
<td></td>
</tr>
</tbody>
</table>
Already the vacuum is beginning to be filled by such agencies as the U.S. Office of Education, state boards of higher education, state departments of education, and administrators of individual institutions. The consequences, if the trend continues, can only be chaos.

In recognition of the lack and in response to a widely expressed need, the Association of College and Research Libraries and the Association of Research Libraries joined in 1968 in appointing a Committee on University Library Standards, to deal with various aspects of university library operation and administration.

The Joint Committee’s original intention was to adopt a strictly pragmatic approach to its assignment. Instead of attempting to formulate a statement of ideal standards, it was agreed that there should be developed a series of “Criteria for Excellence for University Libraries,” based on the best current practices. The criteria would be drawn from facts collected from the leading American university libraries. It was recognized, at the same time, that further research would be required before valid standards could be established.

As a control group, fifty university libraries in the United States and Canada were selected. The libraries chosen are primarily those institutions belonging to the Association of American Universities (or more specifically the Association of Graduate Schools in the AAU), supplemented by several top ARL libraries to bring the total number to fifty. The entire group cooperated in supplying data under seven categories: resources, personnel, finances, space, public service, administration, and professional school libraries. The present article summarizes the data collected, prior to any attempt to develop standards, because it is believed that the statistical information in itself is valuable.

The preceding tables are based on far more detailed figures for individual li-
Standards for University Libraries

Libraries contained in a near-print report issued for limited distribution by the Association of Research Libraries.

If one is willing to concede that the fifty universities represented in the preceding tables do indeed possess the most distinguished libraries to be found in American institutions of higher education, an examination of their current status is relevant to the study of standards. Any university library, if it wishes, can compare itself with the selected fifty on such bases as financial support, resources of various types, personnel, space, and aspects of public service. For the purpose, averages, medians, or quartile figures may be used.

For practical application in an individual library, accordingly, the tabular data may assist the librarian in determining the proper distribution of his budget, the ratio of professional to non-professional staff, the size of the book collection, space relationships, hours of service, and a variety of additional aspects of library management—enabling him to compare his own situation with institutions he considers his peers or whose eminence he desires to attain or to emulate.
The Application of Computers to Library Technical Processing

A 1967 White House report, Computers in Higher Education, begins with an arresting statement: “After growing wildly for years, the field of computing now appears to be approaching its infancy.” Library automation has passed through similar throes, and we may be at the beginning of a period of new and significant development.

Several important milestones have already been reached. Computer experts, now facing the problem of structuring and maintaining complex files, and dealing with a wide span of graphic output characters, have begun to appreciate the data management complexities inherent in bibliographic data. We no longer hear from computer people that our problems are trivial. We, in turn, have realized that it is no longer possible to speak of one component or subsystem such as an acquisition system, in isolation from other technical processing functions. Automation has confirmed the integrity and unity of technical processing.

The economics of applying computers to library data processing has come as a rude shock to many administrators. The old idea that an automated system could be operated at a new lower cost than a manual system is dead, indeed.

One now needs to plan future budgets in terms of cost avoidance or improved library services.

The Large System: Maker or Solver of Problems?

The choice between stand-alone equipment and procurement of services from a central facility is the first major decision in any automation endeavor. The small or medium-sized stand-alone device is attractive because one can fully dedicate it to a specific application. But as the user’s sophistication and system requirements increase, he outgrows the smaller machine and soon finds that he must cast his lot with a larger facility in order to enjoy certain technical benefits and operational features not available on smaller devices.

It is at this point that one must be prepared to give up some freedom in exchange for more computer power, and where the complexities of scale begin to compete with the economies of scale.

Software in the large system carries with it unforeseen problems that seem to crop up endlessly and affect the scope of many operations in unknown and unpredictable ways. Hardware manufacturers and software developers have already learned about this, much to their chagrin, especially with time-sharing. W. F. Miller, Associate Provost for Computing at Stanford, characterizes this facet of software thus: “The reward, and at the same time the retribution, of software is self-change.” The reward is the enormous increase in our power to do things; the retribution is
the unforeseeable perturbations which come back to haunt operations thought to be fully debugged and dependable.

Fifteen major hazards in the development of large multi-use systems have been enumerated in a paper by F. J. Corbató, of Project MAC at MIT.3 The dangers cited include lack or inadequacy of documentation, failure to implement designs, overstaffing of the design team with its attendant communication and supervision problems (Corbató conceives of ten as a maximum number), overextension in time, the attempt to undertake more than one significant advance at a time, the assumption that a finish date can be predetermined, lack of essential hardware, geographic scattering of resources (people and equipment), too many maintenance people in the systems programs.

Yet, once in the grasp of an automated system, there is no turning back. Entering upon an automated system in any enterprise is practically an irreversible step. This is why reliability in automated systems is a factor of overwhelming importance for library operations. The thing about library operations is simply that they must be operational. Our users and our management demand facilities that work during all normal service hours, and sometimes beyond that.

With this critical background, I would now like to describe what I believe are useful and profitable computer applications to acquisitions and technical processing. I also wish to report in some detail Stanford's development work in automated technical processing, an effort supported by the Office of Education's Bureau of Research. (Contract OEG-1-7-071145-4428)

Candidates for Library Automation

First, it is clear that a significant number of libraries do not require and should not embark upon library automation programs; they should instead participate in regional technical processing centers, operated either by a jurisdiction or a commercial organization. Typically, these libraries order and process mainly current English language imprints marketed in the book trade, and they buy multiple copies of the same title for branch libraries. NILINET (New England Library Information Network), The Ohio College Library Center, and the Colorado Academic Library Book Processing Center are examples of service agencies for libraries which should not individually undertake automation, because their local operations are too small in scale. In the aggregate, the scale is sufficient to support the personnel and machine overhead demanded by computerized operations. These new centers may soon supplant in-house technical processing operations. While it is not clear at this time that technical processing will disappear altogether in the small and medium-sized library, it will certainly be radically altered in the near future. It is doubtful whether large university and research libraries can ever dispense with internal technical processing services, but even there, more widespread utilization of centrally produced data is likely to shrink the size of technical processing departments.

Standardization

Second, it is abundantly clear that the major impact of library automation will be felt in the area of bibliographic standardization. Page 1 of the final report, The MARC Pilot Project, contains a crucial observation: "The single most significant result of MARC has been the impetus to set standards."4 Standardization efforts will be greatly aided by budgetary considerations. In every enterprise there is keen competition for the dollars needed to run every operation in the organization, and the dollars can be very determining. The increasing trend towards measuring perform-
ance effectiveness is already being felt in libraries. For example, Booze, Allen, and Hamilton is conducting a major management study for the Association of Research Libraries, a study whose aim is management improvement and increased adequacy of budget justification.

Two-thirds of a century ago, Herbert Putnam, then the Librarian of Congress, outlined the Library’s proposed card distribution service. The purposes of distributing centrally produced bibliographic data are stated in clear and simple language:

to supply libraries with information of books which they do not possess . . . to enable them to avoid expense in the preparation for use of those which they do possess.

He goes on to quote the contemporary library press, pointing out that the two most costly factors of getting a book recorded in the catalog are the work of the cataloguer, the expert, and the work of the compositor or transcriber. It is worth the time and space to quote in extenso from this 1901 report:

Now, the interesting thing is that until now libraries have been, in effect, duplicating this entire expense—multiplying it, in fact, by each one undertaking to do the whole work individually for itself. There are thousands of books which are acquired by hundreds of libraries—exactly the same books, having the same titles, the same authors and contents, and subject to the same processes. But each library has been doing individually the whole work of cataloguing the copies received by it, putting out the whole expense . . .

American instinct and habit revolt against multiplication of brain effort and outlay where a multiplication of results can be achieved by machinery. This appears to be a case where it may. Not every result, but results so great as to effect a prodigious saving to the libraries of this country. The Library of Congress cannot ignore the opportunity and the appeal. It is, as I have said, an opportunity unique, presented to no other national library. For in the United States alone are the library interests active in cooperative effort, urgent to “standardize” forms, methods, and processes, and willing to make concession of individual preference and convenience in order to secure results of the greatest general benefit . . .

A centralization of cataloguing work, with a corresponding centralization of bibliographic apparatus, has been for a quarter of a century an ambition of the librarians of the United States. It was a main purpose in the formation of the American Library Association in 1876 . . . The economies effected to the libraries of the country might alone justify the maintenance expenses of the Library of Congress even without a single direct service to scholarship. The country at large might indeed save great expense by purchasing a copy of a book merely to be catalogued at Washington, even if that copy should never go outside of the walls of the Library nor find a reader within it.

There are many difficulties of detail, and the whole project will fail unless there can be built up within the Library a comprehensive collection of books, and a corps of cataloguers and bibliographers adequate in number and representing in the highest degree (not merely in a usual degree, but in the highest degree) expert training and authoritative judgment. But the possible utilities are so great; they suggest so obvious, so concrete a return to the people of the United States for the money expended in the maintenance of this Library; and the service which they involve is so obviously appropriate a service for the National Library of the United States, that I communicate the project of this report as the most significant of our undertakings of this first year of the new century.5

Is it not time to realize Putnam’s dream? Is not the day long gone when we can justify a host of alternatives to centrally produced bibliographic data? It is my conviction that there will be no justifiable computer operations in libraries until we realize that the computer is an instrument of standardization, not a device whereby we perpetu-
ate the alteration of bibliographic data produced by a central source. The idea of a local cataloger examining LC prepared data on a CRT terminal for editorial modification is economically un­supportable and managerially unwise. Yet there are still libraries which, even in their manual systems, alter 100 percent of the card sets they receive from the Library of Congress. The cost of performing such chores of questionable necessity is likely to be intolerable in a computer environment. The aggregate of system resources spent on data management, Central Processing Unit cycles, Input/Output, channel time, and so forth, will be too great, and the computer’s ability to do its own bookkeeping is relentless. Hence, it will be impossible to bury the cost of changing bibliographic data.

Perfectionism: Friend or Enemy?

Perfectionism and permanence are two interdependent fallacies of modern bibliography. Perfectionism is based upon the idea that the librarian is creating a permanent record. Unfortunately, even in the manual system this has never been true. Even the Library of Congress’ Official Catalog changes substantially, the amount varying according to the age of the record and ranging from an estimated rate of about 5 percent in the first year of a record’s life to an aggregate of about 40 percent of all records after thirty years.6 To prepare for future network applications it is essential that changes in the nation’s bibliographic records be kept as consistent as possible, and this is achievable only by rigorous adherence to data centrally produced at a national bibliographic center, even if those data contain errors when issued. At least in this way, errors will be consistent, and they can be corrected later in a consistent way by the central distribution service.

The abandonment of perfectionism in bibliography needs to be established as a goal. (It need not be employed as an excuse for deliberate carelessness.) The future of a computerized update mechanism for bibliographic records should encourage libraries to make rapid inroads on arrearages now, without waiting until every bibliographic problem is solved with a score of 100. We may be approaching the first time in history when we can afford a few errors.

Another facet of the technical processing problem has been a traditional view, fortunately not shared by everyone, that all books are equal and must receive equal technical processing. Just as we need to establish time priorities for processing, we need to make intellectual judgments concerning the quality, amount, and depth of bibliographic treatment to be given publications. Because such decisions are no longer irreversible, there is an opportunity for expedited processing and the preparation for public use of more books.

The idea of self-sufficiency in resources, i.e., exhaustive collection building, is dead. Self-sufficiency is a laudable heritage of the protestant ethic, needed in eras of slower communication. High “budget visibility” of book funds has aided in the development of a variety of cooperative acquisition programs, based on the idea of building national rather than purely local resources. The costs of technical processing have not been so visible, but they are coming into sharper focus all the time. Costs now hidden in personnel and overhead are likely to be surfaced by the application of computer technology.

Applications to Technical Processing

There are two categories of work which can be substantially aided by computer applications.

First, we have a great mix of data-management activities: keyboarding, updating, deleting, sorting, printing, distributing, calculating, merging, filing—
dull and boring activities. It is difficult to recruit and train, and almost impossible to retain staff for this kind of work. Rapid staff growth needed to accommodate recent large increases in publication output makes for very difficult management problems: supervision troubles, lack of employee satisfaction, high turnover, poor communication within the organization, and difficulty of following standard procedures.

Searching is the second category of technical-processing work which can be materially aided by computer applications. Stanford has applied substantial effort to develop a capability for on-line searching, because we believe that in this area there can be a future payoff in public service when computer costs come down to the point where public terminals can be justified. Meantime, the paucity and rigidity of access points for searching card catalogs and in process files makes searching for technical processing frustrating and much less productive than it should be.

**Development in On-Line Search and Retrieval**

Stanford has developed a search facility by which many users can search the same or different files simultaneously, just as one can do with the card catalog, but with these additional features which no card catalog can offer: (1) users can interact or negotiate with the files expanding or contracting searches at will, even saving them for future reference if desired (saved searches can be run against new MARC tapes); (2) users can carry out coordinate searches; and (3) users can access any of several central files anywhere that there is a terminal. System response time can be kept reasonably short—a few seconds—because an inverted file structure searches index files which point to data base entries. In other words, no serial searching is employed.

With the aid of a grant from the Library and Information Science Branch of the Office of Education’s Bureau of Research, Stanford is developing an on-line bibliographic control system dubbed SPIRES: Stanford Public Information Retrieval System. Acquisition and cataloging are the two chief areas of current research and application. However, it is well to mention that interactive searching is practical only on fairly large computer systems.

**Requirements for On-Line Retrieval**

An on-line search facility requires several things: (1) a large computer facility (Stanford’s system uses a partition of an IBM 360/67); (2) software with built-in feedback features to facilitate system modification; (3) a large data base; (4) very large storage facilities; (5) a means of rapidly displaying search results, preferably by visual terminals; (6) a wideband communication network to transmit processed data to remote stations.

SPIRES software already provides its users with the capability of communicating their satisfaction or dissatisfaction to the system’s designers. A large data base is obtainable through MARC, and an even larger one will be available through RECON (REtrospective CONversion), if the full RECON Project materializes. Really large storage facilities—enough to store even a million records locally—must await future, more economical devices, perhaps photodigital stores or laser beam recorders, such as the UNICON (Unidensity Coherent Light Recording). In terms of screen capacity, character set, and writing speed, visual displays are still quite costly and not yet truly satisfactory for bibliographic data. A wideband communication network means coaxial cable, which costs about $1.50 per installed foot.

**Need for Collaborative Development**

One of the first automation lessons librarians learned was the astronomical
communications gap between computer people and librarians. We conclude that this gap must be reduced nearly to zero—if the automation of library technical processing is to succeed. Three groups need to be brought together: the librarian, the computer expert, and the information scientist. The library can’t do this job alone; in fact, none of these people acting alone is likely to succeed.

Expendable Equipment?

For many years we have been in an era of expendable software. In fact, software investment commonly runs two to three times the cost of hardware. It is not unreasonable to expect that the future is likely to bring us quickly to an era of expendable hardware. The American economy already provides an outstanding precedent: the automobile is a piece of expendable hardware. Basically, hardware and software are no different. Some hardware—terminals in particular—may have a useful lifetime of only one or two years.

The Future of Books and Bibliographic Files

About ten years ago, the book began to come under some concerted attack as an inefficient means of storing and transmitting information. Despite the controversy surrounding this issue, one fact stands out: the book is still the cheapest to produce, the simplest and easiest-to-use device for information storage and retrieval. A 1969 article on the impact of the computer on publishing begins: “The most efficient information storage medium, by far, is the least sophisticated to produce—the printed page.” In 1968, consumers spent $4 billion for broadcasting services and another $4 billion for consumer electronic products. Yet in the same year, the value of printed and published goods totaled $22 billion, of which $12 billion was for newspapers, books and periodicals—substantially more than the sum spent for nonprint communication media.

Looking ahead some distance in the future, I see a long life for the book. I see the retention of paper as a major medium of communicating data for acquisition processing; booksellers in developing countries (and even in some advanced ones) will continue to issue paper invoices, some written in a familiar illegible scrawl. I foresee continued lack of rationalization of the processing unit in book procurement (invoices, purchase orders, checks, etc.), the factor responsible for the great amount of effort we face in distributing and redistributing data over media in reconciling our budget accounts and invoice documents. I do not see vast on-line bibliographic files in our major research libraries, except possibly at the Library of Congress and maybe at a few regional bibliographic service centers. Rather I see the possibility that our entire concept of file organization will be restructured. A highly simplified model, which I hasten to add I have not casted, might look something like this: closest to the library user might be on-line access to current items in process and to those permanently held items known to be heavily in demand. Somewhat further away—in terms of ease of search and retrieval—might be book catalogs with relatively brief and simple entries supplemented by full bibliographic data in microfilm cartridges permanently arranged by sequence members in the form of a register. Such a master file could be centrally produced by computer output microfilm printers as a byproduct of the MARC and RECON projects. This register would require virtually no updating—all the organization and maintenance would be confined to the book catalogs or on-line files, which would act as indexes to it. Even the book catalogs might be organized far differently from our present ones; some
might be topical, others chronological. A microform register would be extremely cheap to duplicate and distribute. Hard-copy of full bibliographic data could be easily obtained by conventional reader/printers.

Before any idealized file structure or service like this can be implemented, we need to know much more about our users than we now do. It is unlikely that we will reach this future by postulating great, all embracing “total system designs,” either conceived in ignorance of user requirements, or representing someone’s pet idea. The necessary research, experimentation and implementation should be dominated by two principles: (1) construction and testing of development models capable of self-change through user feedback, and (2) implementation of major functional modules one step at a time.

References

7. A searching guide, the SPIRES Reference Manual, has been issued to explain the search facility; this publication is available on request. Further information on Stanford’s automation program is contained in the Proceedings of the Stanford Conference on Collaborative Library Systems Development and in the first issue of the Project BALLOTS Quarterly Newsletter, which was distributed at the Atlantic City ALA Conference. The Proceedings are available for $7.00 (prepaid) from the Office of the Financial Manager, Stanford University Libraries, Stanford, Calif. 94305. Overseas orders are priced at $8.00 and must be prepaid in U.S. dollars.
Problems in the Life of a University Librarian: Thomas James, 1600-1620

The founder of the reconstituted library at Oxford University, Sir Thomas Bodley (1545-1613), has enjoyed the praise of historians and librarians. The achievements of his librarian, Thomas James (1573-1629), have been less celebrated but are possibly equal in importance to those of Bodley. Evidences of the conflict between these two personalities reveal differences in objectives and approaches to librarianship. After examining four episodes at Oxford between 1600 and 1620, the author concludes that James represented a progressive position in academic library services.

The story of Sir Thomas Bodley’s offer to restore the library at Oxford University in the early seventeenth century is a familiar one to most library historians. Much praise has been accorded Bodley (1545-1613) for his far-reaching activities on behalf of the bibliographical resources of the library. Thomas James, the first librarian of the Bodleian Library, has received less attention and limited praise. Most chroniclers are content to note the significance of the printed book catalogs which he produced.

The objective of this essay is to provide some insight into Thomas James’s career as an academic librarian at Oxford University from 1600 to 1620. The general approach and philosophy of James to academic librarianship will be studied in relation to the ideas of Bodley, the benefactor of the library. The relationship of the two men will be explored. To illustrate the thesis which evolves from this comparison, several episodes in the life of Thomas James will be presented as examples of his contribution to the Oxford library and the profession he chose. Because of the nature of this essay, the more commonly known events of James’s life will not be repeated. However, before the main thesis may be developed fully, some knowledge of the early life of Thomas James is necessary.

Although the exact date of James’s birth is unknown, he was born about 1573 in Newport, Isle of Wight. He matriculated at New College, Oxford, on January 28, 1592, and was a fellow of the college in the years 1593 to 1602, receiving in the meanwhile his BA in 1595 and his MA in 1599. On May 16, 1614, he received the BD and DD degrees, perhaps in partial recognition of his achievements as a scholar-librarian.

Immediately upon finishing his undergraduate education, James began the production of scholarly works and bibliographic activity which characterized his life to the end. In the years 1598 and 1599 his translations of Italian and French works were published in Lon-
don and Oxford. His edition of Richard de Bury's *Philobiblon* was printed in 1599 and included a long dedication to Bodley. Although James praised Bodley and his colleagues for reestablishing the Oxford library, there is no clue to his desire to become a librarian. Nevertheless James enjoyed, even at an early age, an excellent reputation for scholarship among his contemporaries. From the first, Bodley had his eye upon James to be the Keeper of his library.

Before the Bodleian Library, as it would be called in years to come, formally opened on November 8, 1602, James had been in the employ of Bodley for some months.

Even a cursory examination of the correspondence between Bodley and James reveals the strong affection that the elder statesman held for his young librarian. Thomas Bodley was in his late fifties when he made his proposal (February 23, 1598) to the university that he refurbish the library. Son of a printer, Bodley fled to Europe with his family during the reign of Queen Mary, and consequently received an education at the hands of protestant scholars in Germany and Switzerland and gained an acquaintance with several languages. With the accession of Elizabeth, Bodley's family returned to England, and he went to Magdalen College, Oxford, whence in 1563 he received his BA degree, specializing in Greek and Hebrew studies. After teaching some years, he traveled on the Continent and became proficient in Italian, French, and Spanish, and upon his return to England joined the Court. From 1585 until his request for recall and retirement from public service was granted in 1596, he undertook various state missions of a diplomatic nature and performed well in these tasks for which he was so admirably fitted. In 1587 he married Mrs. Ann Ball, a wealthy widow; no children issued from the union.

At the close of his life, therefore, Bodley determined to offer his services in a venture that would bring fame and honor to his name and to that of the university and nation. His proposal was accepted, and the response of his friends to support the project, both in providing books and also in gathering funds for the endowment, was successful.

Bodley, a bachelor for most of his life, was a man of various gifts and marked personality traits. His years as a scholar working with the details of linguistic study must have contributed to his concern for minutiae and his knowledge of the bibliography of the day. His was a classical education, and he recognized the important works in major fields. Furthermore, his years in public service must have influenced him to place a high priority on the appearance of the material in his library. He was exceedingly conscious of public relations and always strove to derive the maximum advantage out of every situation. This is seen in the meticulous way in which donors were wooed and satisfied.

These traits, careful attention to detail and a perception of how operations appear to others, are extremely useful to the good administrator. However, Bodley combined them with a third trait. The Oxford library was in many ways the private and personal project of Thomas Bodley himself. He made the library the one passion of the last fifteen years of his life and in so doing he may have limited the development of the library. Instead of allowing for discussion in the evolution of procedures of library operation and for flexibility on the part of his staff, he exercised personal control. Until formal statutes were approved by the Crown and the university, and the endowment provisions for the library's support were accepted in 1610, Bodley was the source of all funds and he made use of this privilege to take direct responsibility for the library.
Thomas James, not yet thirty when asked to be the Keeper of the Oxford library, was not interested in being a simple desk clerk for Bodley. He was basically a faculty member and his first love was research. He was concerned for the use of the materials he acquired. Not only did he want to collect for others, he wanted to avail himself of the materials and aid others in their use. As a young man, he seemed to be particularly sympathetic to the undergraduates and students below the highest rank. As a scholar more than a diplomat, he was more concerned with the general utility of the collection than he was with appearances and the impressions that were made for their own sake.

Here then are the two principal personages in the foundation of the Bodleian Library: Thomas Bodley and Thomas James. While they both placed the growth and development of the Oxford library on the highest level of priority, their personalities and modus operandi were quite different. Opinions of scholars regarding the two men vary apparently with personal biases. The traditionally minded tend to exalt Bodley, and revisionists lean toward a greater appreciation of James's role in the library's development. Here are two examples of opinion. Strickland Gibson, supporting Bodley, has written:

It must be obvious to everyone who reads Sir Thomas Bodley's letters that during the first eleven years of the library's existence he took a far larger share in its organization than did his Librarian. Although James... had at first shown promise of being an ideal Librarian, he proved otherwise. Bodley was an exigent master, and James a careless cataloguer.10

On the other hand, George Wheeler has written concerning James,

Dr. Thomas James, Bodley's first Librarian, has perhaps scarcely received justice on his professional side at the hands either of his contemporaries or of writers of a later date... To a certain extent this view is perhaps due to his having been overshadowed by the commanding personality of Sir Thomas Bodley. The latter held very decided views not only on matters of real importance but even on comparatively trivial details, and the Librarian thus became, to a large extent, merely the executive officer who carried out the instructions of the Founder... Perhaps, too, there has been a tendency to attribute to the Founder what really was in a great measure due to the Librarian.11

It is the thesis of this essay that Bodley and James were personalities which because of their prior training, experience, and interest were united in their love of books. But this is where the unity ends! Each had his own reasons for the practice of librarianship as he saw it. Their relationship was marked by conflict between contradictory goals. Between them they achieved a great deal. But unlike Bodley, James has not been fully appreciated.

In the following pages, four episodes in the tenure of James as Keeper of the Oxford library will be briefly studied for the purpose of understanding the relationship that he had with Bodley and appreciating his role in the library's administration. The four issues to be considered are James's initial appointment, his ideas of book selection, his shelving scheme, and his resignation.

Although Bodley had decided on James for his librarian perhaps as early as the publication of the new edition of Bury in 1599, James did not actually enter the employ of Bodley until the appointment was confirmed April 13, 1602.12 James had, however, for several years been working with Bodley in preparing the new collection of books. Before the library was officially opened in November 1602, James tried to settle several issues with Bodley. The first involved compensation. Bodley had fixed the annual salary for the Keeper at £22 13s. 4d. James wrote him suggesting that
thirty or forty pounds might be more appropriate! When James hinted at leaving the library, Bodley relented and increased his compensation by four pounds per year. This was gradually raised to forty pounds per year after 1611. The first battle for increased financial recognition of the academic librarian was won.

Bodley's original instructions in proposing to rebuild the Oxford library also outlined the qualifications for his Keeper, whoever he would be. Two provisions clearly did not meet with the approval of James: the prohibition of holding a clerical appointment and the prohibition of marriage. Just two months before the library opened in November 1602, James, with the grudging consent of Bodley, violated the regulations of the Founder. On September 14, he became rector of St. Aldate, Oxford, and on October 18, he married Ann Underhill. In 1614 and 1617, he took other church posts. Since Bodley was neither a churchman nor the marrying type (at least for the first forty years of his life), perhaps he did not realize the significance of these restrictions upon the position he outlined. By gaining Bodley's reluctant approval, James protected both his domestic and intellectual rights. Bodley, like St. Paul, apparently wanted his man to concentrate totally on the business at hand, in this case, library work. But James won out for the necessity of matrimony and the freedom to follow his intellectual interests.

A second matter which illustrates the interaction between James and Bodley involves the issue of book selection. Bodley started selecting books and manuscripts before James came to his Oxford post. Many volumes were donated by Bodley's friends and acquaintances. James I offered Bodley the privilege of selecting from his books some additions to the library—an offer that was never fulfilled. In addition to donations, Bodley had a London agent tour the book centers of Europe to purchase volumes. However, the great benefactor had a particular taste in books. First, he preferred large folio volumes to the smaller quarto and octavos. Second, he wanted the books to be in European or classical languages; "learned books should be written in learned languages." And third, Bodley did not want his library cluttered with English plays and almanacs, to which he referred as "baggage bookes" and "riffe raffes." Bodley's motive was probably good; he wanted to create a true scholar's library.

James did not lack enthusiasm for the classics, but he was concerned with the vernacular as well. Witness his concern for manuscripts in the university libraries and his translations into English from French and Spanish. Perhaps James saw that a growing number of English playwrights and writers were achieving stature with their continental counterparts. To discourage the collection of the plays of Shakespeare and Marlowe was a serious policy for the library to maintain. Eventually, of course, the library became internationally famous for precisely those materials Bodley had banned!

Manuscripts were more attractive to Bodley than printed books. It must have been in a moment of weakness when Bodley in 1610 negotiated the agreement with the Stationers' Company whereby a copy of every work printed by a member would be presented to the library. To Bodley's dismay and James's delight, the influx of English books slowly increased. Although some years were required to bring pressure upon the Company to honor its agreement, a principle was won by James which contributed to make the Bodleian Library one of the finest. James could be pleased not only because of the deposit value of this material, but because the undergraduates would have access to current English thought.

A third matter over which Bodley
and James disagreed was the arrangement of books in the library. Bodley felt that the folio and larger quarto volumes should be shelved, preferably chained to desks, for relatively easy and free access. The smaller books should be kept under lock and key because of the threat of theft. Furthermore Bodley insisted on the same policy for manuscripts and printed books. Now this may have worked out well enough in 1600 when the proportion of manuscripts was much higher than in later years, and when the percentage of large folio volumes was greater than it was ten years later. But with the growing collection of medium-sized printed books, the original arrangement did not work as well.

James tried to get his chief to agree to a change, but to no avail. Upon Bodley’s death in January 1613, James thought that he might be able to carry out his own plan. He separated the manuscripts and put them under lock and key, and thus they were not directly accessible to the reader. In addition, he moved the octavo volumes to open shelves. James knew the value of manuscripts and he also knew how infrequently they were being used. Progress had won again.

But not quite! James soon incurred the wrath of the Oxford archivist, Brian Twyne who was engaged in research on a history of Oxford and who used the manuscripts perhaps more frequently than other scholars. Twyne made a formal complaint to the Curators of the library at the visitation of 1613, one of the first times the Bodleian statutes had been put into effect. Twyne perhaps welcomed this opportunity to attack the library and its librarian, and thus invoked the elaborate provisions that Bodley himself had laid down as to the arrangement of the library. James, yielding to pressure, was persuaded to revoke his earlier decision. He thus discovered that Bodley’s spirit was still very much alive. John Rous, James’s successor, was able to make the change during his tenure as Keeper. This incident shows the type of museum depository that Bodley envisioned, in contrast to the practical arrangement of James.

One other evidence of a difference in philosophy is the proposal made by James to Bodley that when the Arts portion of the new addition to the original building was completed, it be made into a library for the students of the Arts, that is, an undergraduate library. Bodley did not accept this proposal and the idea was not implemented at Oxford until 1883. James turned instead to his extensive subject cataloging projects as a means of aiding students.

The final episode in James’s life which reflects his philosophy of mission in the library is his resignation. In 1620 James resigned from his position as Keeper of the Bodleian Library. His reason for leaving was severe bodily suffering, which may have been the case, though he lived for another nine years and was productive all the while. Yet there is some evidence that James was not appreciated by his contemporaries. Although Bodley could disagree and spar with him about library procedure, he had a certain affection for his young administrator. With Bodley’s death, things probably changed somewhat.

Brian Twyne, the University Archivist, publicly wished that Mr. James would frequent his place more diligently, keepe his houres, remove away his superfluous papers lienge scattered about the desks, and shewe himselfe more pliable and facill in directinge of the students to their bookes and purposes. Whether the implied can be substantiated is difficult to determine. One thing is clear. James could not have been happy bogged down in the trivial details of the profession. While still alive, Bodley dealt with these matters whether or not James wanted him to do so. James at least could concern himself
with his Biblical studies. He was a member of one of the Oxford committees preparing the Authorized Version of the Bible in the years prior to 1611. James finally succeeded in getting Bodley to appoint an Under-Keeper in 1606 to help relieve him of some of the physical work, paging octavo volumes for patrons! Under Bodley, his duties were many, and the Founder had insisted that six hours per day in the library was reasonable; he could spend the other four hours of the work day in his own study.²⁵

There are suggestions that in his later years as Keeper, James might have felt that he was not free to pursue those activities for which he was best suited. Of the more than twenty books that James produced between 1600 and his death, six appeared before 1613. There are none recorded from 1613 to 1623, but eight were published between 1624 and his death in 1629.²⁶

He did not resign, however, until the second edition of his catalog of books in the Bodleian Library was at press. Here he arranged the titles of the 16,000 volumes in an alphabetical arrangement.²⁷ This was a crowning bibliographical achievement. Since the first classified catalog of 1605, James had been at work on subject catalogs for the faculties of Theology (1607), Medicine (1610), and Law (1613). After his retirement, he completed the greatest task of all, the subject catalog for the Arts (1623).²⁸ In a sense this fulfilled his desire to be of utmost help to the patrons of the library. Wheeler says:

He resigned the Librarianship in 1620, and in order that readers should not be altogether deprived of the advice and assistance he had been able to give in person while he had charge of the Library, spent some part of his leisure in the compilation of a subject-catalogue intended primarily for the use of younger students.²⁹

In an official Bodleian Library publication of 1951, the following judgment is made:

It is doubtful whether any library in Europe at this time was so well equipped with the bibliographical tools required to enable readers to make the best use of its contents. It was not without reason that a contemporary could pay tribute to “Mr. Dor James the incomparably industrious and learned Bibliothecary of Oxford.”³⁰

Whatever the deeper causes for James’s resignation, his service to the library did not end and his desire to assist the academic community can hardly be questioned. A five-hundred page volume remains containing transcripts of 124 letters addressed to James. Indicating the scope of service he performed, the volume contains letters complimenting James, introducing visitors and others, asking for information from books in the library, asking for transcripts of library material, asking for help in the preparation of works for publication, and dealing with the persecution of Catholics, to name a few of the subjects.³¹ These copies of letters may have been left behind by James to offer a defense against the charge that he had been a liability to the library.

In summary, what can be said? Accolades have been heaped upon Sir Thomas Bodley since his imaginative proposal of 1598; his reputation has been so exalted that the labors of his librarian have been eclipsed. Episodes, however, speak for themselves. Bodley was not a librarian in the historic and professional usage of the word. Rather, he was a collector with a personal idea of the arrangement and use of the collection he sponsored as a private project for the benefit of Oxford University and England. His traditional conception of a somewhat medieval library which served a select group of classical schol-
ars doubtless hindered the development of progressive library services. His library was to be a showpiece and an incentive to encourage further donations and endowment funds.

Thomas James was a younger man who had had recent personal experience with the problems of research and was involved in continuing study himself. He was aware of the changing nature of library materials and the needs of students. In short, he was both a scholar and a service-oriented librarian. He contrasts sharply with the aristocratic bibliophile, Bodley. The motives of neither man may be impugned. Without both of them, the Bodleian Library would have had a less illustrious beginning, if a beginning at all. But in a revisionist spirit, the career of Thomas James needs to be reevaluated. When that biographical study is done, Thomas James will in all probability emerge as a great academic librarian.

REFERENCES

Ed. Note: The author calls attention to Sidney L. Jackson's article, "Bodley and the Bodleian: Collections, Use, and Administration," Library Quarterly 39, 3 (July, 1969) 253-270. Jackson's article was published after acceptance by CRL, and although both deal with some of the same ideas, the emphasis is quite different.

1. Gordon Goodwin, "James, Sir Thomas (1573?-1629)," Dictionary of National Biography (London, 1908), X, 658-660. Unless otherwise noted, biographical information on Thomas James is drawn from this source.

2. George W. Wheeler, Letters of Sir Thomas Bodley to Thomas James, First Keeper of the Bodleian Library (Oxford, 1926), p.x

3. Ibid., pp. xi-xii.


5. Falconer Madan, The Bodleian Library at Oxford (London, 1919), p. 16, cites the date of the marriage at 1597. Macray, however, in his article in the Dictionary of National Biography (p. 757) sets the date as 1587, some ten years earlier.


7. Gibson, p. 28, says, "To the founding of his library Sir Thomas Bodley brought the mind of a scholar, the training of a diplomatist, and the common sense of a man of business."


9. George W. Wheeler, "The Bodleian Staff, 1600-12." Bodleian Quarterly Record, vol. 2, no. 23 (3rd Quarter 1919), 281. "For several years then James had sole charge of the Library, and during the whole of his term of office the greater part of the work of the Library fell to him. But if assistants were wanting there was no lack of supervisors. . . . The Founder, indeed, took such a very active part in the management of the Library that the Keeper was practically relegated to the position of an executive officer carrying out the instructions of another. The smallest admin-
Bibliocentre: An Essay in Central Processing at College Level

This paper recounts the establishment of a central bibliographic and processing center for twenty community colleges in Ontario. It presents a case history of the beginnings of this venture, including the basic demonstration regarding costs.

The Bibliocentre of the Colleges of Applied Arts and Technology of Ontario came into being as a result of the foundation of these colleges in the spring of 1967. At that time it was announced that twenty colleges were to open their doors in the fall of the year, for students throughout Ontario, beginning a new pattern of higher education that would be a different sort of education from that traditionally offered by the universities and colleges already in being. Although these new colleges were to be primarily concerned with vocational and technical education, the liberal arts, naturally, were not to be neglected. Some people were surprised at the apparent suddenness of the development, although indeed their founding was the result of years of study and preparation by the Applied Arts and Technology branch of the Ontario Department of Education. Each college was made responsible to a local Board of Governors. A Provincial Council of Regents was set up to govern the schools. The Council was composed of citizens eminent in their own fields of endeavor. They were backed by the expertise of the Department of Education, under the direction of Norman Sisco and a selected staff of experts.

The colleges came before the buildings that were to house them. They opened in temporary quarters, in converted schools and industrial buildings, even in trailers. The staff was assembled, often just in time to meet a hectic opening day. Among the most difficult staff to find and to hire were librarians with college experience. Yet without librarians there could be no libraries, so it was with a strong sense of urgency that Alexis Jamieson, recently appointed Master and Assistant Librarian at the new Seneca College, returned to McMaster University, where she had formerly been Chief of Public Service, to see what McMaster could do to help Seneca get a library together for opening day in the following September.

The McMaster librarians agreed that if the Seneca library staff, still in process of assembling, would provide them with a list of books needed, the McMaster staff could process them. They re-
garded this as not too much an intru-
sion on their own time, and they were
doing it for a friend and colleague. They
were blithe about it. Some of the blithe-
ness was to wear off during the next few
months. Had they known what they
were letting themselves in for, they
would not have entered into the scheme
so easily, so full of goodwill. Yet, now
that it is over, it was a library experi-
tence to be cherished. It became for all
a sort of Agincourt, a feast of Crispian,
but at that time, in the spring of the
year, it seemed easy going, what they
would do for Seneca.

Then, in helping to remove the stone
that blocked the progress of that library,
they sprouted wings, until the whole sky
was full of flying things, books, brickbats
and unease. For it soon happened that
McMaster librarians became persuaded
that they ought to help not only
Seneca,
but all of the new colleges.

Victor Whatton, of the Department of
Education, was concerned with the li-
brary situation of the colleges. More
than most administrators, he realized the
time and effort involved in setting up a
library, because he is a graduate librar-
ian as well as an educational adminis-
trator. By dint of his cajolement, he per-
suaded McMaster to do for all the col-
leges who wanted it what had been
agreed upon for Seneca alone. He must
have been very persuasive that day at
McMaster. Somehow his ebullience car-
rried the day. He infected McMaster
with it so much that at times they were
sick of it, yet if anyone deserves the
palm for getting libraries into the col-
leges as soon as they did, it is he. He
was the supporter whose confidence
and optimism never flagged; indeed, it
more than matched McMaster’s own.
All involved in the project had had lit-
tle or no experience with any form of
higher education save that at a univer-
sity. Here is a great lesson in library ad-
ministration, in administration of all
kinds! What seems so sensible and rea-
sonable on paper, like a battle plan, be-
comes muddled, torn and marred in
practice, with hazards unforeseen, re-
sistance unexpected; invisible elements
arise like enemies to foul up the situa-
tion.

McMaster had to come to a few de-
cisions if it were to go ahead full steam.
The first was to adopt the LC classifica-
tion, then that acquisitions be pre-proc-
essed wherever possible, and that the
collections be basic only.

McMaster began at once to find out
what was available in pre-processed li-
brary material and learned that, while
American lists were extremely useful in
the areas of technology and applied arts,
they failed Canadian library needs in
the social sciences and the humanities.
Nearly all of their choices were gov-
erned by the American system of edu-
cation which has as one of its goals
Americanism, so that McMaster had to
choose from non-processed material al-
most its entire list of humanities and
social sciences materials. Additional ti-
tles were purchased in Britain in many
more copies than Seneca would need,
so that there would be copies available
if and when some of the other colleges
agreed to join. There was already es-
tablished in Britain at Hatfield in Hert-
fordshire, a central library processing
system controlling the technical college
libraries of that county. They were help-
ful and provided their catalog and data.

The booksellers in Britain accepted
the sort of challenge that was inherent
in the nature of this project, especially
Bertram Rota, bookseller of Savile Row,
without whose efforts the project would
have failed. Agencies had already been
set up for such operations in Britain,
had served college library systems be-
fore, and there was no time for explora-
tory deals while this basic library was
being established. It has, however,
turned out subsequently that Canadian
firms get most of the Bibliocentre busi-
ness. By the end of June McMaster had
received from the individual colleges promises of $802,000.

Gradually, as the books began arriving, a payroll was established, and the processing began. McMaster was recompensed for workers' salaries, save in two extraordinary cases.

The first shipment of books arrived on the 5th of July. These came from Bertram Rota. Already representatives had been to Bro-Dart at Williamsport, Pennsylvania, and to Stacey's at Palo Alto, California, arranging for pre-processed books, and setting up with Programming Services Incorporated the beginnings of computer control.

By the end of October, 74,000 books representing 6,400 titles had been cataloged and delivered to participating colleges. During the summer boxes and boxes of books filled reading rooms, stairways, and study areas to overflowing, since the university library was concurrently acquiring its own books at a great rate, too. The building was already too small, as faculty, administrators, students, and librarians all clambered over boxes or disappeared between crates. These containers, labyrinthine in their accidental set-up, seemed like the maze at Hampton Court, only more so. Yet not a body or a book were lost.

While McMaster answered questions about the scheme and urged the librarians of the colleges to come and help out during these frantic first months, the whole operation aroused a buzz of conjecture and some dismay among librarians throughout the province. Small wonder. Letters were sent to the Department, protesting that the scheme was harebrained, haphazard, and worse. The President of the University was approached about it. The University Librarian was regarded, rightly, as the originator of the fell design. His professional background and capabilities for such a task were queried. Indeed the entire background of all the people involved came under close scrutiny, and some charges were made, but they were mainly caused by apprehension and lack of communication, although there were some with venom in them. . . . Ignorance and fear are fed by rumor, and rumor runs riot when accurate information is hard to come by. Regrettably one could not take time off to answer all or even most of the questions raised; it was a battle with books and time and people.

The administration at McMaster showed enthusiasm for the project as soon as it was broached. They gave freely, not only of permission, but also of space; they regarded it as a function of the university to help establish these libraries. Indeed, the vice-president, whose bailiwick included the McMaster University Library, was as enthusiastic about the scheme as any librarians and he backed it most heartily. The unequivocal support of Norman Sisco, and of Donald Craighead and Victor Whatton was a pleasure.

By August it was obvious that the scheme was going to work. The loose ends were innumerable, and the advent of the college librarians who came upon the scene late, some of whom had had little experience, and were bewildered by it in many cases, exacerbated the situation. It was obvious that many of the books would not be ready for opening day, although they were on the way, but it was the matter of the choice of books arbitrarily presented to them, and the tardiness of distributors, booksellers and publishers, that caused the strain to show through. Many librarians saw the trees and the bushes, the thorns and the other tangles that were bearing down on them, not the wood, the forest of the project. They deserve our sympathy, and some of them supported from the start, pitching in with a will. They were entering into a new sphere of activity; they were being subjected to the angry denunciations of faculty who often expect a book to be delivered and
processed a day or so after it has been ordered, and they were in make-do quarters with no books, and with no control over what was coming in. Small wonder that many were dubious of McMaster’s efforts. Somehow or other all the books were cleared by October and sent on their way, often with McMaster librarians driving the trucks on weekends to get them there on time; even children of librarians were pressed into service, hauling or packing like men.

The new business manager of the university library received his introduction to the intricacies of university library administration by driving a truck to Barrie by way of Peterborough, Belleville, and Kingston, to deliver college books. There were times when he would disappear behind the wheel of a rented Tilden and not be seen for days. He learned more about the roads, the janitorial services, or lack of them, the timbre and temper of Canadian librarians during those few formative months, than anything that has happened to him since. Normal transportation difficulties now seem like a joy ride, even flying the Russell Papers from London to Malton left him unfazed, since that drive to Timmins by way of Sarnia and Sudbury.

With McMaster cleared of books and the project under way, Bibliocentre had to be set up outside of McMaster. Now it was on its own, the creature of the colleges. McMaster did lend the Bibliocentre three catalogers for a while; that was all, more than enough. The president of Ryerson, although his college was not a member of these newly emerging institutions, was generous and far-seeing from the beginning regarding Operation Bibliocentre; it was through his efforts that space was found adjacent to the Ryerson campus in one of their buildings, 101 Gerrard Street E., where the Bibliocentre still operates, with business that is increasing so rapidly that it has become a model for any who contemplate cooperative and/or central processing to observe.

In spring 1969, the professional journals have contained advertisements for the appointment of a Director for the Bibliocentre. They have spelled it out in such a way that some of the challenge and excitement inherent in the situation comes through in the text.

The success of the project has convinced most of the college presidents of the sense of this approach to library economy. A committee of presidents, under the chairmanship of William Newnham of Seneca College, has been made responsible for establishing and controlling the entity created, and which is now formally known as the College Bibliocentre, as it was informally known at the beginning. This committee of presidents has an advisory committee of their college librarians for consultation.

The culmination of the McMaster end of the project came with the publication of a computer-produced book catalog, which gives location and bibliographic information for all the colleges. Some copies are still available at twenty dollars from the College Bibliocentre. It contains 10,000 titles. The next edition, which was scheduled for publication in the summer of 1969, will contain 40,000 titles, giving some idea of the growth of the Bibliocentre since it left McMaster.

An accounting and information reporting system has been developed, based on computer techniques that allow the Bibliocentre to give information regarding all orders from their receipt to delivery of fully processed books. Between April 1968 and January 1969, the College Bibliocentre processed and delivered over 30,000 books. This, added to the 77,499 previously delivered, is an impressive total and will show up in the next edition of the union book catalog. The average book cost for the initial operation is shown at the end of this article; cost figures have been improved.
HERE IS A BREAKDOWN OF THE FIRST EFFORT:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of books</td>
<td>about 70,000 volumes shipped to 23 locations by October 31, 1967.</td>
</tr>
<tr>
<td></td>
<td>final total of 74,499 volumes shipped by March 1968.</td>
</tr>
<tr>
<td>Book cost</td>
<td>$8.23 average for science, social sciences, technology.</td>
</tr>
<tr>
<td></td>
<td>$5.61 average for humanities.</td>
</tr>
<tr>
<td>Processing cost</td>
<td>$1.97 per volume which includes:</td>
</tr>
<tr>
<td></td>
<td>1. Creation of basic list.</td>
</tr>
<tr>
<td></td>
<td>2. Selection of material and preparation of lists by level of participation.</td>
</tr>
<tr>
<td></td>
<td>3. Ordering.</td>
</tr>
<tr>
<td></td>
<td>4. Cataloging—including filing 800,000 cards for 23 separate libraries in 5 files per library (accession, shelf, author/title, subject and subject heading lists).</td>
</tr>
<tr>
<td></td>
<td>5. Processing.</td>
</tr>
<tr>
<td></td>
<td>6. Packing for delivery according to library and level of participation.</td>
</tr>
<tr>
<td></td>
<td>7. Delivery.</td>
</tr>
<tr>
<td></td>
<td>8. Creation of union catalog with holdings of all material.</td>
</tr>
<tr>
<td></td>
<td>9. Conversion of union catalog to machine readable form, including the publishing of the author union catalog.</td>
</tr>
<tr>
<td>Total cost</td>
<td>$818,945.40 of which $112,918.62 was returned to the colleges</td>
</tr>
<tr>
<td></td>
<td>$706,026.78</td>
</tr>
<tr>
<td>Total cost per volume</td>
<td>$9.48</td>
</tr>
</tbody>
</table>

THE COLLEGE BIBLIOCENTRE SCHEDULE OF SERVICE CHARGES IS AS FOLLOWS:

- $1.25 per transaction (one order for one title at one time regardless of the number of copies).
- $1.50 per book for cataloging and processing.
- $0.45 per book for adding entry to Bibliocentre master machine file.
- $1.15 per book for perma-binding.
- $2.90 per book for cloth binding.

In addition, there is a 25 percent charge per book for transportation. This includes delivery charges from publisher and/or dealer to us and delivery charges from us to ultimate destination. There is a weekly cumulative printout of the books on order file and the data allows for subsequent publication of book catalogs. Three dollars forty-five cents, therefore, includes the whole technical processing, barring the binding. These costs, of course, are subject to change and afford all sorts of ammunition for criticism, but libraries would be happy to settle for this processing cost, if they were able to achieve it.

and this trend is expected to continue. Of course, there are complaints and delays galore; this is to be expected, just as any anthology of poetry is noted more for its omissions than for the solid body of the work it contains. It is the hangnail, not the mortal blow, which excites the vocal woe.
To the Editor:

Miss Joan Ash’s article on “The Exchange of Academic Dissertations,” in the May 1969 issue of College & Research Libraries, contains a number of misstatements of fact and a basic misunderstanding of the intent of the system that was adopted in 1952 by the Association of Research Libraries. It is important that some of these errors be corrected and it is essential that her misunderstanding of the system be set straight, otherwise we could drift back into the very condition the 1952 report attempted to overcome. Let me deal first with the intent of the 1952 ARL Plan.

1. ARL appointed a committee in about 1948 (not 1951 as Miss Ash states) to study the problem of accessibility to doctoral dissertations, which existed because of the conditions that Miss Ash mentioned. There were others she did not list. Practically every American university had stopped requiring the printing in book form of dissertations because of the high expense to students and because of the waste involved in library exchange handling of texts which received very little use and were often of little value in themselves.

To meet the needs of that time our Committee looked for a way of doing two things, first, establishing bibliographic control, with abstracts, over dissertations; and second, making the full text available upon demand, thus eliminating the cost of an exchange system to provide them in advance. The Committee studied many ways of solving this problem and finally approached University Microfilms to expand its Microfilm Abstracts to provide central bibliographic control with abstracts. It also recommended to ARL libraries that they use one of the microforms for the text of their dissertations and then deposit the microform in the University Microfilms’ vault. It has turned out that most members found it easiest, cheapest, and best to have University Microfilms do the filming, but this was only one of the options our Committee recommended (see Plan C of the ARL Committee Report in the January, 1952 Minutes of the Association of Research Libraries). The essence of the system was that we proposed substituting a system of supplying the text in microform on demand for the old system of automatic exchanging of thousands of copies of printed texts of dissertations. We hoped that all American universities granting the Ph.D. would adopt this plan and that European countries would develop parallel plans for universities in their own countries with a system of international exchanges.

All but two or three American universities have adopted the plan and in those cases it is sometimes the intransigence of the head librarian that has kept the university out. We also hoped that European universities would adopt the plan and that a system of international exchanges among the various countries would result. The latter has come very slowly for a number of reasons. First, many European universities held to the high publication cost requirement as one of the methods used to restrict the universities to the wealthy and the aristocracy. This was only a minor point but not one to be ignored. Second, changes come very hard in European universities because of the governmental controls that are involved in many of the countries. And third, European librarians have had a great emotional attachment to the idea of exchanges primarily because cash seemed to be lacking for purchases and also because there was a kind of status symbol involved. They did not realize that frequently the cost of running an exchange system has been larger than would be the cost of purchasing publications as needed directly on demand.

Nevertheless, the European university libraries have in recent years been study-
ing the ARL-University Microfilms plan and I would hazard the guess that within the next ten years we will see its adoption by most of them. What we will not see is a return, as apparently Miss Ash hopes, to the old system of exchanging printed editions of the texts of dissertations. Why not? First, because most European university dissertations are not very good and are not worth the cost of an exchange system; second, European universities will soon be giving up, as some of them already have, publication requirements for the same reasons that American universities gave them up at the end of World War II; and third, the ARL-University Microfilms method of publishing dissertations has proved to be a very satisfactory system for making texts available for which the demand is light. It is conceivable that European university librarians will see the virtue of this system.

2. Now to correct a few of the errors in Miss Ash’s article.

(a) Her first sentence makes no sense. The text of American dissertations are now freely available and we are all freed of the necessity for maintaining the old exchange system, which was clumsy, expensive, and not complete. But this was not caused as she says “by the rigid control of a private enterprise.” It was an ARL Committee that buried the old exchange system when it was already dead and beginning to smell.

(b) The implication of her paragraph beginning “the wave quickly receded” is incorrect. Once the ARL-UM system was described and explained by such articles as Vernon Tate wrote, the plan caught on rapidly and most American universities joined. There was no need for more articles. A standing ARL committee has continued to advise University Microfilms on the solution to problems that have arisen and will continue to arise.

3. It was never contemplated that American universities would make copies of their own dissertations and send these to European libraries. Few did so obviously because the need did not arise. Again Miss Ash misses the point of the system that ARL created.

4. It is not true that University Microfilms has “remained uninvolved” with foreign dissertations. On the contrary, it has made many efforts and is continuing to do so, to help European universities evolve a new workable system for the old one which they cannot maintain much longer.

5. The American student pays $20 to have his dissertation published in the ARL-University Microfilms plan. Where does the German student get the money to give the university library the 150 copies Miss Ash mentions on p. 239, even though in the previous paragraph she said that the German universities gave up the publication requirement years ago? They may have done so but the student still pays the cost. Recent information indicates that German universities are now going to pay the cost.

6. Under the ARL-UM plan the student, not University Microfilms, controls the copyright. This is stated clearly on the contract which the student signs, along with University Microfilms. University Microfilms will handle the mechanics of the copyrighting but Miss Ash is in gross error on this point.

7. The problem of handling classified information is solved simply by not publishing the dissertation until the information in it is unclassified. I doubt very much if many universities are turning out classified dissertations.

8. Likewise the pirating question she raises is another red herring. If the dissertation is copyrighted, pirates can be punished. If the danger is acute at the time the dissertation is submitted to the university, the university can withhold it from publication until the danger time is passed. This could happen, for example, with a novel which the author thought might become a best seller. But, of course, this problem could be solved by copyrighting.

9. Obviously the “use of academic dissertations for exchange by academic libraries has greatly diminished since University Microfilms extended its operation in 1953” is true. But the use of disserta-
tions has increased and availability is nearly 100 percent complete. Miss Ash assumes that an exchange system has virtue in itself. A university can buy and send out on exchange as many copies of the occasional dissertation it might want to use for this purpose at a lower cost than it would pay for the maintenance of a full exchange system in the old manner. Her last sentence on p. 239 is simply untrue.

She admits on p. 240 that the present system is successful. Why then complain about its effect on a system of exchanges which it was intended to replace?

10. The International Association of Technical University Librarians is primarily a European organization and it reflects the attitude of those librarians, including their kind of thinking about the exchange problem. They do have a special problem of cash but I think they are kidding themselves when they think they are lowering the cost by maintaining an exchange system. The Association would appear to be perpetuating a system that is already near the end of its time.

11. American university librarians are surely not so foolish as to give up a successful program just because librarians in other countries cling to an outmoded system. I regret very much that Miss Ash, through misunderstanding the intent of the present program, seems to indicate that American librarians ought to move in a backward direction.

Ralph E. Ellsworth
Director of Libraries
University of Colorado Libraries
Boulder, Colorado

To the Editor:

My purpose in writing a paper on the exchange of academic theses was not to condemn University Microfilms or the ARL committee. My aim was to focus attention on the poor service American librarians are giving to scholars who need foreign theses and foreign librarians are giving to their researchers who request American dissertations. University Microfilms and the ARL committee have served our country well; I would like to see similar arrangements made on a worldwide scale. A University Microfilms representative informed me in a telephone conversation shortly after publication of my paper that University Microfilms had set up a depository for American dissertations on microfilm in England. This is certainly a step in the right direction.

In reply to Dr. Ellsworth's specific points:

1. I found the 1951 date on page 6 of the source listed in footnote (1) of my paper and am sorry if it is erroneous.
2. I cannot agree that all foreign dissertations are bad: witness, for example, research in the medico-biological areas from the Scandinavian countries, Israel and Japan.
3. American theses are not "freely" available to foreign libraries. Their cost is great both in money and access time.
4. It is true that the author has copyright privileges for publication of his thesis in book form. The rigid copyright control I refer to in my first sentence is the regulation stated on page 238 of my paper which says that only University Microfilms can reproduce the thesis in microform or by xerography.
5. The arguments concerning classified information and pirating are not mine. As documented in footnotes 15 and 16 of my paper, these were found in the Library Association Record. I tend to question their validity myself.

I agree that the old exchange system is outmoded. This is why I have suggested a new plan. Dr. Ellsworth has clarified much that was not apparent in the literature, but has not proven to me that I misunderstand the present program. Is better service a step backward?

(Mrs.) Joan Ash
Science Bibliographer
San Fernando Valley State College
Northridge, California
BOOK REVIEWS


Perhaps any reference to piracy whets the reading appetite; in any case, David Kaser’s book presents a suspenseful account of a bedeviling situation in the book publishing world. The book has much to offer for serious thought; it happens also to be entertaining, a quality that never prejudices a judgment.


The Irish reference recalls the sixth century decision of King Diarmuid against St. Columba who, without permission, had copied a psalter. “To every cow her calf; therefore to every book its copy.” The tangled webs resulting from that decision have stretched and strengthened through the years and Kaser writes a short, informative background to the understanding of his present concern. He does not overlook the struggles of noted English writers with the vagaries of nineteenth century reprinting in the United States.

The reader is equally well served by a brief description of the status of literary property in the East. Since the American copyright laws had become fairly stable, American publishers found it most unpleasant to be confronted with dwindling sales and a dictum agreed to by China and the United States in 1903: “It is understood that Chinese subjects shall be at liberty to make, print and sell original translations into Chinese of any works written or of maps compiled by a citizen of the United States.” During the 1950s it became apparent that far more than translations into Chinese were being printed; furthermore, the books were being published not only for students in Taiwan but for other centers like Hong Kong and Macao, and finally for sale in the States.

There follows a detailed account of the frustrating efforts of American publishers to come to terms with this flagrant piracy. Misunderstandings on a colossal scale complicated the paths of decency and fairness. “Almost all of the Taiwan reprinters had done exactly what good businessmen have always done everywhere—they operated their activities to the limit of the law in the interest of profits and what they felt to be the public good.” The ever-increasing hordes of students needed books; book prices were high; reprinting seemed to be as kindly as it was unauthorized.

Kaser clarifies the maze of negotiation, compromise, and self-interest with a narrative style that untangles and delights. He concludes on a note of subdued optimism, having told a good yarn while increasing the reader’s awareness of an important facet of the world’s book trade. A satisfying index guarantees the book’s usefulness to future students of copyright. The same index comes in handy for more casual readers; it helps them keep track of the names and numbers of the players.—Philip J. McNiff, Boston Public Library.


Much of the intellectual history of colonial America has gone up in smoke—literally. One need only recall the fire
which destroyed the first and largest li-
brary of the early days—the Harvard con-
flagration of 1764, and the two devastat-
ing holocausts which literally wiped out
the Library of Congress in 1814 and deci-
mated it in 1851. Somehow—and it cannot
all be blamed on Sherman—the South suf-
fereed book losses to a greater extent than
the North. The library of the College of
William and Mary burned in 1705, 1859,
and 1862.

It is remarkable that Mr. Jennings has
been able to salvage so much history from
the ashes which destroyed both books and
the records of them. Of the first collection
but a single volume, Paolo Sarpi’s History
of the Council of Trent, has survived.
However, there is a manuscript list of the
substantial nucleus of that collection, the
158 works given the college in 1698 by
Governor Francis Nicholson. From the ti-
tles cited (one wishes the list had been
printed in full in an appendix), the choice
seems to have been in scope, size, and
contents as theologically Anglican (with a
sprinkling of books on history, travel, sci-
ence, and literature) as the collections
sent at the same time to Boston, New
York, and Philadelphia by Dr. Thomas
Bray. William and Mary also received a
shipment from the book-dispensing Bray,
but what those works were we do not
know.

Growth after the fire of 1705 seems to
have been slow. Books were begged for in
England, bought in London by John Ran-
dolph with money from the Brufferton
fund, and supplied after 1734 by grants
from the General Assembly from liquor
import duties—an unusually advanced
form of subsidy. Gifts and bequests, nota-
ibly that of President James Blair, added
to the college’s store. A few volumes and a
few titles mentioned in documents and
letters are the tantalizingly scanty indica-
tions of what the library may have con-
tained. One visible tip of the iceberg is
the inventory of scientific works purchased
from the estate of the Rev. James Hor-
rocks in 1772. During 1781 the academic
book resources suffered a loss when the
college buildings were occupied by Brit-
ish, French and American troops at differ-
et times during the Yorktown campaign.

It is curious that the only record of the li-
brary’s size at this time—3,000 volumes—
comes from the recollections of a Revolu-
tionary soldier. With the addition of a gift
from Louis XVI, similar no doubt to that
given at the same time to the University of
Pennsylvania, the Library of the College of
William and Mary at the end of a hun-
dred years of existence is estimated by
Mr. Jennings to have consisted of 4,000
volumes.

The library historian will find this ac-
count of the struggles to build a collection
of books for an academic institution
strangely modern in tone. There were pe-
riods of academic dedication which result-
ed in gifts and governmental support.
There was unforeseen loss through fire.
There were major windfalls of money and
books. There were periods of relaxation,
which in libraries amounts to retrogres-
sion. Yet basically Mr. Jennings’ chronicle
is one of bookmen trying to convince non-
bookmen of the importance of books, with
good to moderate success. Alas, we learn
more about the tree than the fruit. The
records of the books are lacking. Mr. Jen-
nings cannot be faulted. He has written
everything that can be written about the
first hundred years of the Library of the
College of William and Mary.—Edwin
Wolf 2nd, Library Company of Philadel-
phia.

BOOKS RECEIVED

Note: The titles listed represent books re-
ceived at the editorial office that may be of
interest to academic librarians.

Akers, Susan Grey. Simple Library Cata-
logging. 5th ed. Metuchen, N.J.: The

Bekker, Nielsen Hans, ed. Bibliography of
Old Norse-Icelandic Studies 1968. Copen-
hagen: Munksgaard, 1969. 95p. 30 Da-
nish Kr.

Brunn, Alice L. How to Find Out in Phar-
macy. A Guide to Sources of Pharma-
cutical Information. London: Pergamon
Press, 1969. 130p. $4.75/hd, $3.00/flexi-
cover. (Commonwealth & International
Library of Science Technology Engineer-
ing & Liberal Studies.)

Crowley, Edward L., et al., eds. Party and


ABSTRACTS

The following abstracts are based on those prepared by the Clearinghouse for Library and Information Sciences of the Educational Resources Information Center (ERIC/CLIS), University of Minnesota, 2122 Riverside Avenue, Minneapolis, Minnesota 55404.

Documents with an ED number may be ordered in either microfiche (MF) or hard copy (HC) from ERIC Document Reproduction Service, National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014. Orders must include ED number and specification of format desired. A $0.50 handling charge will be added to all orders. Payment must accompany orders totaling less than $3.00. Orders from states with sales tax laws must include payment of the appropriate tax or include tax exemption certificates.

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This report considers universities as information systems because their effective operation is based on the storage, processing, and communication of various types of information. Three basic types of information systems (administrator-, teacher-, and researcher-oriented) are discussed in an attempt to understand each system's operation from the point of view of its basic objectives and the information processing necessary to achieve these objectives. The use of computers to aid this processing is also discussed. The report views the university as a totality of many diverse information systems which are interdependent and interrelated, a concept which leads to the proposal that a single centralized information system be established using a computerized data base with remote access by the various users. The possible uses of such a system are discussed. A bibliography of 102 items related to the three basic types of information systems is attached.


A 30-day test of the Xerox Magnavox Telecopier was conducted in order to evaluate its feasibility as a means of transmitting printed pages between libraries primarily as a faster alternative to the usual method of mailing a Xerox copy of a journal article from one library to another in response to a mailed request. The test was carried on between the Reno and Las Vegas campuses of the University of Nevada and the Davis campus of the University of California, using early production models of the machines. Results of the experiment indicate that the system is feasible and convenient for routine interlibrary use provided that improved reliability and consistency of copy quality is attained in later production models. Transceiving time for an average 10-page request is about one hour. An average total elapsed time of four hours for completion of requests can readily be achieved. Quality of copy is adequate for most library materials when the machines are functioning properly, a condition which occurred less than two-thirds of the time with the early production models used in this test. Total operating costs for the system average about $9.85 per 10-page transmission. Appendices include technical aspects of the system, costs, and examples of telecopied materials.

This report is a part of Phase I of the Detroit Metropolitan Library Project and contains suggestions for methods and procedures for Phases II and III of the Project, in which patron use and costs of patron services at the Main Library are to be measured. The report includes recommendations for new instruments for measuring patron use and appropriate changes in financial record keeping which should facilitate the determination of true costs of patron services. The recommendations are made in light of the Project's overall objective to study means of bringing the reference and research resources of the Detroit Public Library to all citizens of the six-county metropolitan area and to provide a realistic and equitable basis of financial support to the library so that it can effectively accomplish this goal. Methods for the development of a formula for determining cost of patron services appear in Appendix A. Appendix B presents a method for determining place of residence by county of current registrants of the Detroit Public Library.


This report describes the results of a project to conduct research on and to develop instructional materials for use in on-the-job training of professional and nonprofessional library personnel in scientific and technical libraries. The project began on June 28, 1967 and was completed on May 15, 1969. This report reviews previous research, design, and development activities but concentrates on the effort following October 31, 1968, which involved field testing the developed instruction, analyzing the test results, and making final modifications to the packages before turning them over to the U.S. Office of Education. Three instructional packages were developed. One, directed to professional librarians, provided an introduction to system analysis, with particular emphasis on its relevance to library operations. The other two instructional packages, designed for nonprofessional library personnel, consist of workshop materials on reference tools and services and Russian-to-English transliteration. Each of the three packages was tested in the field in libraries of different sizes and with junior college students. It is concluded that the developed instruction meets its design objectives and provides effective means to enhancing skills in the three areas concerned.


The topics covered in this collection of papers include (1) educational materials pertaining to Negro Americans; (2) information pertaining to Negro Americans in textbooks in Georgia; (3) information pertaining to Negro Americans in "Georgia Library Lists"; (4) significant factors in selecting and rejecting materials; (5) topics and types of materials needed; and (6) methods of increasing the accessibility of materials in the schools, in libraries, and in the home. A summary of the proceedings, a list of publishers who sent materials to be displayed at the conference, and some suggested questions for discussion are appended.

The paper examines several ideas for information handling implemented with new technologies that suggest directions for future development. These are grouped under the topic headings: Handling Large Data Banks, Providing Personalized Information Packages, Providing Information Specialist Services, and Expanding Man-Machine Interaction. Guides in planning information handling systems are discussed. A brief bibliography of readings is appended. The author suggests that systems be designed and modified from the point of view of making them interactive with other systems where possible to most fully exploit the investment required in money, manpower, and time.


Findings of this comprehensive study of the Brigham Young University Library are based upon interviews held with university administrators, faculty, and students and extensive documentation provided by the library director and staff. Recommendations for constructive action are made in each section of the survey report. These suggestions include: (1) the establishment of the position of assistant director for the supervision of library technical service departments, (2) an increase in financial support and a change in ratio between book funds and salaries, (3) a major addition to the present library building, (4) engaging in cooperative acquisition projects and faculty participation in book selection, (5) undertaking measures to stimulate student reading, (6) analyzing the ratio of professional to nonprofessional library personnel, (7) continuing to engage in cooperative activities, (8) accelerating the acquisition rate and undertaking a program to develop retrospective collections, and (9) giving consideration to faculty and student criticism and recommendations.


This report describes the system design of a regional computer center for the libraries of New England state universities. The function of this center is to provide library technical processing service to the participating libraries. These services will include: (1) catalog data file creation and maintenance, (2) catalog data file search and retrieval, (3) production of catalog card sets, (4) production of book labels, (5) production of book pockets, and (6) acquisitions control. The computer will be used as a tool to provide processing services and will be a conduit for current cataloging information in machine form produced by the Library of Congress Machine-Readable Cataloging (MARC) project. Three tasks were defined which comprise the work required to implement the system: Task 1, Catalog data file creation; Task 2, Catalog data file searching; and Task 3, Acquisitions processing. The programs for these tasks and the machine configurations to run them, both in demonstration and in regional center operation, are discussed in this report.


The purpose of these guidelines, prepared by the Audio-Visual Committee of the Association of College and Research Libraries, is to supply basic assistance to those academic libraries that will assume all or a major portion of an audiovisual program. They attempt to assist librarians to recognize and develop their audiovisual responsibilities and to incorporate the newer media within the traditional concepts of library service, and should not be considered an accrediting measurement. They contain no quantitative standards, since these will vary with each institution, depending on the extent of that institution's
involvement in an audiovisual program. Topics covered in the guidelines include: planning, types of materials, equipment, budget, personnel, facilities, selection, acquisition and cataloging, collection organization and maintenance, and service. A bibliography of 115 items is appended.

**Masfile—I Pilot Project. Final Report.**

The objectives of the MASFILE—I Pilot Project were (1) to test the utility and cost of compiling a manipulative data base from remote card files; (2) to test the utility of the Administrative Terminal System (ATS) for inputting bibliographic data into computer files from catalog card copy at a central location; (3) to test the adequacy of a modified MARC tagging scheme for labeling, inputting, and retrieving formatted bibliographic data elements; (4) to determine overlap of items in the file; (5) to aid the Five Associated University Libraries (FAUL) in designing a compatible worksheet for transcribing the intellectual product of local catalogers into various on-line and off-line machines; (6) to develop recommendations for building a bibliographic data base. A sequential sample of shelflist catalog cards was selected from each FAUL library in the Library of Congress Classification for the Book Trade and Library Science (Z116-Z1000.5), manually merged, converted to machine readable form by the IBM ATS system at SUNY-Buffalo in a modified MARC-I format. After editing, a list of 1,827 items was published containing full citations, holdings statements, and indexes by main entry, LC card number, and LC class number. A draft cataloger’s worksheet was designed and is undergoing testing. Overlap studies were made, and time and cost figures compiled. Recommendations for continuation of the project (MASFILE-II) are also included.

**Automated Acquisition, Cataloging, and Circulation in a Large Research Library.** Merle N. Boylan, and others. Livermore, Calif.: Lawrence Radiation Laboratory, 1968. 94p. (CFSTI UCRL 50406, MF—$0.65 HC—$3.00).

This report describes automated procedures now in use for book acquisition, and book and document cataloging and circulation, in the library at Lawrence Radiation Laboratory, Livermore. The purpose of the automation is to increase frequency and accuracy of record updating, decrease the time required to maintain records, improve the formats of the records, and provide multiple copies of records when they are needed. A broad view of the automation is given in the first section of the report, where system concepts and master data files are discussed. Subsequent sections fill in the details, describing the individual operations in terms of flow charts, tape records, and input-output formats. System features include: charge out and discharge, maintenance of reserve lists, provisions for statistics and inventory control, and the production of availability notices, recall notices, purchase orders and claims, sorted printouts of acquisition data, announcement bulletins, and separate printed catalogs for books and documents. Printed catalogs for books permit access by author, corporate author, title, subject, contract number, report number, and accession number.
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The emphasis of this, the fourth volume of a series devoted to the analysis of the uses of mathematics in political science, is on methodology. Richard A. Brody analyzes the nature and uses of simulation in the study of political affairs and shows that this systematic approach is particularly applicable to international relations research. The uses and criticisms of formal models are examined in detail by Otto A. Davis. James F. Herndon demonstrates that techniques borrowed from economics are useful for the study of legislative conflict. Donald E. Stokes discusses Leo Goodman's notion of "ecological regression," attempting to determine whether Goodman's techniques are an adequate response to W. S. Robinson's attack on ecological correlation. In the opinion of editor Joseph L. Bernd, Stokes's study "merits the widest attention from students of empirical social studies."

American Association of Architectural Bibliographers Papers, IV

An Intelligent Interest in Architecture

A Bibliography of Publications about Thomas Jefferson as an Architect, together with an Iconography of the Nineteenth-Century Prints of the University of Virginia.

Edited by William B. O'Neal, Professor of Architecture, Chairman of Architectural History, University of Virginia. viii, 148 pp., illus., index. 6 x 9. SBN 8139-0281-9. LC 65-14273. $7.50.

The first section of this volume, which celebrates the Sesquicentennial of the founding of the University of Virginia, is a bibliography listing all the books written between 1786 and 1968 that refer to Thomas Jefferson as an architect. Following the list of publications is "The Iconography" of the early University with prints picturing the rural character of the surrounding area. Together, these two sections show how Jefferson used his architectural talent not only to build his own home but also to construct one of the greatest examples of university architecture in the United States.

FOLGER PUBLICATIONS:

A Discourse of the Commonweal of This Realm of England

Attributed to Sir Thomas Smith. Edited by Mary Dewar, Research Associate, Department of History, University of Texas at Austin. xxvi, 169 pp., index. 5 7/8 x 8 1/2. SBN 8139-0278-9. LC 72-84764. $6.50.

This edition of A Discourse of the Commonweal of This Realm of England is the most accurate available; the various manuscript copies extant have been collated to approximate the original text as closely as possible. A Discourse was part of the flood of "commonwealth literature" provoked by the severe inflation and changing economic patterns of Tudor England. It stands as "the most advanced statement of economic thought in Tudor England."

The Case of the Commonwealth of England Stated

By Marchamont Nedham. Edited by Philip A. Knachel, Associate Director of The Folger Shakespeare Library. xlii, 151 pp., index. 5 7/8 x 8 1/2. SBN 8139-0277-0. LC 72-83653. $6.50.

In 1650, shortly after the overthrow of Charles I in favor of Independent rule, Marchamont Nedham, one of the best-known journalists in England, published The Case of the Commonwealth of England, Stated. Nedham wrote this tract to prove "the equity, utility, and necessity of submission to the present government." He hoped it would persuade the people to abandon their hostility toward the new Commonwealth. Nedham's book is reprinted here for the first time since the two original editions of 1650. Included are Nedham's illuminating marginal references and citations along with an identification of their sources whenever possible.

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