

# COLLEGE & RESEARCH LIBRARIES

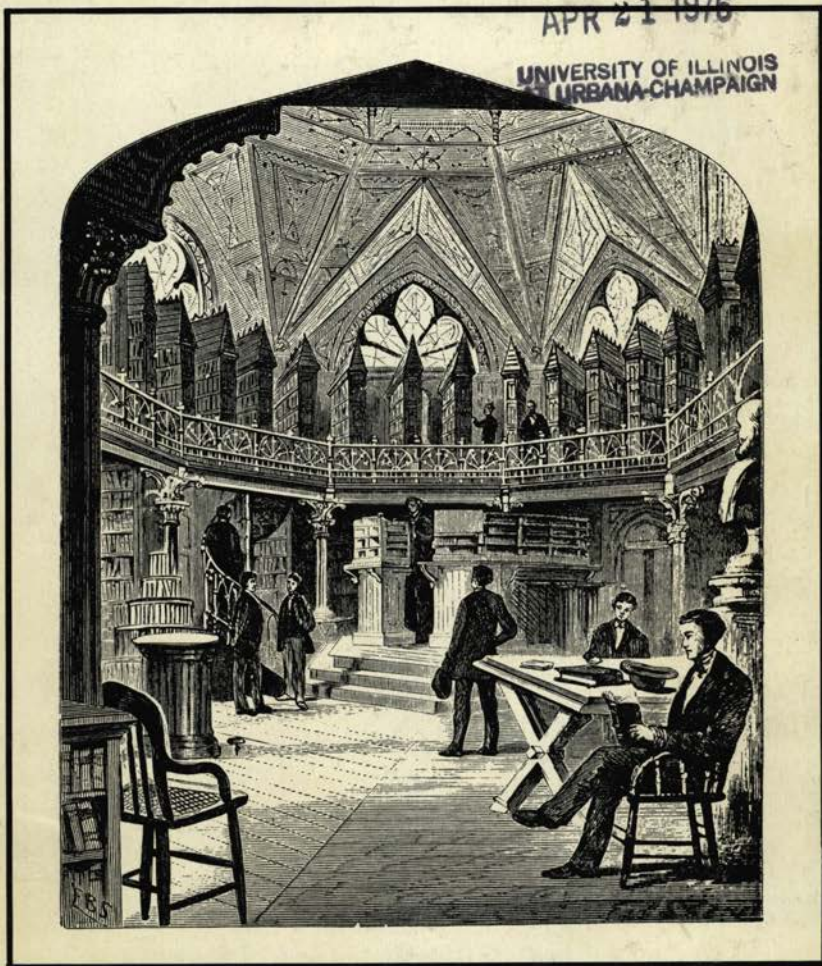
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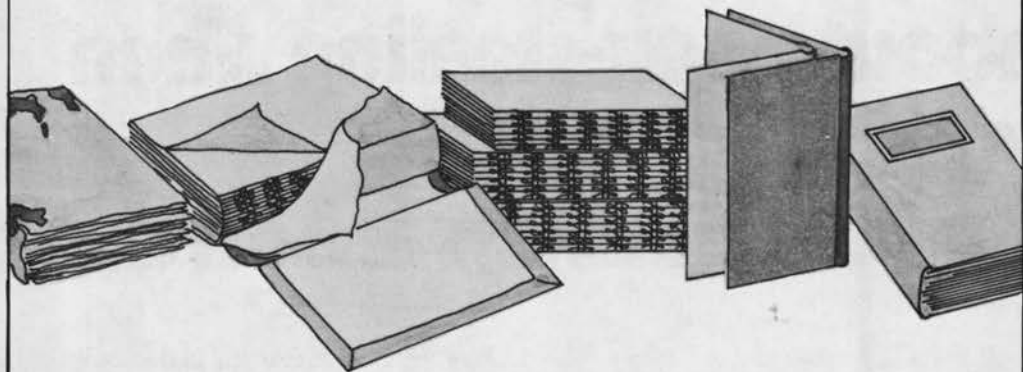
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MARCH 1976  
VOLUME 37  
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# COLLEGE & RESEARCH LIBRARIES

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**Cover illustration:** The Chancellor Green Library, College of New Jersey, Princeton (see page 136).

# COLLEGE & RESEARCH LIBRARIES

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## Reading, Writing

In this second issue of *College & Research Libraries* in ALA's centennial year, David Kaser and Robert Stueart call our attention to the literature of librarianship.

Robert Stueart looks at the present. His aim is primarily practical as he gives his thoughts on how and what to write in the field of librarianship. He points out the pressures placed on academic librarians to publish as well as the rewards they may receive. He reminds the writer to be prepared for and not discouraged by letters of rejection. Even though opportunities for publication are many, the scope of a given journal can be limited. For example, of the approximately 150 to 160 manuscripts presently submitted each year to *College & Research Libraries*, forty to fifty will be selected for publication. Dr. Stueart's major concern, however, is that our profession is too inward looking and that its members are writing only for one another. There are too few examples of librarians writing for the nonlibrary press.

A related concern of ours is that even though this journal gives librarians an opportunity to write for one another, all too often manuscripts received are prepared as though in a vacuum without any obvious indication of interest as to what has already happened or been recorded elsewhere. David Kaser would seem to agree. In his review of a century of writing on academic librarianship, he recalls the several major themes that continue to engage our attention. With our own too limited view we forget at times that problems facing us have been with us before and "that there is little that is ever truly new in the field."

Even with that warning, Dr. Kaser points out how the literature has developed from simple descriptive statements of conditions in one library to subsequent contributions in which generalizations are advanced. When tested, prescriptive statements are made and ultimately, once a consensus is reached, standards are achieved. In this way "a profession reaches maturity." It is an aim of this journal to participate in that development so that the maturity he describes may be attained.

Dr. Kaser also credits the American Library Association with having published a large share of the important literature of academic librarianship, and in this centennial year we look with pride also at this particular achievement. This issue features reviews of two books recently published by the association and of particular interest to our readers—a new volume in the ACRL Publications in Librarianship series and a useful volume assembling the several policy statements on academic status.

ACRL celebrates an anniversary this year with *College & Research Libraries News* beginning its second decade in March 1976. Started ten years ago on a six-month trial basis with the title *ACRL News*, our division's newsletter has increasingly become an essential medium bringing all academic and research librarians together.

R.D.J.



DAVID KASER

## A Century of Academic Librarianship, As Reflected in Its Literature

ACADEMIC LIBRARIANSHIP can view its past from several different vantage points. It can comb the minutes of its corporate actions; it can piece together the lives of its great practitioners; it can reconstruct such archaeological remains as its older buildings, equipment, forms, and other artifacts. These and other kinds of study will all contribute usefully to a better perspective against which the profession can judge the decisions it faces, can separate the transient occurrences of the moment from the more chronic and permanent conditions deserving higher priority attention, and can improve the wisdom of its future actions through an understanding of what has been tried before.

This essay will attempt to review the last century of academic librarianship as it is reflected in its literature. It will note not only what was written, but it will also try to determine why it was written, as well as to speculate upon the reasons for its being written when it was written. It will view the literature neither comprehensively nor statistically, although both of those approaches deserve also to be taken, but rather based upon a very limited selection of its highest peaks and most notable landmarks. Any such selection must be highly subjective, and although many of the works discussed herein will doubtless enjoy the concurrence of most American

library historians, others will clearly be seen as personal. Nonetheless, it is hoped that the selection will be adequate to permit the identification of some trends and influences and the positing of some useful generalizations about the development of the profession of academic librarianship.

### THE BEGINNINGS

Any surveyor of the literature of librarianship during the two decades following 1876 must be struck by how very little was written in the period which concerned specifically academic libraries. That heavy compendium produced in 1876 by the U.S. Bureau of Education, entitled *Public Libraries in the United States*, contained only two essays about college and university libraries per se. Yet many, perhaps most, of the other thirty-six pieces, while general in subject, were written by academic librarians, making it as clear to the reader that these founders of the profession had their minds so affixed to the commonalities of concern among all libraries that they were unable yet to ponder the uniquenesses of the several kinds of libraries.

The periodical literature of the period supports this perception. Although the October 1877 issue of *Library Journal* was a "college number," the periodical press outside of that single issue

carried fewer than a half-dozen articles on college and university libraries before the mid-1880s. A growing sense of identity among academic librarians marked the last decade of the nineteenth century, however. Not only did its literature grow heavier during that period, but there were other manifestations as well. A College Library Section of ALA was formed in 1890, and in 1896 Maude Wheeler Carman presented a thesis to the Armour Institute of Technology entitled "The College Library; How It Differs from a Public Library."

Academic librarianship's lack of self-awareness during the first quarter of the period under review here is demonstrated nowhere more than in the bibliography of the subject. The first attempt publicly to "bibliographize" academic librarianship was apparently not made until the turn of the century, when in 1899 Hugh Williams of the Library of Congress produced his fifty-five-page document entitled *College Libraries in the United States; Contributions toward a Bibliography*. Published as number 19 in the "Bibliographic Bulletin" series of the New York State Library, this publication established that institution as the geographical center of academic library bibliography for some three and a half decades thereafter.

Bibliographical coverage of the literature for the period 1899 to 1926 became available in the latter year when the *Bibliography of American College Library Administration* was issued also by the New York State Library as its "Bibliographic Bulletin" number 77. This new publication was greatly larger than its predecessor and contained some 600 titles. Practically no books had been written during the period, however, and fully one-fourth of the entries were unidimensional descriptions of collections, processes, or circumstances within individual libraries. There were no research investigations or empirical analy-

ses to be reported; that kind of scholarly writing had not yet come into the field.

Nor had any journals yet come into being which were addressed primarily to college and university libraries. That was still almost fifteen years ahead. Most of the articles published before 1925 had appeared, predictably perhaps, in *Library Journal*. The *ALA Bulletin* had published several, as had also *Public Libraries*, which later became *Libraries. School and Society* and other nonlibrary journals, were also represented by a number of items. Many of the works cited were not from periodicals at all but from annual reports and handbooks of local libraries; proceedings of workshops and dedicatory ceremonies; addresses; and other similar documents.

The subject matter of the items listed in this quarter-century bibliography ranged pretty evenly over the full spectrum of the academic library concerns of that or any other period. Aspects of finance and budgeting were well represented, as were articles on the several library processes, such as acquisition, circulation, cataloging, and reference. Many articles discussed personnel, including concerns for training, qualifications, rank, vacations, salaries, and the like. There were some papers on buildings and equipment (largely descriptive), the role of library faculty committees, and such public relations activities as mounting exhibits, publishing, and the preparation of reports. Surprisingly heavy was the literature dealing with instruction in use of the college library, extending to fully thirty-eight entries, or almost 7 percent of the total. Collection development, book selection, and public services, on the other hand, were relatively lightly treated.

The names of the most prolific authors during this period were predictably different from those of the previous. Although an occasional piece still

turned up by such original nineteenth-century worthies as Charles Ammi Cutter and Melvil Dewey, these years reflected the work of a whole new army of library giants. William Warner Bishop of the University of Michigan was everywhere, publishing well over 100 books, articles, and reviews in this quarter-century alone. Here also was the ubiquitous Louis Round Wilson. Oberlin's Azariah S. Root wrote prolifically, as did Princeton's E. C. Richardson, Cornell's Willard Austen, F. K. W. Drury then of Brown, and James Ingersoll Wyer of the New York State Library. Women, notably silent before the turn of the century, began to make their presence known in print, and writings appeared over the names of Columbia's Isadore Gilbert Mudge and Margaret Hutchins and Minnie Earl Sears, then of the New York Public Library. By the end of the period still another generation of great librarians was beginning to raise its voice also, and there were pieces by Keyes D. Metcalf, Charles B. Shaw, and Frank K. Walters.

By the end of the first quarter of the twentieth century, the literature of academic librarianship had become very substantial, and even the simple task of listing it regularly had become a chore of some magnitude. Dorothy Plum continued the work, however, and all-told issued four supplements to the Albany bibliographies covering the next seven years. The first three supplements appeared one each in the three *Yearbooks* (1929, 1930, and 1931) of ALA's College and Reference Section, and the fourth, for 1931-1933, was published in the latter year by the Vassar College Library. The separate listing of the literature of academic libraries largely ended there, however. H. G. T. Cannon's comprehensive *Bibliography of Library Economy 1876-1920*, had appeared in 1927, and this was brought up to 1934 when ALA's Junior Members Round Table produced *Library Literature* for

the next decade. The latter monument, of course, continues today under the auspices of the H. W. Wilson Company, eliminating the need for special coverage in the academic field. Merging academic library listings into those of other library literature, however, rendered them thereafter difficult, if possible at all, to review at a glance, diminished the profile of the leading writers in the field, and ended an important era in academic librarianship.

#### THE DEVELOPMENT OF TEXTBOOKS

During the first third of the century under discussion here, there was no single text to which a reader could go to gain an overall impression of the scope and work of academic librarianship. When the first effort was made to repair this deficiency, moreover, it was a modest effort indeed, containing only eighteen pages. Written by James Ingersoll Wyer, *The College and University Library* comprised number 4 in ALA's thirty-two-part "Manual of Library Economy." Attempting to describe best contemporary practice, this little handbook contained brief essays on the functions of college and university libraries, buildings, governance, the librarian and other staff, finances, departmental libraries, and the administration of library operations. This slender pamphlet remained the sole textbook in the field for fully twenty-five years, and reappeared in revision in 1921 and 1928.

A very difficult problem standing in the way of proper textbook development not only for college and university librarians but for the rest of librarianship as well in those early days was not to determine just what constituted "best practice," but indeed "practice" at all. Most discussions of practice in the literature had been either speculative or had described methods which were as yet untried; others, as was mentioned earlier, concerned procedures within a single library. Librarians could augment



this kind of information only by visiting other libraries or talking with other librarians. It was at best a slow and tedious business.

By the time of World War I, however, the profession had concluded that such ignorance about itself was no longer tolerable. In 1919 ALA President William Warner Bishop appointed a "Committee of Five" to conduct a survey of the entire field of library service. With a grant from the Carnegie Corporation of New York, this group sent questionnaires to more than 3,000 libraries across the nation in an attempt to determine just what and how things were being done in American libraries. Some 261 replies were received from academic libraries, and these, together with responses from other libraries, were used in the preparation of ALA's four-volume *Survey of Libraries in the United States* which appeared in 1926.

The survey by today's standards was amateurish and unsophisticated in both conceptualization and analysis. The report contained some simple statistics and much description of actual practice in the college and university libraries of the land. Under "Administration" there were data on faculty library committees; the number, size, and administration of departmental and seminar collections; and the organizational structure of the library. There were financial data on such matters as the percentage of the budget spent for materials, per-student expenditure for books and staff, ratio of library to institutional expenditure, and the apportionment of funds. Information was reported on personnel practices, including appointments and promotions, education of librarians, salaries, working hours, and staff welfare. And data were given on hours of opening, library fees, overdue fines, access to stacks, nonbook materials, and other public service matters. The technical services were represented by information on cataloging, classification, ac-

counting, and binding practices.

For the first time in its history, academic librarianship was possessed of a body of hard data about itself. Some of it was inaccurate, some was incomplete, some was unanalyzed, some was not what was truly needed. Nonetheless, the potential utility of such data was obvious. Improved in quality and quantity, it was for the first time recognized that such data could lead not only to some valid generalizations as to "best practice," but also to the development of a much more fruitful and realistic "standard practice."

Refinement of this process of statistical introspection was not long in coming. George A. Works, a nonlibrarian who was chairman of the Division of Education at Cornell University and was later to become dean of the Graduate Library School at the University of Chicago, was retained by the Association of American Universities, again under a Carnegie Corporation grant, to begin the task. His *College and University Library Problems*, which was issued by ALA in 1927, reported statistical analyses of the libraries in eighteen institutions of higher education, all of which were universities, save for Oberlin and Vassar. The study did not deal at all with internal operational problems, which had been the preoccupation of most literature at that time, but concentrated rather upon identifying relationships between such things as enrollment and collection size, teaching salaries and library expenditures, costs of books and periodicals, salaries of instructors and librarians, and like matters.

The profession's data about itself were further enlarged in 1932 with the publication of somewhat similar statistics and descriptions of more than 200 four-year liberal arts institutions, based upon questionnaires and visits by William M. Randall of the Graduate Library School faculty at the University of Chicago. Entitled *The College Li-*

brary, this volume was "primarily a study of conditions. It [was] not in any sense a textbook in college library administration" (p.3). This work was also funded by the Carnegie Corporation and was supervised by its very influential Advisory Group on College Libraries, comprising librarians William Warner Bishop as chairman, Andrew Keogh, Carl Milam, Louis Round Wilson, and a number of college deans and presidents. Among other facts, the study found the ratio of library to institutional expenditure to stand at 9.3 percent, the seating capacity of college library buildings at 25 percent, and the ratio of women to men in the post of head librarians at three to one.

With good reliable data in hand describing *practice* in academic librarianship, the profession found itself in need of a summary of contemporary *thought* on the matter. The task of preparing such a summary fell upon Blanche P. McCrum, librarian of Washington and Lee University. Her book, which was somewhat mistitled *Estimate of Standards for a College Library*, appeared in 1933, having grown out of a document in which she attempted "to summarize for the president and the board of trustees of a college not only the needs of their library, but also the principles behind those needs" (p.ix). McCrum's volume constituted a thorough review of contemporary thought and debate regarding libraries and was drawn not only from the published literature but also extensively from library minutes, annual reports, staff manuals, handbooks, and ephemera.

Armed now with hard data in the volumes by Works and Randall, a summary of theoretical considerations by McCrum, and a growing corpus of relevant papers in the library press, academic librarianship was by the mid-thirties for the first time in a position to produce a true textbook. The task was assumed, naturally enough, by William

M. Randall, who allied himself with F. L. D. Goodrich, librarian of the City College of New York, to produce in 1936 the first edition of their *Principles of College Library Administration*. Whereas the literature to date had been largely and necessarily descriptive, this textbook was avowedly prescriptive, intending, according to its Preface, "to set forth certain principles which may be applied in the administration of the liberal arts college library" (p.v). The work, which was published by ALA, was widely used and required a second edition in 1941. Fully sixty years after the establishment of its professional association, librarianship at last was possessed of a textbook which it could use in the preparation of aspiring academic librarians.

The balance of the century was one of refining, improving, and broadening textbook coverage of the field. For general college work the quality of available texts was enhanced greatly in 1944 with the appearance of *Administration of the College Library* by Guy R. Lyle, who was at that time librarian of the University of North Carolina Woman's College. Finding no "suitable textbooks" in the field, Lyle set about to produce a comprehensive work, stressing the "broad view" but emphasizing the "practical" aspects of the work. Its acceptance was immediate, and it promptly superseded its predecessor by Randall and Goodrich as the standard handbook in the field, a recognition which it still enjoys. The work proceeded with little change through a second edition in 1949, a much-revised third edition in 1961, and a fourth revised edition in 1974.

Textbooks on specialties within academic librarianship began shortly thereafter to appear. An exposition of practice in larger, more complex institutions appeared in 1945 under the title *The University Library* by Louis Round Wilson of the University of North Caro-

lina and Maurice F. Tauber of Columbia. This book, with its second edition in 1956, served as the standard text on the subject of university library administration until 1971 when a volume with that title appeared written by Yale's Rutherford D. Rogers and Stanford's David C. Weber.

Likewise, smaller academic libraries gained their own texts during the period. A fairly thorough volume on *The Junior College Library* by Ermine Stone had appeared as early as 1932, and Helen R. Wheeler's *Community College Library, a Plan for Action* served a useful purpose following its appearance in 1965. The standard textbook in the field, however, had to await the end of the century when Fritz Veit's *Community College Library* was produced by Greenwood Press in 1975. Meanwhile, a helpful handbook entitled *The Small College Library* by Sister Helen Sheehan, S.N.D., librarian of Trinity College in the District of Columbia, was issued in 1963, and required a second edition in 1968.

#### THE EVOLUTION OF STANDARDS

The last half-century of academic librarianship has been marked by a dogged search for standards which has been fully as frenetic, as pervasive, and frequently as frustrating and seemingly chimerical as the quest for the Holy Grail. "Standards *must* exist somewhere, if we are but wise enough and persistent enough to find them," the fifty-year actions of the profession seem to have implied. Yet a review of those actions also purveys somehow a discomfiting sense of unreality, as though academic librarians were, perhaps subconsciously, interested in standards less for purposes of library evaluation than as a manifestation of societal concurrence that what they do is important. Different from the case of the Grail, the pursuit of academic library stan-

dards has been at least partially and tentatively successful.

A stated purpose behind the ALA *Survey of Libraries* in 1926, the Works study in 1927, and the Randall survey in 1932 was to prepare the way for academic library standards. Standards were in each case described to the Carnegie Corporation as a key social benefit that could be expected from the expenditure of its grant money. Standards, it was pointed out, could only be developed out of an understanding of the possible. Carl H. Milam accordingly distilled information from the first two of these three studies and from twenty-six other citations of lesser consequence in the preparation of his "Suggestions for Minimum College Library Standards," which appeared in the second College and Reference Section *Yearbook* in 1930. The penultimate section of Randall's study two years later noted how the results of his survey could be converted into standards, and he concluded with an actual draft of proposed standards. This draft was offprinted by the sponsoring Advisory Group on College Libraries of the Carnegie Corporation in 1932 and, without benefit of wider approbation, long served as moral suasion for college library development.

The next major spur to action on this knotty problem of college library standards was an effort by the North Central Association of Colleges and Secondary Schools to rationalize its efforts at institutional evaluation for purposes of accreditation. Douglas Waples of the University of Chicago Graduate Library School was retained to study problems of college library evaluation, and the results of his work were published in 1936 with the title *The Evaluation of Higher Institutions. IV. The Library*. This early effort to determine quantitative standards based upon a description of the status quo recommended that libraries be adjudged on the numbers of books and current journals they held



that were listed in standard bibliographies, their expenditure for books and journals, the ratio of salary expenditures to enrollment, and the numbers of loans to students and faculty. Waples also noted as unresolved problems such issues as library and institutional excellence, relationships between reading and scholarship, and between reading and extracurricular activities.

The appearance of Waples' study, carrying with it the threat of possible nonaccreditation by the North Central Association, raised a predictable flurry of surrejoinders, notably in the trilogy presented at ALA's midwinter meeting the following year. Published in 1938 in a volume entitled *College and University Library Service*, edited by A. F. Kuhlman of the Joint University Libraries, these papers were written by Jackson E. Towne of Michigan State University, G. Flint Purdy of Wayne (State) University, and John Dale Russell of the University of Chicago. The Towne and Purdy papers especially expressed the profession's unease that the NCA's standards would evaluate too few of the requisite activities of the college library, that it was limiting them too directly to the curricular offerings of the college, and that the subjective evaluation of quality was unduly subordinated to the objective evaluation of quantity.

The problem of college library standards was hardly solved, but the amount of professional literature devoted to the subject subsided considerably during World War II and the immediate post-war period. Much of the thinking and work on standards for a number of years was done in the regional accrediting associations, generating an understandable apprehension among librarians that they had somehow lost the initiative in their development. Under the editorial oversight of Eli M. Oboler, then of Idaho State College, the ACRL brought together in a volume entitled

*College and University Library Accreditation Standards, 1957* all of the requirements for libraries in higher education then being observed by the professional and regional accrediting associations.

In the same year the ACRL Board of Directors authorized and appointed a Committee on Standards chaired by Felix E. Hirsch of Trenton State College. This committee labored for two years and produced in 1959 the first real set of "Standards for College Libraries" to enjoy the consensual support of the profession. This highly influential document was instrumental for some fifteen years thereafter in gaining improvement in college library resources and services not only in America but in the rest of the world as well.

The 1959 standard for which it was most difficult to gain agreement outside the profession was the statement which called for a book collection of 50,000 volumes, augmented by 10,000 additional volumes for each 200 students above 600. "Why," college presidents and others often asked, "Why 50,000?" And "why should colleges with different purposes all have the same size library?" An epochal effort to improve the plausibility of a quantitative standard for collection size was made in 1965 by Verner W. Clapp and Robert T. Jordan of the Council on Library Resources in a piece unassumingly entitled "Quantitative Criteria for Adequacy of Academic Library Collections." In it they proposed adopting a basic collection size which would then be supplemented in fixed increments for each faculty member, student, and field of concentration in an institution's curriculum. The Clapp/Jordan concept stood up well under subsequent scrutiny and debate and, with certain limited transmogrifications, was adopted for evaluation purposes by several state systems of higher education. A revision of the "Standards for College Libraries," in-

corporating the Clapp/Jordan concept and other more recent thinking and experience in academic librarianship, was developed in 1975 by an ACRL Committee chaired by Johnnie E. Givens of Austin Peay State University. By the end of the century this document appeared to have received a level of professional approbation similar to that enjoyed by its predecessor.

Junior college libraries experienced somewhat less difficulty developing standards for themselves than had their four-year college brethren. Although Stone had drafted some trial standards in her *Junior College Library* in 1932, it was not until an ACRL committee, chaired by Felix E. Hirsch, produced a set of "Standards for Junior College Libraries" in 1960 that the profession had a document which it could adopt. These standards served well until they were superseded in 1972 by a set of "Guidelines for Two-Year College Learning Resources Programs." The "Guidelines" were essentially qualitative, and a quantitative supplement to them was authorized by ACRL in 1975. University librarians, on the other hand, found progress on standards more difficult to accomplish. Following years of feckless discussion of the matter, largely within the Association of Research Libraries, the ARL and ACRL joined in 1968 in a somewhat promising effort to devise university library standards. The major research in this direction was made by Robert B. Downs of the University of Illinois in 1969 in his *University Library Statistics*, which was based upon the premise that the aggregate experience of fifty university libraries noted for their excellence in resources and service ought to provide a foundation upon which standards can be built. As has been seen elsewhere in this review, in other words, it should be possible to move from careful *description* of what exists to *prescription* of what should be.

#### LISTS OF BOOKS FOR COLLEGE LIBRARIES

It was the same continuing concern for standards that prompted the compilation of the first list of books for college libraries. Unlike the public library field, where the *ALA Catalog* had been produced in 1904 (and kept current beginning in 1905 by *Booklist*) simply as a list of recommended titles, the function of the first *List of Books for College Libraries* was originally conceived as being primarily for collection evaluation and only secondarily for collection development. Thus its first "preliminary" edition in 1930 was viewed by its compiler, Charles B. Shaw, as a holdings list of an ideal college against which an institution could compare itself in different fields. Commissioned by the Carnegie Corporation's Advisory Group on College Libraries, the work listed some 14,200 titles selected upon the recommendation of two hundred college teachers, librarians, and other advisors. The immediate popularity of the work as a buying guide, however, prompted Shaw to alter his views concerning it, and in the second preliminary edition in 1931 he reduced considerably the number of out-of-print titles listed in it in favor of others which were more readily obtainable in the market. A *Supplement* issued in 1940 listed 3,600 additional titles, all of which were in print.

Although Shaw's lists included periodicals, this was considered to be one of the weaker features of the work, and a special listing of recommended journals seemed to be in order. Building upon work he had done in citation counting as a thesis at Columbia University, Guy R. Lyle, then of Antioch College, produced in 1934 the first edition of his *Classified List of Periodicals for the College Library*. Through subsequent editions this handlist grew in size and quality and became of considerable

utility to college librarians. From 376 titles in the first edition, the work expanded to 413 in the second edition in 1938, to 435 in the third edition in 1948, to 601 in the fourth edition in 1957, to 1,048 titles in the fifth edition in 1972. The last two editions were compiled by Evan I. Farber of Earlham College.

Although certainly never intended for the purpose, the 39,000-entry *Catalogue* of Harvard's Lamont Library almost immediately superseded Shaw's *List* as a buying guide for college libraries following its publication in 1953. Its value as a buying guide for other institutions, however, was diminished by its understandable adherence to the vagaries of the Harvard College curriculum which lacked such fields of concentration as business, home economics, education, and agriculture. The rationale for the list was simply expressed in its Introduction by Lamont Librarian Philip J. McNiff as follows: "The books on this list were placed in the Lamont Library only because it was believed they would be used by Harvard undergraduates" (p.vii). Nonetheless, many college librarians, believing apparently that what is good for Harvard must be good for the rest of us, set about attempting to acquire titles on the list which they had not previously held.

A decade later the University of California's New Campuses Program selected some 53,400 titles for its several college libraries, and the list was published by ALA in 1967 as *Books for College Libraries*. Much more general in its scope than the Lamont Library *Catalogue* had been, this list served more appropriately as a buying guide for other institutions. Its coverage, moreover, was thereafter kept current by the new periodical *Choice*, which presented selections of books for general college libraries made with the advice of hundreds of faculty members and librarians in many institutions. *Choice* grew in the decade following, listing some

3,388 titles in its first year and 6,561 in 1972-73. In 1975 ALA issued the second edition of *Books for College Libraries*, now a completely generalized list subtitled *A Core Collection of 40,000 Titles*. . . . This edition, as well as *Choice*, was made possible through funding from the Council on Library Resources.

Junior colleges have had their booklists as well. In 1931 Edna A. Hester of Pomona College prepared a list of perhaps 4,500 titles for use in the junior colleges of California. Learning of this venture, the ALA published the list as *Books for Junior Colleges*. A vastly more satisfactory selection, however, was compiled in 1937 by Foster E. Mohrhardt for the Carnegie Corporation's Advisory Group on Junior College Libraries and was published by the ALA with the title *List of Books for Junior College Libraries*. This entire selection of 5,300 in-print titles was available in the market at the time for \$23,445, and its 140 periodical titles could be subscribed to at an annual cost of \$618. The Mohrhardt list was widely used and highly influential in the development of junior college library collections.

Other booklists have also been prepared for lower division institutions. In 1954 Frank J. Bertalan, building from lists submitted by junior college librarians and based upon frequency of nomination, produced his 4,000-title *Books for Junior Colleges*, which was published by ALA. Among other useful lists have been *Basic Books for Junior College Libraries* compiled in 1963 by Charles L. Trinkner, and *A Basic Book Collection for the Community College Library*, produced by Helen R. Wheeler in 1968. The standard guide to collection development in lower division institutions at the end of the century, however, was James W. Pirie's *Books for Junior College Libraries*, a 19,700-title list which was issued by ALA in 1969.

The original purpose for which book-



lists had been advocated thus had changed completely over the forty-five-year period of their existence. Valid though it still sounded in 1976, the "discovery" reported by Randall in 1932, to the effect that "the book collections of a college must contain not a certain number of books, but *certain books*" (p.133, italics his), had been found difficult to incorporate into library administration. In its place the profession rather had espoused another "discovery," namely that collection quality is easiest to gain at point of input, an apothegm requiring buying guides instead of evaluation lists for implementation.

#### SERVICES IN LIBRARIES

Books or seminal articles concerning technical services specifically within academic libraries have been surprisingly few in number. Indeed, virtually no monographs have been prepared on the subject at all, although many of the treatises on technical services in general have been written by academic librarians or have emphasized the academic viewpoint. Thus the first *Practical Handbook of Modern Library Cataloging*, albeit general in scope, was written in 1914 by William Warner Bishop, then of the Library of Congress, although earlier of Princeton, and destined in the same year to move to Michigan. Margaret Mann was also at Michigan, although as an instructor, when she produced her textbook on *Introduction to Cataloging and the Classification of Books* in 1930.

Although the present review is supposedly limited to literature concerned specifically with academic libraries, it would be a clear distortion if no mention at all were made of at least the key general works without which academic library collections could never have been organized at all. Melvil Dewey's *Classification and Subject Index*, prepared at Amherst first in 1876, as well

as the *Classification Classes* of the Library of Congress which began in 1910, would be among such titles. So also would the Anglo-American Code, published in 1908 by ALA as *Catalog Rules: Author and Title Entries*, and Charles Ammi Cutter's *Rules for a Dictionary Catalog*, which was influential from its first appearance in 1876 through its more useful fourth edition in 1904. Both the ALA *List of Subject Headings*, which appeared first in 1895, and the Library of Congress list of *Subject Headings*, beginning in 1910, were instrumental in organizing college and university libraries. The full story of the general literature of library technical processing, however, if it is to be told anywhere in this Bicentennial year, must be told elsewhere.

Much the same phenomenon holds true as regards public services in academic libraries; there is little literature here either. In fact, *Circulation Work in College and University Libraries*, produced in 1933 by Iowa State College's Charles H. Brown and NYU's Humphrey J. Bousfield, may be the only monograph dedicated to public services solely in academic institutions. Again, however, it would be a distortion to ignore here some of the general literature that was written by academic librarians and was influential in the development of public services on campuses. Alice B. Kroeger's *Guide to the Study and Use of Reference Books* is perhaps the best example. Originally produced at Drexel, this work has for the last sixty-five years come out of Columbia University—under Isadore Gilbert Mudge from 1910, Constance M. Winchell following 1941, and more recently under Eugene P. Sheehy and his associates. Although general in its scope, it has remained a veritable monolith in academic library service. Margaret Hutchins was also at Columbia when she wrote her *Introduction to Reference Work* in 1944, and William H. Jesse was at the University

of Tennessee when he produced his *Shelf Work in Libraries* in 1952.

Public services specifically in academic libraries, however, have benefited greatly over the last two-score years from a body of literature of a very special kind. Partly visionary, partly hortatory, and largely experimental or theoretical, this corpus of writing has concerned the unrealized potential of the college library within the mission of its parent institution. Largely, although not entirely, initiated in the early depression years, these concerns did not produce a heavy literature until shortly before World War II, which event may account in part at least for the fact that it impacted rather slowly on the academic library scene.

A major locus for experimentation along these lines was Stephens College in Missouri. Funded again by the Carnegie Corporation of New York, this junior college for girls appointed an educator from the University of Minnesota, B. Lamar Johnson, to two previously discrete positions now conjoined as dean of instruction and librarian. Johnson was given a tripartite charge: "first, to make the library contribute as effectively as possible to the instructional program of the college; second, to teach students how to use books effectively; and third, to lead students to love books and to read for pleasure." Following a period of learning about libraries, Johnson set about for the subsequent years to accomplish this somewhat awesome charge. He was able, with outside money, to try just about everything anyone could think of that might enhance the value of the library to the Stephens girls, including many things that have subsequently become wrapped into standard college library practice. A key discovery, according to Johnson and reported in his 1939 volume, entitled *Vitalizing a College Library*, was that "teachers and librarians [should]

merge into a single instructional staff" (p.117).

This was not the first time such a notion had appeared in print. The concept had been implicit in Johnson's very appointment to a dual role in 1931, and Ralph Waldo Emerson's concept of "Professorships of Books" had been "in the air" ever since William Mathews and F. B. Perkins of the Boston Public Library had applied it to libraries in their essays in the U.S. Bureau of Education's report on *Public Libraries in the United States* in 1876. Nonetheless, it somehow seemed more relevant and indeed possible of implementation in the 1930s. In the same vein, Louis Shores of George Peabody College coined the term "Library-Arts College" in a speech at the Chicago Century of Progress Exposition in 1934, and Blanche P. McCrum had recognized its virtue in her *Estimate of Standards for a College Library* a year earlier.

Although stopping short of recommending actual merger of the instructional and library functions of the college, B. Harvie Branscomb strongly supported the general cause of increasing a library's educational effectiveness in his *Teaching with Books* in 1940. This book was a report on his work directing "the Library Project" of the Association of American Colleges two years earlier. A professor of early Christian literature at Duke University and former Rhodes Scholar, Branscomb brought his perceptive pedagogical insights and incisive debating skills to his task and produced a volume that was destined probably to accomplish more improvement in American college libraries than any other single document written during the entire century here under review. Finding baldly that "a large percentage of undergraduates . . . make such a slight use of the college library that they would scarcely miss it if it ceased to exist" (p.39), he urged closer articulation of the library and the instruc-

tional program, greater attention to the problem by presidents and deans, improvement in the professional preparation of librarians, and a number of other changes. Coming as it did with the imprimatur of the AAC, although published by ALA, this volume elicited salutary attention and action in many institutions in the land over the subsequent fifteen or more years.

Sensing that many college instructors were inadequately informed about libraries to integrate their resources fully into their teaching, Louis Round Wilson, Mildred Hawksworth Lowell, and Sarah Rebecca Reed produced a volume in 1951 entitled *The Library in College Instruction*. Discussing general and specific bibliographic sources, the selection of library materials, the value of reading, and the library as a teaching tool, this work attempted to provide a route by which college teachers could aid progress toward the goals set by Branscomb.

A resurgence of interest in the concept of a merged library and instructional capability occurred in the mid-1960s. A workshop on the subject at Jamestown College in North Dakota resulted in 1966 in a volume of papers edited by Louis Shores entitled *The Library-College*. A *Library College Journal* which commenced publication in 1968 became *Learning Today* in 1974. By the end of the century, a group called the Library College Associates was also publishing a chronicle of educational events called the *Omnibus*, a clearinghouse of library-college experience called the *Experimenter*, and a series of booklets entitled "Learning for Living."

It is sometimes tempting to ask why those enthusiasms of the 1930s never came to fruition, but even to permit the question is to view the last forty-five years of academic librarianship simplistically, because those enthusiasms did bear fruit. When the condition of aca-

demical libraries in the 1920s is scrutinized in comparison with that of the 1970s, it is apparent that much progress has indeed been made, especially in the community colleges, toward the goals promulgated by Shores, Johnson, and Branscomb. The library *is* more closely integrated with the curriculum today, better instruction in library use *is* available today, librarians *are* better prepared as educators today, the library *is* a more effective educational instrument today, library materials *do* extend far beyond the codex book today. The fact that so much progress has been made may account, in part at least, for the fact that the library-college movement has no more adherents than it has in the 1970s; progress has been so extensive as to alleviate somewhat the pressure for more.

#### LIBRARY BUILDINGS

With library buildings, as has already been noted in several other aspects of library work, there was for a long time little if any literature dealing specifically with academic as distinct from other kinds of libraries. Charles C. Soule's 1912 volume on *How to Plan a Library Building for Library Work* contained practically no mention of colleges or universities, although many of the precepts he advocated (e.g., "the preeminence of utility over display") were as valid in academe as anywhere. Likewise, Chalmers Hadley's *Library Buildings: Notes and Plans* in 1924 contained only two pages specifically on academic libraries, being a description, picture, and floor plan of the library at Heidelberg College in Tiffin, Ohio.

Once more it was courtesy of the Carnegie Corporation that the literature of academic library buildings received its start. With its funding, Princeton University librarian James T. Gerould set out in 1931 to visit and report upon the library buildings of fifty academic institutions. Observing that there had



"been hitherto no handbook of principles and standards by which [colleges] can be guided in the development of a plan "for a new library, Gerould's book, *The College Library Building, Its Planning and Equipment*, attempted to do just that.

Sounding today like a "period piece," although containing much that is still useful, Gerould's book advocated multi-tier structural stacks seven feet, six inches deck-to-deck, with reading and service areas fifteen feet floor-to-floor, and it noted that "thirty percent is now almost a minimum" of the enrollment for which seats should be provided (p.29). Gerould promoted browsing rooms and observed that "quite as important as are the books and their setting is the quality of the woman in charge. . . . She should be of ripe culture, human sympathy, and social experience" (p.51-52).

Edna Hanley Byers, librarian of Agnes Scott College, reproduced floor plans, sectional drawings, and elevations, as well as pictures and textual descriptions of forty-two recent libraries in her *College and University Buildings*, which was published by ALA in 1939. Although general in its coverage, Herman H. Fussler's *Library Buildings for Library Service* (ALA, 1947) contained essays by four university librarians: William Warner Bishop, Indiana's Robert A. Miller, Colorado's Ralph E. Ellsworth, and William M. Randall. Also, between 1952 and 1956 the proceedings of six ACRL-sponsored building plans institutes were published in the ACRL Monographs series.

The next entire work specifically concerned with academic library buildings, however, was *Planning the University Library Building*, which had appeared in 1949. This full account reported the "exchange of experience, ideas, and knowledge" (p.viii) that occurred among librarians, faculty members, administrators, and architects in sessions

scheduled over five years by the Cooperative Committee on Library Building Plans. It constituted the first comprehensive treatment of the modern modular style of academic library building.

The year 1960 saw the publication of Ralph E. Ellsworth's slender volume on *Planning the College and University Library Building*. In this highly personal and chatty book, written much in the first person, the author attempted to convey "what I think I know" about the process of effective library building planning. Replete with anecdotes, illustrations, and floor plans, this book continues—now in a 1968 second edition—to serve a useful function in building planning.

This is true despite the publication in 1965 of the comprehensive and definitive book, *Planning Academic and Research Library Buildings*, by Keyes D. Metcalf, librarian emeritus of Harvard College. This big book, intended to explain academic libraries to architects and architecture to academic librarians, was supported in its preparation by the Council on Library Resources. Its existence has already been of incalculable value in improving the quality of academic library buildings, not only in the United States but in many foreign lands as well; and it appears able to serve for many years to come. It is so thorough and so sound as to render it almost silly to begin planning a library today without first virtually memorizing every word in it.

It fell to Ralph E. Ellsworth, however, to produce one more valuable book on the subject before the century ended. His *Academic Library Buildings*, also funded by the Council on Library Resources, was issued in 1973. Criticized in some quarters for not being what it was never intended to be—a picture book—this volume did contain pictures, some 1,500 of them. None, however, were chosen for their esthetic or technical quality, and certainly not for their



beauty; all were selected rather because they demonstrated pictorially how some 130 different recent academic library buildings in North America and Western Europe had resolved certain specific and chronic design problems. It contained minimal text, but the pictures proved invaluable for library planners.

This kind of review of the literature of academic library buildings leads one, foolhardily perhaps, to speculate that the profession may be approaching the end of an era in building design. Just as few really new concepts were incorporated into academic library buildings for three decades following the opening of World War I, so has there been little that is truly innovative in the three decades since World War II. Just as the former period was one of refinement and perfection of the concept of service areas wrapped one-on-two around multitier structural stack cores, so has the latter period been one of finding the best way of utilizing the loft space made available by flexible, modular construction. Some excellent buildings have now been built in both styles—so good, in fact, that substantive improvement in library building quality may now have to await the conceptualization of a whole new revolutionary theory of interaction between library function and structure. It is challenging and tantalizing to ponder just what that might be.

#### SERIALS . . .

Almost two-thirds of the century had passed before academic librarians had their own journal. Although, as was mentioned earlier, such general library periodicals as *Library Journal*, *Public Libraries*, the *ALA Bulletin*, and later the *Library Quarterly* had published many articles concerned with colleges and universities, the field by 1939 clearly needed a periodical dedicated solely to its own concerns. Accordingly ACRL in that year authorized the establishment of *College & Research Libraries*,

a periodical intended at once to be its news bulletin, its scholarly journal, and its forum. *C&RL* served the first of these three purposes fully until it spawned its separate *News* in 1966. As a scholarly journal *C&RL*'s service began slowly and increased through its lifetime as empirical research in academic librarianship increased in quantity and quality; it tended always to favor papers concerning applied rather than pure research. As a forum for academic librarians, *C&RL* strove to present all sides of any debate or issue facing the profession, although this effort brought upon it some criticism for dissipating its printing space upon articles which were contentious and repetitious. *C&RL*'s editors have been the following:

- A. F. Kuhlman, 1939–41
- Carl M. White, 1941–48
- Maurice F. Tauber, 1948–62
- Richard B. Harwell, 1962–63
- David Kaser, 1963–69
- Richard M. Dougherty, 1969–74
- Richard D. Johnson, 1974–

Academic librarians had had some experience with serial publications of their own prior to the establishment of *C&RL*, however. The *Yearbook* issued annually by ALA's College and Reference Section between 1929 and 1931 had given the field some opportunity to bring together its writings in a single bibliographical location. This publishing effort collapsed certainly because of the depression and perhaps also because of the establishment in 1932 of the *Minutes* of the Association of Research Libraries. The ARL *Minutes* expanded rapidly to carry not only committee reports and accounts of its discussions but also the many fine papers, addresses, and reports on university librarianship which were commissioned, or sometimes simply received, by that body. The ARL was also the publisher throughout its life of the *Farmington Plan Newsletter*

and of its successor the *Foreign Acquisitions Newsletter*. In the 1970s ARL's Office of Library Management Studies established two other useful series: its *Occasional Papers*, concerning such subjects as planning, objectives, and policies; and its *SPEC Kits*, containing selected documents from its member institutions on such issues as leave policies, collective bargaining, and book selection. ACRL meanwhile developed an extensive serial publishing program of monographic-length writings. Its Monograph series began in 1952 and developed later into its Publications in Librarianship series; its Microcard series, established the following year, became in 1969 its Microform series.

In 1975, noting the growth of the academic library community and anticipating—because of new-found faculty status—increased pressure to publish, Richard M. Dougherty of the University of California established a commercial periodical in the field, the *Journal of Academic Librarianship*. Its early issues contained articles in many ways similar to those that had appeared during the previous decade in *C&RL*, which Dougherty had edited for five years. It also began publishing an attractive new feature containing excerpts from published reviews of recent books in the field.

#### ... AND SURVEYS

No review of the literature of academic libraries would be complete without observing the great historical importance of library surveys. Their utility and influence have been thoroughly examined and reported in *College and University Library Surveys* by Eastern Michigan University's E. Walfred Erickson and need not be discussed here *in extenso*. Nonetheless, the enormous value of the monuments among them as instruments of organizational development dictates their notice in this essay. Coming, as many of them did, at a time

before there were either textbooks or an extensive open research literature, they pitted the wide proprietary knowledge borne of extensive experience—and often the sagacity and wisdom—of their authors against many of the peskiest problems of the profession.

Several kinds of library surveys have left their mark upon academic librarianship: self-surveys, surveys by accrediting agencies, others by management consultants, and studies by teams of experts from within the library profession. All four kinds have been useful. By far the most important survey literature, however, was that produced by teams of library experts, primarily between the late 1930s and the early 1950s. Since most of these surveys were published over the imprint of ALA, they were widely read, and their impact extended far beyond the specific institutions which they examined.

Louis Round Wilson, as would be expected, was involved in many of these surveys. He and several colleagues studied and reported upon the University of Georgia Library in 1939; with Guy R. Lyle and A. F. Kuhlman, he surveyed the University of Florida Library in 1940; together with Robert B. Downs and Maurice F. Tauber, he studied the Cornell University Libraries in 1948; and he and Frank A. Lundy of the University of Nebraska surveyed Notre Dame in 1952. The University of Texas' Donald Coney, Herman H. Henkle of Simmons College, and G. Flint Purdy conducted a library survey at Indiana University; and Tauber and Colorado's E. H. Wilson examined Montana State University in 1951. More recently, Columbia University Libraries benefited from one self-survey under the auspices of the University President's Committee on the Educational Future of the University, which in 1958 defined many of the future needs of the *Columbia University Libraries*; and another effort in 1973 conducted jointly by the staff and

the management firm of Booz Allen & Hamilton proposed new patterns for the *Organization and Staffing of the Libraries of Columbia University*. These and many others have had a wide influence.

One can only speculate as to the reasons for the decline in the importance of surveys during the last quarter-century. It is probable that the increasing professionalization of academic librarianship has gained improved credibility for the resident library staff, thereby reducing reliance upon experts from outside the institution. Certainly the methods used by outside surveyors have become more widely known and have, therefore, been susceptible to copy by institutions that would survey themselves. Perhaps also, what one might call the "democratization of knowledge" about the profession—the more widespread teaching of theory and principle in the library schools as distinct from technique—may have enabled operating librarians to resolve more of their own problems rather than relying upon outside experts. Maybe, in other words, experts, like heroes, no longer exist. Certainly, however, experts, like heroes, have left their mark upon our past, and the literature of library surveys was a prime carrier for their influence.

#### CONCLUSIONS

Several impressions can be drawn from this cursory review of some of the more important pieces of literature on academic librarianship. Preeminent among them perhaps is that there is little that is ever truly new in the field. Cooperation, status, evaluation, concern for service, and virtually all other motivating issues have been around for a long time. The profession seems often to forget from one generation to the

next that it has faced these issues before, and as a result it often attacks them repeatedly in exactly the same way, sometimes even making the same errors over again.

Another impression that is gained from such a survey is that a very small segment of the profession at any given moment is the fountainhead of a very large share of the writing in the field. This impression would seem to be subject to proof or disproof by objective analysis and would seem to deserve being done, although problems would exist if one attempted also to gauge the value or influence of that writing. Related to this impression is another that the American Library Association has been the publisher of a very high percentage of the landmark literature of academic librarianship over the century of its existence.

Finally, an interesting cycle seems to emerge through which the literature of the profession grows and develops. First in evidence are very simple descriptive statements of conditions and operations within single institutions. Several such descriptions permit trial generalizations to be made in subsequent writings. These are later tested against broad surveys of experience in many libraries. Thus far, all has been descriptive, but now prescriptive statements can for the first time with some authority be made. Subsequent literature refines the prescriptions until consensus is attained. With consensus come standards, and once tenable standards can be agreed upon and with some success enforced, a profession has attained maturity. A review of the past century of academic librarianship as reflected in its literature suggests that the profession is now at that point in its development.

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## Estimating Lost Volumes in a University Library Collection

*This study employed standard sampling theory to make a study of library book losses, but unlike previously reported studies, the investigators instituted periodic searches for volumes missing after the original search. Over a period of two years and nine months, the original loss figures were cut by more than 60 percent.*

*With the assumption that the loss was related to the size of the collection each year, thus taking into account the rapid growth in recent years, a rough estimate of the annual loss rate was obtained. This figure was adjusted to reflect known losses discovered annually (identification of which resulted in routine purging the shelflist of holdings) yielding an adjusted estimated loss rate of about one-third of 1 percent annually.*

**F**OR SOME TIME THE LIBRARY ADMINISTRATION HAS BEEN CONCERNED with the problem of missing books in the Washington University's central library (the John M. Olin Library). In the background of our concern there was the desire to consider alternative security arrangements. The present security arrangements in Olin Library include using a single exit, where an inspector visually checks all briefcases and bundles and verifies that all Olin Library books have been properly charged out (by inspecting a date stamped on a "due date" slip pasted inside the back flyleaf of each volume).

Our concern led in the fall of 1970

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to a systematic attempt to determine the book losses being incurred. No inventory had ever been made of Olin's collections; our attempt would thus give us some conception of the books lost since the start of the collection in the latter part of the nineteenth century. Given the obvious difficulty in making a complete inventory—at the time there were approximately 850,000 volumes—we decided upon a sample study.

The basic sampling technique used in this study is the same as that employed in two other recent studies by Bommer and Ford and Clark.<sup>1,2</sup> Moreover, the Bommer and Ford study had the same impetus, the analysis of the value of an electronic security system.

One of the principal differences between our study and both the Bommer and Ford and Clark studies lies in the repeated searches for missing volumes incorporated into our study, in an effort to refine the estimate of missing volumes. The need for doing this was the

subject of a letter commenting on the Bommer and Ford article.<sup>3</sup> Another is the use of a different assumption to break down a cumulative loss estimate into an annual loss rate. A third important difference is the fact that we extended our analysis to a second, and quite different, collection. The contrasting results we achieved in these two studies, together with the different magnitudes of the estimates generated by the Bommer and Ford and Clark studies, led to our trying to analyze factors accounting for differences in loss rates among various libraries.

#### DESIGN AND METHOD OF DRAWING SAMPLE

It was decided to determine the proportion of missing volumes with an accuracy of about  $\pm 10$  percent, and with a confidence level in the range of 90 percent to 95 percent. The "best guess" in advance of the study was that the percentage missing would be about 10 percent of total volumes. Using the standard formula for a 95 percent confidence level,<sup>4</sup> a sample of about 3,600 was indicated. At a 90 percent confidence level, this was 2,400. So, we targeted a sample in between, about 3,000. These were chosen as three subsamples, each of about 1,000.

The shelflist rather than the card catalog was used to draw the sample, and the items were chosen by inches of material, rather than a fixed number per drawer. Use of the shelflist facilitated retrieval of information from both the stacks and the library's daily computer printout of volumes charged out to borrowers, because all of these were arranged in the same sequence. Furthermore, the problem of cross-reference cards (present in the card catalog) was eliminated, along with the problem of cards in the catalog that referred to items located in departmental libraries (rather than in Olin Library itself).

Using inches rather than a fixed number of cards per drawer to determine the number of items chosen eliminated the bias against drawers containing a large number of cards. Under a fixed number per drawer method, for instance, we would pick two cards from a drawer containing 400 cards, and two cards from a drawer containing 1,000 cards. At the same time, the tedium of counting every card, necessary if a fixed number of cards has been used, was avoided.

Furthermore, the samples were accumulated in lots of fifty, the researchers both compiling a list of fifty volumes and checking status information on the items in that lot the same day. All this "work unit" represented about four hours of work. This procedure enabled the data gatherers to appreciate the value of their efforts and also provided for some flexibility in making assignments of employees to this task.

In this fashion, three samples (A, B, and C) of approximately 1,000 cards each were drawn from the shelflist in January and February 1971. In each case, the stacks were checked to establish the physical presence or nonpresence of each item on the shelf. Then each missing item was checked against the Circulation Department's computer printout of books on loan. Volumes that were not found on the shelves and not listed as charged out to borrowers were classified as missing.

#### INITIAL SAMPLING RESULTS

The study data on March 1, 1971, are shown in Table 1.

TABLE 1  
STUDY DATA AS OF MARCH 1, 1971

Sample	Number in Sample	Found	Not Found	Percent Missing
A	971	924	47	4.84
B	887	845	42	4.73
C	1091	1026	72	6.59
Total	2949	2795	161	5.45

Employing the same formula used above, we solved for the accuracy of the 5.45 percent figure and found that at the 95 percent confidence level, the upper limit for the percentage of books missing would be 6.3 percent and the lower limit 4.7 percent. That is to say, if our sample was truly unbiased, the odds were 95 in 100 that the proportion of books missing in the library will fall somewhere in the range of 4.7 percent to 6.3 percent, with 5.45 percent being the "best guess" figure.

The figure of 5.5 percent was much less than our original estimate of 10 percent. But the volumes in Olin by this time were approaching 900,000, so 5.5 percent of these—49,500—was a significant total. Assuming a cost to acquire and catalog of only \$15.00 per volume—certainly minimal—the missing volumes represented a loss of at least \$750,000.

#### ADDITIONAL SEARCHES

Were all of the missing volumes permanently lost? Would some "turn up" later on? We decided to find out and arranged to check on the missing items five times over the following three years. By January 1972, ten months after the original searches, nearly half the missing volumes had been found, and only eighty-six (2.91 percent) were still lost. And by January 1974 only sixty-five, or 2.20 percent, still could not be located. The effects of these searches, therefore, were to cut the missing volumes to about 60 percent of their original proportion. Applying our formula again after the last of these searches, at the 95 percent confidence level, the lower limit to the estimated proportion of books missing in the entire collection would be 1.7 percent, the upper limit, 2.7 percent, and the "best guess," 2.2 percent.<sup>5</sup>

Figure 1 plots this information for the total sample averages on a time axis. Attempts were made to fit various curves

to these data points, including the Gompertz, logistic, exponential, and second-degree exponential. No completely satisfactory fits could be obtained, however, because of difficulties in reconciling the first (March 1971) and second (July 1971) data points. Curves that gave good fits to the second and later points gave estimated values for the first point that were substantially below its actual value. On the other hand, curves that obtained close fits through the first and second data points yielded unsatisfactory fits for the latter data points, notably for April 1973 and January 1974. For instance, a logistic curve (of the form

$$\frac{1}{Y_t} = \frac{1}{K} + AB^t,$$

where  $Y^t$  is the percentage of books missing at time  $t$ ) could be fitted in a way that yielded an estimate for the first data point of 5.44 percent, only .01 percent deviation from the actual. But the estimate for the last data point (January 1974) using this curve would be 3.06 percent, which compared very unfavorably with the actual value of only 2.2 percent.

It seems very likely that the magnitude of the first data point (March 1971) reflects the effects of books in the process of being reshelfed at the time, i.e., a "float." This "float" was not checked. By the time of the second search, however, four months had elapsed, and all (or practically all) of the missing volumes that had been in the "float" were now either on the shelves or recorded as checked out to a borrower—i.e., they were no longer missing. From the second search on, then, the "float" did not significantly affect the number of missing volumes.

The magnitude of this float probably would vary from one library to another depending on the details of their reshelfing procedures. We, therefore, concluded that a simple exponential curve ( $Y_t = AB^t$ ) fitted to points II through



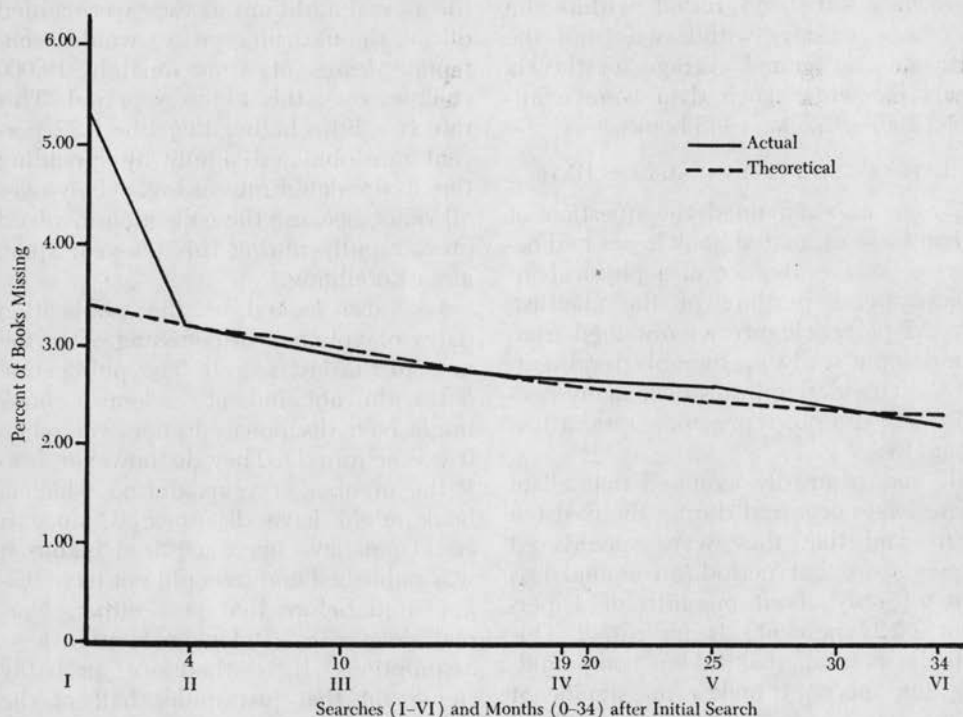


Fig. 1  
Percent of Books Missing, at Various Intervals

VI (omitting I) was the most appropriate general indicator of the effect of successive searches. The formula for the curve that does this is:

$$Y_t = 3.378 (0.9868^t)$$

where  $t$  = serial number of months (1, 2, 3, . . . 34) from first search. It was calculated by using a computer program for fitting regressions and is plotted on Figure 1.

#### SHELFIST DELETIONS

This turned out to be just the first step in estimating Olin Library's losses, since even if we accept the validity of the sampling results showing accumulated losses equal to 2.2 percent of the entire collection deposited there, all this discloses is the discrepancy between the books the shelflist showed were in the collection in March 1971 and the vol-

umes actually there (or charged out to borrowers). Naturally, this raised the question of what deletions in the shelflist had been made over the years, for one reason or another. Investigation determined that none of the existing staff knew of any physical inventory and, in particular, no actions since the library moved into its new building in 1962, that might have resulted in a wholesale revision of the shelflist.

One regular type of adjustment was made to the shelflist that bore on the question of book losses. This related to books that library users could not find themselves and that the Circulation Department, after being asked to help, also could not find. The standard procedure calls for three searches to be made for items of this type, the last taking place one year after the first. If the

item has not been found within the year, the card is withdrawn from the catalog. The annual average for the six years for which such data were available, 1967-1972, was 445 books.

#### ESTIMATING THE ANNUAL LOSS RATE

There also remained the question of when these estimated book losses had occurred. In the absence of a physical inventory and purging of the shelflist, the 2.2 percent figure we obtained from our sample study presumably represented the cumulative losses over many decades and did not represent a rate of loss annually.

If one arbitrarily assumed that all of these losses occurred during the past ten years and that they were spread out evenly over that period, an annual loss rate of only about one-fifth of 1 percent (0.22 percent) is indicated. This rate is so small that taking compounding into account makes no significant difference—the loss rate would still be 0.22 percent per year.

Complicating the determination of annual losses was the fact that this collection had doubled during the decade, 1962-72, reaching 953,809 volumes by 1972. We speculated that losses each year bore some relationship to the number of volumes on hand, with larger losses being incurred when the collection was (relatively) large (i.e., the more recent years) than when it was small. We, therefore, sought a level annual rate of loss that, applied to the starting inventory ten years earlier and to each year's additions beginning when they occurred, would yield the losses accumulated by early 1971. The accumulated loss for ten years was assumed to be approximated as 2.2 percent of the June 30, 1970, perpetual inventory (844,301 volumes), or about 19,000 volumes. By trial and error, we found that a rate of loss of about 0.3 percent, compounded annually (applied to the book inventory ten years earlier and picking up each of

the annual additions as they were added during the next nine years) would accumulate losses of approximately 19,000 volumes over this ten-year period. This rate is a little higher than the 0.22 percent rate obtained simply by spreading the accumulated rate of loss evenly over all years, because the collection involved grew rapidly during this ten-year span, almost doubling.

We also looked at the publication dates of volumes still missing after the next to the last search. The publication dates do not indicate when a book might have disappeared (nor even when it was acquired). They do, however, limit the number of years during which a book might have disappeared, since it could not have been acquired before it was published and so could not have disappeared before that year either. Normal delays in cataloging fortify these assumptions. It is, therefore, probably significant that just under half of the seventy-five books missing at the time of the second to last search (April 1, 1973) had been published during the last decade, 1961-1970. This fact lends some support to the assumption that the cumulative losses might be spread approximately over the last ten years with some, but not great, overstatement. The increasing numbers shown over the individual years from 1950 through 1970 also roughly parallel the growth in the collection during this period, although it should be reiterated the publication date does not indicate when a volume disappeared, only the earliest time it could have disappeared.

To the estimate of a 0.3 percent annual rate of loss based on our sample study we added an adjustment for the rate at which the lost volumes were being purged from the shelflist, since their having been purged precluded any of them from being included in the sample. As was stated earlier, an average of 445 lost volumes were purged annually for the six years that such data

were available. Since the average size of the collection during those six years was 816,800 volumes, this amounted to a loss rate of 0.05 percent annually. Summing the two loss rates yielded a total estimated annual loss rate of about 0.35 percent. Subject to the evidence that may be developed in the future showing this estimate to be very wide of the mark, losses at this rate did not seem to us to justify further consideration of an electronic security system for this collection, so we did not pursue that objective any further.

#### A SECOND STUDY: THE ART AND ARCHITECTURE LIBRARY

In May 1973 a second study was begun in the Art and Architecture Library, one of the university's several departmental libraries. This collection is located in a different building, near the schools that account for the major use of this material. It includes 50,202 volumes. Unlike Olin Library, it uses a manual system to charge out books to borrowers, and it has no form of exit control.

The sample chosen here was smaller, 594 volumes, and, on the average, the searches were conducted at shorter intervals than in the Olin study. The first, conducted on April 30, 1973, showed 153, or 25.5 percent, of the sample to be missing. Eight months (and fifteen searches) later, in December 1973, the missing total had been reduced to 55 (9.2 percent). By May 19, 1975, two years and twenty-two searches later, the lost volumes numbered only 33 (5.5 percent). The curve of declining losses was similar to that found in the Olin collection, bulking relatively large at the time of the first search but shrinking by about one-half after four months had elapsed. Beginning with the fourth month, an exponential equation,  $Y = .1262 (.9691^t)$ , described subsequent reductions very well ( $R^2 = .95$ ), just as it did in the Olin case.

On the other hand, the magnitude of the losses in the Art and Architecture Library study is much greater than in the Olin study. The last estimate, 5.5 percent accumulated losses, is more than twice as high as Olin's was two years after the original search. At the 95 percent confidence level, the upper limit for the estimate of Art and Architecture books missing would be 8 percent, and the lower limit 4 percent. Since the staff of the Art and Architecture Library had made a complete inventory of the collection in the summer of 1971 and had brought the shelflist and inventory into agreement by the time the sample was drawn, the estimated losses of 5.5 percent had accrued over a time span of only two years. Therefore, an annual rate of about 3.75 percent was implied. Volumes requested by patrons that could not be located following searches by the staff were routinely deleted. (As in Olin, staff searches—six in the case of this collection—were made over a one-year period before the items were deleted.) The record of such items for the past four fiscal years showed an average of 309 per year, or an additional loss rate of about 0.6 percent. (A few books deleted represent items lost by borrowers who make payment for the book, but these do not materially affect the net losses; although historical records of such items have not been kept, in the year ending June 30, 1975, for instance, there were only thirty-five items like this.) Adding this to the sample loss rate yielded an overall loss rate of 4.35 percent per year, a level substantially higher than the 0.35 percent estimate for the Olin collection. The disparity in the two rates is still wide even if the lower limit of 4 percent for the sample study result is used; this implies an annual loss rate of about 2 percent, increasing to 2.6 percent per year when the losses identified through patrons' requests are added. Actions, including the establishment of stronger exit controls, have

been taken to reduce losses from the Art and Architecture collection.

Three reasons for the difference in losses between the Art and Architecture and the Olin collections seem plausible. The first is the relatively greater attractiveness of the volumes in art and architecture on the average both because of their contents and their higher prices. The second is the lack of formal exit control, although some minimal security was obtained by the surveillance of staff, the circulation desk being located near the library's exit. A third is possibly the manual system for charging out volumes to borrowers which, if not well maintained, may impair timely follow-up on past due items and be more liable to errors or losses of data.

#### EVIDENCE BASED ON OTHER WASHINGTON UNIVERSITY COLLECTIONS

We have not made sample studies of other departmental collections at Washington University, but evidence is available from some of them that tends to help validate our estimate of losses for Olin, low though it appears. The biology collection (27,218 volumes) conducted full inventories at a two-year interval (1971-1973) and found losses of 1.39 percent, or about 0.70 percent per year on the average. The Chemistry Library (16,719 volumes) took inventory annually, and for the year ending October 1973 found losses only 0.18 percent. The earth sciences collection (19,632 volumes) showed 0.54 percent missing between its 1972 and 1973 inventories, while the East Asian collection (60,108 volumes) showed a loss rate of 0.19 percent during its first year in new quarters (it was removed physically from Olin in 1972). Bearing in mind that, although these collections usually receive close attention from their professional staffs, none of them has the kind of exit control that Olin has and that all use manual systems for charging out volumes, we think their

loss data lend additional credence to our estimate of 0.35 percent per year for the Olin collection.

#### FACTORS AFFECTING BOOK LOSS RATES

Based upon our results, it seems quite likely that the kind of books comprising a collection can have an important effect on its loss rate—expensive, attractive volumes of broad appeal are more likely to disappear than the average document. Second, the existence of an exit control, the nature of the exit examination, and the thoroughness with which those examinations are conducted undoubtedly affect the loss rate, probably significantly. In the case of Olin, all persons exit through one entrance. All briefcases and bundles are inspected. Library-owned volumes are easily identified, and the fact that a borrower has properly charged out a book is indicated by a date stamp on a slip pasted to the rear flyleaf of each volume. When the volume is returned, this date stamp is overprinted by a "returned" stamp. Finally, although the standard procedures may be followed in the breach at times, by and large we believe that inspections are thorough. In effect, ours is a manual system that closely approximates an electronic system when the standard procedures are followed, although it is perhaps more subject to human frailties. The contrast in loss rates between the Olin and Art and Architecture collections clearly demonstrated the importance of these two factors in our opinion.

We have also mentioned a third factor that we think probably has some effect on reducing losses: the electronic system Olin uses for charging out volumes, maintaining a record of the books on loan and automatically dispatching recall notices for past due documents. We think a well-designed system of this type is less liable to errors, of both omission and commission, or to misuse, than at least a great many man-



ual systems. Fourthly, the loss rate in any library is obviously affected by the proportion of its volumes that circulate compared to those that must be used within the library. Less obvious, however, is another factor: the proportion of patrons' voluntary use of documents within the library, rather than withdrawing them for use elsewhere. Especially in a university environment, the availability of sizable, attractive space designated for this purpose for undergraduates, graduate students, and faculty, including appropriate and sufficient study carrels, probably cuts down on the external use and thus on losses.

Other factors remaining constant, it also seems probable that increased borrowing—i.e., an increase in circulation for external use—would also raise the loss rate, although whether this would be proportional or not, we are unprepared to say. We also suspect that changes in the social environment, and specifically the social unrest of the late 1960s, may also be an influence on the loss rate. Finally, of course, there may be a significant accumulated "paper loss" of volumes—items physically present within the four walls of the library but unlocatable except by chance—as when books are mis-shelved either by staff or patrons, or when there are improper additions to or deletions from the shelflist and public catalog.

Clearly, there is a complex of factors that bear on the losses incurred by any particular library collection, and it is no easy task to identify and measure each. Moreover, the circumstances vary so much from one collection to another that simple comparisons of loss rates usually will not be very fruitful. Perhaps to oversimplify a bit, a library requires a sound circulation system, trained operating personnel, and effective supervision, all in terms of its particular circumstances, to properly control book losses. We would suggest that it also needs periodic inspections and

sample studies like ours to verify that the system is, indeed, functioning effectively.

#### CONCLUSION

We believe that the results of our study were important on three counts. First, the study reiterated the usefulness of sampling theory in studying book losses. Second, and probably more significant, is the discovery that there can be substantial returns from periodic searches for missing volumes. Over a two-year span, these cut the original losses by more than half in each of the two collections sampled. While we certainly do not suggest that the loss shown after an original search is always twice the real losses, our results do suggest that first search results are likely to be quite misleading and that additional periodic searches are essential to obtain a reasonably accurate estimate.

Finally, our study rather strongly supports the thesis that two factors significantly affecting book losses are the nature of the collection and the nature of the exit control. More sample studies, relating to several years, are needed before a more sophisticated model of the loss process can be developed. We plan to do additional sample studies over the next few years to obtain additional insights into the matter of losses.

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$$4. SP = 2 \sqrt{\frac{(P)(1-P)}{N}}$$

where  $P$  = percent books missing  
 $S$  = accuracy of  $P$ , expressed as a percent of  $P$   
 $N$  = sample size

For a 90 percent confidence level, the "2" is changed to "1.64." See John E. Freund and Frank J. Williams, *Elementary Business Statistics* (Englewood Cliffs, N.J.: Prentice-Hall, 1964), p.233ff., or any elementary text on statistics.

5. It is interesting to note, in a 1969/70 study at Cambridge University (England) of patrons discovering that books in the catalog they wanted were unavailable, permanently missing books accounted for 2.7 percent of the failures in one term's data and 2.0 percent for another term's. It was the custom for all borrowers to return all books at the

end of each term, and missing volumes were determined after this had been done. See John A. Urquhart and J. L. Schofield, "Measuring Readers' Failure at the Shelf," *Journal of Documentation* 27:276 (Dec. 1971). Great weight cannot be attached to the close correspondence of these proportions to those obtained in our study because their sample was of readers' requests that could not be filled, biased toward popular volumes in many cases, rather than being a random sample of all volumes. Furthermore, we know nothing of how often that library had taken full or partial inventories and adjusted their card catalog accordingly.

#### ON OUR COVER

The opening in 1873 of the Chancellor Green Library for the College of New Jersey at Princeton symbolized a new freedom of access that was beginning to prevail among college libraries. The building was considered one of the finest in the country at the time. Its 18,000-volume collection began to grow at a rapid pace under the hands of its new librarian, Frederic Vinton. Given the title of the distinguished jurist, Henry Woodhull Green, to make clear that it was named for him and not the donor, the building was the gift of his brother, John Cleve Green, who provided the \$120,000 fund. The Victorian Gothic octagonal structure, flanked by two small outlying octagons, was sixty-four feet in diameter and fifty feet in height, with the second floor made of perforated iron to permit the librarian to see everyone in the library from his place in the center of the reading room. (The exterior is shown in our January issue, p.38). The ornate showplace served the college for some twenty years when, with the construction of the connecting Pyne Library with a capacity of one million volumes, the old library was transformed into reading rooms for the library of the newly named Princeton University. At last in 1948, with the construction of the Harvey S. Firestone Library, the old buildings were converted to other uses. The Chancellor Green Library itself is now the student center.—  
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WILLIAM L. COHN

## An Overview of ARL Directors, 1933-1973

*This study presents a description for the period 1933-1973 of directors of U.S. academic libraries that are members of the Association of Research Libraries, comparing earlier and present directors in terms of academic preparation, age, sex, and destination upon leaving a directorship.*

OF THE SEVENTY-FOUR U.S. ACADEMIC LIBRARIES that were members of the Association of Research Libraries (ARL) in 1973, thirty-four named a new director during the four-year period January 1970 to December 1973. Two of these institutions even named a second new director within the same time period. Understandably, librarians have been much concerned over such an apparently rapid turnover in leadership at our largest and most prestigious academic libraries. The many articles and panels called together to discuss this happening have been mostly on the subject of possible changes in academic librarianship itself that might be leading more individuals to leave positions of administration.

Not much attention, however, has been placed on the nature of the new directors. Do they really represent changes in the field, or are they simply new names for the same type of persons? For that matter, are those who leave the field departing for different reasons than those who left in earlier periods? By looking at such characteristics as age on entering the field, age on becoming a director, degrees on entering the field, and degrees upon becoming a director, it should be possible to distinguish any background difference in the former

and the incumbent directors of the ARL libraries. By looking at where the ex-directors went over the last forty years, it should be possible to see whether the destinations have become different.

Since the ARL was founded in 1932, it should be possible to take the seventy-four member libraries of 1973 (there were forty-three in 1933, but that smaller group wouldn't show the complete picture as well) as they were in 1933, as they were on a composite basis for 1934-1969, and as they have been during the discussion area of 1970-1973, and see whether there have been significant changes in background requirements for directors appointed, or significant changes in immediate locations for those who left ARL directorships in earlier times and for those who left to make way for the incumbents.

It is possible to identify 254 individuals who have served as directors during the total time span of 1933-1973 at the seventy-four libraries (this figure excludes nonacademic libraries, such as the New York Public Library, and the Canadian academic members). This total includes twenty-one individuals who served at two of the ARL libraries, and one individual who served as acting director for thirty-one years (although other acting directors could be identified, they have not been included on the

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assumption that different criteria might well be applied to the appointments of acting directors and directors).

The twenty-one two-time appointees (including ten incumbents) will be treated in terms of their first appointment for all tables concerned with the total group. This will cause some unavoidable problems with the figures on some tables, but not to any apparently harmful degree. Some tables will also show less than full numbers, because data were not fully available on all 254 individuals for all of the categories, even when the existing biographical directories were supplemented by letters of inquiry to the libraries involved. While it is possible to draw fairly significant conclusions about a group of 254, it is not always possible in a group of seventy-four, and it is seldom possible in the still smaller subgroups in the study. Conclusions drawn, therefore, may not reflect true significance in statistical terms.

Since this study is of a descriptive nature only, no attempt has been made to determine motivation. Why persons enter the field, make position changes within it, or choose to leave it will be left for other studies. Particularly in terms of the reasons for leaving, true accounts are often hard to determine. But the destination can tell us much—death or retirement are obvious and unchanging reasons for leaving, and accepting a directorship at another library can hardly be construed as dissatisfaction with academic administration. Thus, knowing such factors as how many used to go into teaching or into other non-library fields and how many are currently doing so does tell a significant story.

#### ACADEMIC PREPARATION OF DIRECTORS

Examination of the descriptive statistics did not lead to some of the anticipated findings. ARL directors are not

showing any dramatic increases in doctorates held in the light of the very large increases in our contemporaries with the D.L.S. (used in this study for all doctorates in library science). The number of directors without library-school education is not decreasing. While age at appointment to director is going up, it appears to be in response to a requirement for more experience rather than more education on the doctoral level. There does seem to be a little increase in holders of two master's degrees.

Tables 1, 2, 3, and 4 give information, first, on degrees held on entrance into the profession and, second, at time of appointment to a directorship, for the total group and for the incumbents.

It was possible to become a "professional" librarian in 1933 without any college degree. It was still possible, but apparently much less probable, during the 1934-1969 period, and it wasn't done by any of the incumbents. It was very easy to become a "professional" in 1933 without benefit of library school training, and some forty-four individuals did so (over 60 percent). During 1934-1969, it was still apparently easy, with sixty-two doing it (over 40 percent), but at least more were holding higher degrees in the professions or in academic subjects. Those for the 1970-1973 period (mostly incumbents, of course) involved ten individuals (almost 30 percent), with a lower percentage of higher degrees included.

By the time of appointment to a directorship (frequently the same time as entrance to the profession, particularly for those without L.S. training), the directors of 1933 still were without L.S. schooling in forty-two cases (still over 60 percent). The group for 1934-1969, however, added some L.S. degree or certificate in twenty cases, to bring the number without it down to less than 30 percent, instead of the over 40 percent who had entered the field. Almost all of



TABLE 1  
DEGREE(S) HELD AT TIME OF FIRST PROFESSIONAL POSITION FOR THOSE  
APPOINTED BY 1933, IN 1934-1969, AND IN 1970-1973

Name of Degree(s)*	By 1933	Percent	1934-1969	Percent	1970-1973	Percent	Total	Percent
No degrees	6	8.7	1	0.7	0	0	7	2.8
B.A. only	22	31.9	20	13.7	5	14.7	47	18.9
B.A. + M.A.	7	10.1	12	8.2	2	5.9	21	8.5
Ph.D.	8	11.6	21	14.4	3	8.8	32	12.9
Degree(s) + Law/ Divinity	1	1.5	8	5.5	0	0	9	3.6
B.L.S. only	2	2.9	1	0.7	1	2.9	4	1.6
B.A. + B.L.S. or Certificate	16	23.1	36	24.7	4	11.8	56	22.5
B.A. + M.L.S.	0	0	14	9.6	12	35.3	26	10.4
M.A. + L.S.	6	8.7	16	11.0	4	11.8	26	10.4
Ph.D. + L.S.	0	0	8	5.5	2	5.9	10	4.0
B.A. + B.L.S. + M.L.S.	0	0	5	3.4	0	0	5	2.0
B.A. + L.S. + Divinity	1	1.5	0	0	0	0	1	0.4
B.A. + L.S. + D.L.S.	0	0	2	1.3	1	2.9	3	1.2
M.A. + L.S. + D.L.S.	0	0	2	1.3	0	0	2	0.8
Total	69		146		34		249	

\* All non-library science degrees are listed as B.A., M.A., and Ph.D. as appropriate. All library science master's and doctorates are listed as M.L.S. and D.L.S. respectively.

No degree information could be obtained for five of the individuals at entrance.

the change, it should be noted, came in the form of those entering the field with only a B.A. adding a library degree before becoming a director. For the 1970-1973 category, only four of the ten who entered the field without library degrees were still without them at the time of appointment to a directorship.

At the same time, those who entered the field with some L.S. degree also im-

proved their educational background during each period. Twice as many 1933 directors had the M.A. + L.S. degree at appointment as had had it at entrance. The middle group showed great increases in M.A. + L.S. certificate and Ph.D. + L.S. degree, as well as in B.A. + B.L.S. + M.L.S. As a quick look at this historical period would suggest, the B.L.S. was starting to give way to the

TABLE 2  
DEGREE(S) HELD BY 1973 INCUMBENTS AT FIRST POSITION  
(BLANK CATEGORIES FROM TABLE 1 ARE OMITTED)

Name of Degree(s)*	1934-1969	Percent	1970-1973	Percent	Total	Percent
B.A. only	6	16.7	7	18.4	13	17.5
B.A. + M.A.	3	8.3	1	2.6	4	5.4
Ph.D.	3	8.3	1	2.6	4	5.4
B.A. + Law/Divinity	1	2.8	0	0	1	1.4
B.L.S. only	1	2.8	1	2.6	2	2.7
B.A. + B.L.S. or Certificate	8	22.3	2	5.3	10	13.5
B.A. + M.L.S.	7	19.4	16	42.1	23	31.1
M.A. + L.S.	3	8.3	5	13.2	8	10.8
Ph.D. + L.S.	3	8.3	2	5.3	5	6.7
B.A. + B.L.S. + M.L.S.	1	2.8	0	0	1	1.4
B.A. + L.S. + Divinity	0	0	2	5.3	2	2.7
B.A. + L.S. + D.L.S.	0	0	1	2.6	1	1.4
Total	36		38		74	

\* All non-library science degrees are listed as B.A., M.A., and Ph.D. as appropriate. All library science master's and doctorates are listed as M.L.S. and D.L.S. respectively.

TABLE 3  
DEGREE(S) HELD AT TIME OF APPOINTMENT TO AN ARL DIRECTORSHIP  
BY 1933, IN 1934-1969, AND IN 1970-1973

Name of Degree(s)*	By 1933	Percent	1934-1969	Percent	1970-1973	Percent	Total	Percent
No degrees	6	8.8	2	1.4	0	0	8	3.2
B.A. only	16	23.5	2	1.4	0	0	18	7.2
B.A. + M.A.	10	14.7	7	4.8	1	2.7	18	7.2
Ph.D.	7	10.3	24	16.5	3	8.1	34	13.6
Degree(s) + Law/ Divinity	3	4.5	7	4.8	0	0	10	4.0
B.L.S. only	0	0	0	0	1	2.7	1	0.4
B.A. + B.L.S. or Certificate	15	22.0	12	8.3	2	5.4	29	11.6
B.A. + M.L.S.	1	1.5	14	9.7	16	43.3	31	12.4
M.A. + L.S.	10	14.7	19	13.1	4	10.8	33	13.2
Ph.D. + L.S.	0	0	16	11.0	5	13.5	21	8.4
B.A. + B.L.S. + M.L.S.	0	0	16	11.0	1	2.7	17	6.8
B.A. + L.S. + Divinity	0	0	3	2.1	1	2.7	4	1.6
B.A. + L.S. + D.L.S.	0	0	19	13.1	2	5.4	21	8.4
M.A. + L.S. + D.L.S.	0	0	4	2.8	1	2.7	5	2.0
Total	68		145		37		250	

\* All non-library science degrees are listed as B.A., M.A., and Ph.D. as appropriate. All library science master's and doctorates are listed as M.L.S. and D.L.S. respectively.

No degree information could be obtained for four individuals at time of being appointed to directorship.

M.L.S., and this was being reflected in ARL directors as well. The 1970-1973 period also showed some increases, notably in Ph.D. plus L.S. and B.A. + M.L.S. Notice that the four D.L.S. at entrance in 1934-1969 and the one in 1970-1973 have become twenty-three and three respectively by the time of becoming directors. Prior to 1968, there were approximately 250 doctorates awarded in library science, while another 250 were

awarded between 1969 and 1972 on the strength of federal monies. Yet the big increase in D.L.S. directors at ARL libraries is before the impact of that money, with a lower percentage of the incumbents having the D.L.S. (7.7 percent) for the period of 1970-1973 than for those (17.2 percent) in 1934-1969. Even more surprising, the incumbents show 12.2 percent with the D.L.S., while the overall group—including those in

TABLE 4  
DEGREE(S) HELD BY 1973 INCUMBENTS AT CURRENT APPOINTMENT  
(BLANK CATEGORIES IN TABLE 3 ARE OMITTED)

Name of Degree(s)*	1934-1969	Percent	1970-1973	Percent	Total	Percent
B.A. + M.A.	1	2.9	1	2.6	2	2.7
Ph.D.	3	8.6	1	2.6	4	5.4
B.L.S. only	0	0	1	2.6	1	1.4
B.A. + B.L.S.	4	11.4	2	5.1	6	8.1
B.A. + M.L.S.	7	20.0	19	48.7	26	35.1
M.A. + L.S.	6	17.1	5	12.8	11	14.9
Ph.D. + L.S.	5	14.3	5	12.8	10	13.5
B.A. + B.L.S. + M.L.S.	1	2.9	1	2.6	2	2.7
B.A. + L.S. + Divinity	2	5.7	1	2.6	3	4.1
B.A. + L.S. + D.L.S.	5	14.3	3	7.7	8	10.8
M.A. + L.S. + D.L.S.	1	2.9	0	0	1	1.4
Total	35		39		74	

\* All non-library science degrees are listed as B.A., M.A., and Ph.D. as appropriate. All library science master's and doctorates are listed as M.L.S. and D.L.S. respectively.

1933, when the degree had not yet been significantly awarded—show 10.4 percent. If the 1933 period is eliminated, the overall group for 1934–1973 shows over 14 percent with the D.L.S. Conclusion: Despite the increase in individuals with the D.L.S., the number of ARL directors with the degree is not increasing.

What of the Ph.D. degree? Formerly, 16.9 percent entered the field with the Ph.D., and 22 percent had it upon becoming director. The incumbents entered with 12.1 percent and became directors at 18.9 percent. Again, for those holding a doctorate outside of library science, the percentage of ARL directors has declined. Another 10.4 percent entered the profession overall with an M.A. plus library school, and this became 13.2 percent holding this combination by directing time. The incumbents entered with 10.8 percent and went on to 14.9 percent by appointment. More of the incumbents, percentage-wise, hold the outside master's degree plus library degree than did the overall group. The incumbents show their largest entry point as being B.A. + M.L.S. (31.1 percent), and this becomes 35.1 percent by appointment. The entire group only had 10.4 percent at entrance and 12.4 percent at appointment. Educationally, the incumbents show a much greater tendency to have the B.A. + M.L.S. and M.A. + M.L.S. than do their predecessors, but a significantly lowered tendency to have a doctorate in or out of the field.

Obviously, the incumbents are reflecting the current standards for the library professional in having the M.L.S. degree, while earlier directors were able to enter the field under a set of standards which did not offer (or at least did not insist upon) this degree. As the new standards were adopted, those already in the field were protected from the need for returning to obtain the M.L.S. by the weight of their experience and

standing. It was to be expected that the professional practitioners would reflect the new degree for entrance to the profession, but it is surprising that the large increase in the numbers of librarians with doctorates is not being reflected in the ARL administrative pattern. It is altogether depressing that 30 percent of the incumbents were able to enter the field without a library degree and that 8 percent could become ARL directors without one. That is much better than the record of the group as a whole, but it still demonstrates a woeful lack of understanding on someone's part as to proper qualifications for directing a large academic research library.

#### AGE OF DIRECTORS

If the expected increase in doctorate holders is not occurring, then what of the age difference at appointment? In this age of emphasis on youth, it was anticipated that the incumbents would be young doctors. Since they don't have the doctorate, do they show increasing youth at time of appointment? The answer, as seen in Tables 5 and 6, is a resounding "No." They are entering the field younger, but they are being appointed as director at an older age than their predecessors.

Tables 5 and 6 do show very definite differences. With one exception, all of those appointed by 1933 had entered the field by forty-two and had been made a director between the age of twenty-one and fifty-eight. Thirty-seven of the sixty-nine had made director by age forty. The directors for 1934–1969 also grouped entry in the period before age thirty, but thirteen entered after age forty-two. The appointment age, however, doesn't start until twenty-eight, and only sixty-one of the group had become directors by age forty versus sixty-seven who were appointed between forty-one and fifty, and twenty not appointed until in their fifties. By the

TABLE 5  
AGE OF ENTRY AND AGE OF APPOINTMENT FOR ARL DIRECTORS  
APPOINTED BY 1933, IN 1934-1969, AND IN 1970-1973

Age	1933		1934-1969		1970-1973	
	Entry	Appointment	Entry	Appointment	Entry	Appointment
20-24	22	3	41	0	7	0
25-29	23	7	56	4	15	0
30-34	14	13	22	21	9	1
35-39	5	12	4	26	2	6
40-44	2	9	11	50	2	10
45-49	0	17	6	25	0	11
50-54	1	7	1	13	0	1
55-59	0	1	4	9	1	5
60-64	0	0	0	0	1	2

Twenty-one directors (ten current) are listed at appointment time of first two ARL directorships.

TABLE 6  
AGE OF ENTRY AND AGE OF APPOINTMENT  
FOR ARL INCUMBENTS

Age	1934-1969		1970-1973	
	Entry	Appointment	Entry	Appointment
20-24	9	0	6	0
25-29	15	1	20	0
30-34	8	4	13	1
35-39	1	2	0	6
40-44	0	10	1	11
45-49	0	8	1	11
50-54	0	4	0	4
55-59	0	3	0	4
60-64	0	0	0	2

1970-1973 period, two-thirds had entered by age thirty and all but three by age forty. The appointment age, however, shows no one by age thirty, eight by forty, twenty by fifty, and nine over fifty—more appointed over the age of fifty than were by the age of forty.

The incumbents showed the acceleration of this trend to enter earlier and not become directors until later. Fifty-three had entered by the age of thirty, but only one was a director. Seventy-three had entered by the age of forty, but still only seventeen had become directors. The last of the incumbents entered the field in his forties, the age at which forty of the incumbents became ARL directors. Another fourteen didn't gain appointment until over fifty-one, with two of those having passed sixty.

The range in professional experience before becoming director has jumped from a twelve-year span to a sixteen-year span in the years covered in this paper. The average entrance age has gone from twenty-eight in the 1930s to thirty-one in the 1970s, while the incumbents averaged the same twenty-eight as their 1933 predecessors. The age of appointment, however, has gone from an average of thirty-nine in the 1930s to the incumbent average of appointment at age forty-three-and-one-half. The ARL libraries are requiring more age (read experience) rather than more degrees for their leaders.

#### SEX OF DIRECTORS

In addition to age and education, sex is often mentioned as a factor in academic administration. ARL libraries, unfortunately, do not refute the idea of male dominance unrelated to numbers in the profession. In 1933 there were fifteen women serving as directors at the ARL libraries. Between 1934 and 1969, however, only two women were appointed to such directorships out of the 147 appointments made. During the period of 1970-1973, four women were appointed and are still serving. All were working at the library which appointed them at the time of promotion, and two were already in their sixties when chosen (the only two incumbents past



sixty at appointment). Despite evidence from several researchers that mobility is a key factor in promotion within the profession, it would appear that women can only reach the top rungs by staying put and "proving" their abilities to those making the appointments. Further, it would appear that the increased size of the member libraries of ARL has led to a decreased number of female directors. It would be instructive to see how many women have reached the level below the director at these libraries and are, therefore, eligible to receive the next available promotion, but that is outside the scope of this study.

#### DESTINATIONS OF DEPARTING DIRECTORS

There are then some changes in background of those becoming directors, although much of it only reflects overall changes in the entire body of the professional practitioners. The M.L.S. is now the accepted degree, and there is an apparent decrease in starting age for librarians generally. As the starting positions have increased in number, creating more competition for higher assignments, it seems only natural that the need to present increased credentials would lead to increased age and/or experience in background. Similarly, as the ARL libraries become truly "big business," it is understandable that the powers that be would require an increased show of maturity. It can be ex-

pected that both of these trends will continue as the current job market creates an increasingly competitive situation and a decreased chance for the mobility which leads to an easy upward movement.

If the background factors can thus be explained away as related to the background of the field generally, then how about the reasons so many appear to be "dropping out" of administration? A look at the destinations of those who have left ARL libraries over the years, compared with the destinations of those whose leaving made way for the incumbents, should indicate whether any sharp changes are happening (see Table 7).

The predecessors of incumbents left a little less because of death or retirement and because of a new position at a non-ARL library. More left for teaching and to direct a different ARL library. The predecessors for the 1970s, however, left for death and retirement slightly more often than the previous directors as a group, and they also went into teaching far more often than the group as a whole. Far less (in fact, none) went into a new library directorship at a non-ARL library. Conclusions: Roughly the same percentage of directors are leaving for death and retirement as in previous years, but teaching is becoming increasingly attractive to those who leave with career time still available. ARL libraries are looking

TABLE 7  
DESTINATIONS OF ARL DIRECTORS UPON LEAVING POSITION

Period	Retired/Died	Teaching	To Other ARL Library	To Other Library	Same Library, New Position	Left Field	Average Years as Director
All ARL directors							
By 1933	52 (78%)	5 (7%)	0	8 (12%)	2 (3%)	0	23.5
1934-1969	45 (34%)	19 (15%)	14 (11%)	21 (16%)	2 (2%)	10 (8%)	12.65
1970-1973	1 (33%)	2 (67%)	0	0	0	0	2
Total	98 (54%)	26 (14%)	14 (8%)	29 (16%)	4 (2%)	10 (6%)	
Incumbents' immediate predecessors							
1934-1969	15 (39%)	6 (16%)	9 (24%)	6 (16%)	0	2 (5%)	14.1
1970-1973	20 (56%)	9 (25%)	4 (12%)	0	0	3 (8%)	15
Total	35 (47%)	15 (20%)	13 (18%)	6 (8%)	0	5 (7%)	14.6

closely at each other's directors, apparently on the theory that success at one ARL library should be a big boost toward success at another ARL institution. Non-ARL libraries are now uninterested or unable to attract any large numbers of ARL directors.

As to the teaching, there are far more teaching positions available now than formerly, and there is at least as strong a tendency toward requiring relevant experience in the area to be taught—i.e., the teaching of administration requires a former administrator. There is also the factor of an increasing number of schools requiring administrative retirement at an earlier age than teaching retirement, so the change may represent an attempt to stave off ending a career. Indeed, eight of the incumbents' predecessors went into teaching at rather advanced ages for a change of career aimed at any long-range future. Subtracting these from the teaching totals would reduce this category to below the percentage of total predecessors, while adding it to Retired/Died would send that total well over past performance.

It would appear that basically the same reasons are now accounting for the majority of departures from ARL directorships. Over one-half of the

ARL institutions appointed a director in the 1940s, usually immediately following World War II. Turnover on age grounds alone should have been expected, therefore, and should not be a reason for anxiety. It would appear that the replacements are a more experienced, but similarly educated group. The number without library-school training is diminishing too slowly, and the number of women is rising too slowly. Our leadership is changing names and faces, and coming a little slower to administration, but it is very close to the same persons updated to fit the new times. Conservatives have little cause for alarm, while those who feel some "real" change is needed are apparently in for disappointment. Unless some new trend develops, over half of the current ARL directors should still be in office fifteen years from now, and an increasing number of our library schools will be having administration taught by former ARL directors. That may be for the good or for the bad, but it is unlikely to cause any major changes anytime soon. Whatever may be happening in ARL-level administration, it is happening with the same type of individuals it has always used, and this will probably continue to be the case.

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# Circulation and Its Relationship to the Book Collection and Academic Departments

*The computer-produced circulation statistics in the Bucknell University Library for the academic year 1973/74 are analyzed by Library of Congress classification and academic department. Circulation is compared to the number of volumes related to each department in order to determine how much the department is using the subject-related book collection. Circulation is also compared with the number of students in the department. These two comparisons identify areas of the collection that are underutilized or heavily used. Those areas can be studied to determine why this is so and where additional resources should be placed or where the collection should be weeded.*

**H**OW IS THE BOOK COLLECTION BEING USED? Which departments make use of it? Are we adding books to the collection that are useful? Are books important to certain disciplines? In an attempt to provide some insight into these questions, the circulation figures of the Ellen Clarke Bertrand Library of Bucknell University for 1973/74 were analyzed.

William E. McGrath, in one study, indicated the correlation between books charged out and books used within an open-stack library.<sup>1</sup> We have considered only those books actually charged out. In another study McGrath assigned classification numbers to courses and found that book numbers matching course profiles were more likely to be charged out than not.<sup>2</sup> The Bucknell case study focuses on individual departments and

indicates which departments are well served.

Bucknell University is primarily an undergraduate university of about 3,000 students in a rural area of central Pennsylvania with an open-stack library. It has thirty-three departments or programs. Programs have a somewhat different status than departments, but for our purposes the distinction is irrelevant. The Library of Congress Classification is used by the library, and each department or program was assigned a class or classes corresponding to the subject matter. This is routinely done in order to produce a list of new books on a departmental basis. Statistics are collected by the computer through an on-line circulation system.

There are a few problems due to the LC classification system and programming of the computer. For instance, the computer science and mathematics classification cannot be separated, since the computer programming does not break

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down class QA into subclassifications. The economics books and the management books are not separable because it is difficult to divide class H into economics and management classifications. There are four engineering departments in the College of Engineering—chemical, civil, electrical, and mechanical—but we have not subdivided class T. Japanese studies include many books in history, but we have not subdivided history, so we have a figure for history and a figure for Japanese studies and history, which includes the language material, but no separate figure for Japanese studies alone. The miscellaneous figure includes the unmodified H's and K's due to a programming error, so that the sociology and political science figures will be a little off.

Also noted are the classifications that do not fall into any of Bucknell's disciplines. These are: A, General; Q, General Science; V, Naval Science; Z, Bibliography and Information Science; Juvenile, classified in Dewey; New Book Shelf, which are unclassified until LC copy is received, and Paperbacks.

In order to determine the number of books in each classification, the shelflist was measured, and the figure of 120 volumes to each inch of cards was used to calculate the number of volumes. This figure may possibly be inaccurate because some areas will have more multi-volume sets or additional copies than other areas. It may also be inaccurate because the 120-volume figure is an estimate. However, for our purposes the actual figure is not so important, since it is the relationship of one area to another that concerns us.

The circulation figures were computed to show the percentage of total circulation by department as compared with the number of books by department. The figures do not include reserve books, periodicals, or government documents. Calculations were also made to

TABLE 1  
ACADEMIC DEPARTMENTS AND LC CLASSIFICATION AS RELATED TO LIBRARY CIRCULATION, BUCKNELL UNIVERSITY, 1973-74

1 Department and Class Numbers	2 Volumes	3 Circulation (Total = 67,307)	4 Percent of Collection*	5 Percent of Circulation†	6 Ratio of 5 to 4	7 Percent of Total Circulation
Art: N	9,240	3,226	3.49	4.79	137.25	4.48
Astronomy: QB	960	111	.36	.16	44.44	.15
Biology: QH-S	17,040	6,473	6.44	9.62	149.38	8.98
Chemistry: QD	2,640	750	1.0	1.11	111.0	1.04
Classics: PA	3,000	985	1.13	1.46	129.2	1.37
Computer Science and Mathematics: QA	7,320	1,172	2.77	1.74	62.82	1.63
Economics and Management: HA-HJ	24,360	4,529	9.21	6.73	73.07	6.28
Education: L	9,960	2,412	3.77	3.58	94.96	3.35
Engineering: T	11,880	2,688	4.49	3.99	88.86	3.73
English: PN, PR-PS, PZ	40,080	12,530	15.0	18.62	122.9	17.38
Geology and						



Geography: G-GF, QE	4,440	631	1.68	.94	55.95	.88
Geography: G-GF	2,040	252	.77	.37	48.05	.35
Geology: QE	2,400	379	.91	.56	61.54	.53
History: C-F	46,800	9,522	17.7	14.15	79.94	13.21
Japanese Studies and History: C-F, PJ-PM	48,480	9,914	18.33	14.73	80.36	13.75
Management and Economics: HA-HJ	24,360	4,529	9.21	6.73	73.07	6.28
Mathematics and Computer Science: QA	7,320	1,172	2.77	1.74	62.82	1.63
Military Science: U	1,320	322	.5	.48	96.0	.45
Modern Languages Literatures, and Linguistics: P, PB-PH, PA, PT	22,080	4,088	8.35	6.07	72.69	5.67
French: PQ1-PQ3999	7,680	1,598	2.9	2.37	81.72	2.22
German: PT	5,160	987	1.95	1.47	75.38	1.37
Linguistics: P	1,320	415	.5	.62	124.0	.58
Russian: PG	2,520	454	.95	.67	70.53	.63
Spanish: PQ6001- PQ9999	1,680	583	.64	.87	135.94	.81
Music: M	5,040	1,462	1.91	2.17	113.61	2.03
Philosophy: B-BD, BH-BJ	7,320	1,767	2.77	2.63	94.95	2.45
Physical Education: GV	1,080	503	.41	.75	182.93	.7
Physics: QC	3,840	700	1.45	1.04	71.72	.97
Political Science: HX-K	13,800	2,784	5.22	4.14	79.31	3.86
Psychology: BF	4,200	2,694	1.59	3.95	248.43	3.74
Religion: BL-BX	14,760	2,656	5.58	3.95	70.79	3.68
Sociology: GN-GT, HM-HV	11,640	4,910	4.4	7.29	165.68	6.81
		(Total = 72,078)				93.38
			(Total Collection)		(7 to 4)	
General: A	1,080	48	.41		17.5	.07
General Science: Q	2,040	199	.75		37.33	.28
Naval Science: V	360	37	.13		38.46	.05
Bibliography and Information Science: Z	2,040	161	.75		29.33	.22
Juvenile	2,160	534	.79		93.67	.74
New Book Shelf		1,199				1.66
Paperbacks		1,872				2.6
Miscellaneous		721				1.0

° Excluding A, Q, V, Z, Juvenile, New Book Shelf, Paperbacks

† Excluding A, Q, V, Z, Juvenile, New Book Shelf, Paperbacks, Miscellaneous

show the percentage of the total circulation in order to make a comparison with the percentage of nondepartmental circulation.

Since the circulation figures are by class number, there is not the distortion which might come about if one used as a basis the amount spent on books or the number of volumes requested by a department regardless of where they might be classified. However, these factors are of some significance and deserve study.

#### ACADEMIC DEPARTMENTS AND LIBRARY CIRCULATION

Table 1 lists the departments and LC class related numbers. Some departments are listed twice because of combined figures that cannot be separated, e.g., economics and management. Geology and geography are combined into one department administratively, but this is historical accident. The five programs under modern languages, literatures, and linguistics are all programs within one department.

The second column gives the number of volumes (estimated) in the class numbers related to the department. The third column gives the circulation of books in those class numbers. The fourth column lists the percentage of books in those class numbers as a portion of the total book collection, excluding books not related to any department. The fifth column lists the percentage of circulation of those books in relationship to the total circulation, excluding books not related to any department. The sixth column shows the relationship between books circulated and books in the collection. The last column lists the percentage of circulation of books in relationship to the total circulation. (The percentage figures are rounded off to the nearest hundredth.)

The sixth column in Table 1 contains significant figures as they indicate

whether the collection is being used and which disciplines are making the most use of the collection. Any figure above 100 means that the percentage of circulation is higher than the percentage of books in that class. Therefore, the higher the number the greater the use compared to other classes. The nondepartmental figures given in this column show the relationship to the total circulation.

#### NUMBER OF STUDENTS AND LIBRARY CIRCULATION

Table 2 again lists departments and LC class numbers and percentage of circulation. The second column gives the total number of students who received grades in the departments' courses for the two semesters and summer school. The last column shows the relationship of circulation to grades as a percentage figure. The figure has no meaning by itself but serves to compare departments on the basis of number of students and circulation of books.

#### RANKING OF DEPARTMENTS

Table 3 first ranks the departments in order of highest circulation compared to the department's portion of the collection in order to show which departments make the most use of that part of the collection relating to their disciplines. The figures simply indicate that those departments at the top of the list use their parts of the collection more than do the departments at the bottom. Missing factors include number of faculty, number of charges for the same title, reserve book use, use of the periodicals collection, graduate work offered, need for a wide range of titles, and use of books outside one's discipline. We hope that much of the latter is occurring.

The last column in Table 3 compares circulation with the number of students taking a department's courses. By using both these relationships we learn some-

thing of the use of the collection and where our strengths and weaknesses lie. There are eleven departments that ranked below 100 compared to both number of volumes and number of students. If a department is low in both columns, we should look more closely at the collection to see why we are buying and keeping books that are not being used.

We should look at those collections

which are used more heavily and see why, and if the higher circulation is for a few titles or for many. We can program our computer to retrieve other statistics that would be useful; for instance, a breakdown of circulation by student class and major.

Let us look at two cases. The physical education department accounts for a heavy proportion of grades given, and the collection is used heavily in relation

TABLE 2  
ACADEMIC DEPARTMENTS AND STUDENTS AS RELATED TO LIBRARY CIRCULATION,  
BUCKNELL UNIVERSITY, 1973-74

1 Department and Class Numbers	2 Number of Grades (Total = 25,325)	3 Percent of Total Grades	4 Percent of Circulation*	5 Ratio of 4 to 3
Art: N	1,012	4.0	4.79	119.75
Astronomy: QB	79	.31	.16	51.61
Biology: QH-S	1,510	5.96	9.62	161.41
Chemistry: QD	1,176	4.64	1.11	23.92
Classics: PA	139	.55	1.46	265.45
Computer Science	—	—	—	—
Economics and Management: HA-HJ	3,075	12.14	6.73	55.44
Education: L	1,418	5.6	3.58	63.93
Engineering: T	1,768	6.98	3.99	57.16
English: PN, PR-PS, PZ	2,491	9.84	18.62	189.23
Geology and Geography: G-GF, QE	500	1.97	.94	47.72
Geography: G-GF	259	1.02	.37	37.27
Geology: QE	241	.95	.56	58.95
History: C-F	775	3.06	14.15	462.42
Japanese Studies and History: C-F, PJ-PM	1,052	4.15	14.73	354.94
Management and Economics: HA-HJ	3,075	12.14	6.73	55.44
Mathematics: QA	2,230	8.81	1.74	19.75
Military Science: U	74	.29	.48	165.52
Modern Languages, Literatures and Linguistics: P, PB-PH, PQ, PT	995	3.93	6.07	154.45
French: PQ1-PQ3999	371	1.46	2.37	162.33
German: PT	259	1.02	1.47	144.12
Linguistics: P	73	.29	.62	213.79
Russian: PG	68	.27	.67	248.15
Spanish: PQ6001-PQ9999	207	.82	.87	106.1
Music: M	787	3.11	2.17	69.77
Philosophy: B-BD, BH-BJ	677	2.67	2.63	98.5
Physical Education: GV	1,600	6.32	.75	11.87
Physics: QC	715	2.82	1.04	36.88
Political Science: HX-K	923	3.64	4.14	113.74
Psychology: BF	1,480	5.84	3.95	67.64
Religion: BL-BX	350	1.38	3.95	286.23
Sociology: GN-GT, HM-HV	1,274	5.03	7.29	144.93

\* Excluding A, Q, V, Z, Juvenile, New Book Shelf, Paperbacks, Miscellaneous

TABLE 3  
 RANKING OF DEPARTMENTS, RELATING COLLECTION USAGE TO NUMBER OF BOOKS  
 AND NUMBER OF STUDENTS, BUCKNELL UNIVERSITY, 1973-74

Department and Class Numbers	Usage of Collection	
	Compared to Number of Books	Compared to Number of Students
Psychology: BF	248.43	67.64
Physical Education: GV	182.93	11.87
Sociology: GN-GT, HM-HV	165.68	144.93
Biology: QH-S	149.38	161.41
Art: N	137.25	119.75
Spanish: PQ6001-PQ9999	135.94	106.1
Classics: PA	129.2	265.45
Linguistics: P	124.0	213.79
English: PN, PR-PS, PZ	122.9	189.23
Music: M	113.61	69.77
Chemistry: QD	111.0	23.92
Military Science: U	96.0	165.52
Education: L	94.96	63.93
Philosophy: B-BD, BH-BJ	94.95	98.5
Engineering: T	88.86	57.16
French: PQ1-PQ3999	81.72	162.33
Japanese Studies and History: C-F, PJ-PM	80.36	354.94
History: C-F	79.94	462.42
Political Science: HX-K	79.31	113.74
German: PT	75.38	144.12
Economics and Management: HA-HJ	73.07	55.44
Management and Economics: HA-HJ	73.07	55.44
Modern Languages, Literatures and Linguistics: P, PB-PH, PQ, PT	72.69	154.45
Physics: QC	71.72	36.88
Religion: BL-BX	70.79	286.23
Russian: PG	70.53	248.15
Computer Science and Mathematics: QA	62.82	—
Mathematics and Computer Science: QA	62.82	19.75
Geology: QE	61.54	58.95
Geology and Geography: G-GF, QE	55.95	47.72
Geography: G-GF	48.05	36.27
Astronomy: QB	44.44	51.61
Juvenile	93.67	
Naval Science: V	38.46	
General Science: Q	37.33	
Bibliography and Information Science: Z	29.33	
General: A	17.5	

to its size but not in relation to the number of students. Probably the collection is too small, and the low usage compared to grades given would rise if the collection were larger. We also need to know who is using these books: our students or local high school students. The geography collection is used very

little; only about 12 percent of the books circulate. It also ranks low in comparison with the number of students. The students may be using other books, such as those in history, since geography draws on many other disciplines. But in any case, most books in G-GF are not being read by anyone.



COLLEGE AND DIVISION AND  
LIBRARY CIRCULATION

The College of Arts and Sciences is organized along the divisional lines shown in Tables 4 and 5. These tables, showing data similar to those reported by department in Tables 1 and 2, reveal what we had thought: students in the

humanities and fine arts read more and read more widely than do those in the social and natural sciences.

No formulas, magic or otherwise, result from this study. The figures represent no absolutes. We cannot say that a portion of the collection which has only a 72.69 percent ratio of usage is under-

TABLE 4

COLLEGE AND DIVISION AS RELATED TO LIBRARY CIRCULATION, BUCKNELL UNIVERSITY, 1973-74

1 Category	2 Volumes	3 Circulation	4 Percent of Collection*	5 Percent of Circulation†	6 Ratio of 5 to 4
College of Arts and Sciences	252,600	64,619	95.51	96.01	100.52
College of Engineering	11,880	2,688	4.49	3.99	88.86
College of Arts and Sciences Division of Humanities and Fine Arts (Art; Classics; English; History; Music; Modern Lan- guages, Literatures, and Lin- guistics; Philosophy; Religion; Japanese Studies)	150,000	36,628	(Percent of A & S) 59.38	(Percent of A & S) 56.68	95.45
Division of Social Sciences (Economics, Education, Political Science, Psychology, Sociology, Management)	63,960	17,329	25.32	26.82	105.92
Division of Natural Sciences and Mathematics (Biology, Chemis- try, Geology and Geography, Mathematics, Physics)	35,280	9,726	13.97	15.05	107.73
Division of Special Programs (Military Science, Physical Education)	2,400	825	.95	1.28	134.74

\* Excluding A, Q, V, Z, Juvenile, New Book Shelf, Paperbacks

† Excluding A, Q, V, Z, Juvenile, New Book Shelf, Paperbacks, Miscellaneous

TABLE 5

COLLEGE AND DIVISION AND STUDENTS AS RELATED TO LIBRARY CIRCULATION,  
BUCKNELL UNIVERSITY, 1973-74

1 Category	2 Number of Grades	3 Percent of Total Grades	4 Percent of Circulation*	5 Ratio of 4 to 3
College of Arts and Sciences	23,557	93.02	96.01	103.21
College of Engineering	1,768	6.98	3.99	57.16
College of Arts and Sciences Division of Humanities and Fine Arts (Art; Classics; English; History; Music; Modern Languages, Literatures, and Linguistics; Philosophy; Religion; Japanese Studies)	7,503	(Percent of A & S) 31.85	(Percent of A & S) 56.68	177.96
Division of Social Sciences (Economics, Education, Political Science, Psychology, Sociology, Management)	8,170	34.68	26.82	77.34

TABLE 5 (continued)

1 Category	2 Number of Grades	3 Percent of Total Grades	4 Percent of Circulation*	5 Ratio of 4 to 3
Division of Natural Sciences and Mathematics (Biology, Chemistry, Geology and Geography, Mathematics, Physics)	6,210	26.36	15.05	57.09
Division of Special Programs (Military Science, Physical Education)	1,674	7.11	1.28	18.0

\* Excluding A, Q, V, Z, Juvenile, New Book Shelf, Paperbacks, Miscellaneous

used and those above this figure are adequately used. The ratios indicate relationships. We need to examine those areas that are heavily used to see why this is so. A low usage may mean that our collection does not have the titles needed. Perhaps we should check certain classifications against bibliographies. Perhaps some areas rely more on periodicals than books and we should adjust our purchases accordingly. Certain areas of the collection must be examined as to selection, usage, and funding in or-

der to make a more efficient use of the collection. All of this should be done anyway, but we now know where to start.

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## Writing the Journal Article

*In their writing for publication, librarians have not adequately exploited journals in many fields that may be open to them and so have not done an adequate job of advancing library interests. Although few librarians have taken advantage of the opportunity to write for publication, there are a number of incentives present to encourage them. Guidelines are offered on writing for publication: selection of the journal for submission and mechanics related to article preparation.*

THE UNITED STATES is a nonfiction writer's paradise. The over 22,000 periodicals published in the United States today represent an insatiable market for nonfiction. Never has there been such a demand for magazine articles. In library and information science alone there are many, many journals, issued at the national, regional, and state levels and by individual libraries. The list grows even longer when one adds to that number those of peripheral interest to librarians, such as those in personnel management, education, communications, media, and computer science.

Librarians have not developed that potential market. As far as considering possibilities for publishing articles, the profession has become very inward-looking. Only a few articles, written about libraries and librarians, by librarians have had an impact on nonlibrarian readers. For instance, look at the furor that Daniel Gore's article on the status

of librarians had a few years ago when it was published in the *AAUP Bulletin*.<sup>1</sup> Some hurriedly rushed to the defense of librarianship by publishing rebuttals.

However, if some librarian had already written a different version, the sensationalism of Gore's article would not have been nearly so great; and the defense would not have been necessary. Or look at his recent article on the growth of college libraries, which was published in *College Management*.<sup>2</sup> Again our defenses are down because it appeared in a nonlibrary journal and is addressed primarily to a nonlibrarian audience. Jesse Shera, on the other hand, is one who has been able to defend library policy in the nonlibrary press. His article, in response to a physicist's plea for branch libraries, is a classic example of the impact librarians can have on a wider community.<sup>3</sup> Yet very few librarians think further than the library press. A recent letter in the March 1974 issue of *College & Research Libraries* by Anabel Sproat points out that in the comprehensive "Bibliography on Faculty Status," published in *College & Research Libraries*, only two articles are cited from teaching journals; all others are from library journals.<sup>4</sup> Other studies have reached similar

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conclusions. An important aspect that is being overlooked, then, is contact with the outside world. No one, except the librarian, has time or perhaps the inclination to read library literature.

Surely there are a number of areas of librarianship which are of interest to a much wider audience. We are all familiar with Winslow Hatch's description of a university or college library which goes something like this: "While the library is typically described as the heart of the campus, it is often more like the liver for it is a large structure whose significance lies in the potential it may not be called on to release." Part of the reason we are not called on is that we have not done an adequate selling job—a public relations job—much of which can easily be accomplished through publication.

#### LIBRARIANS AS AUTHORS

Wolfgang Freitag's article on librarians as literary authors indicates that the librarian administrator who is also an active leading scholar in a major field of learning has virtually vanished.<sup>5</sup> To take its place we should infiltrate the general academic scholarly periodical literature with our writing on librarianship.

Other people certainly write in library journals. Look at *American Libraries* and the large number there. A recent study of articles appearing in *PNLA Quarterly* indicated that 27 percent of the articles in the *Quarterly* were written by nonlibrarians. Of those which were by librarians, 64 percent were by academic librarians.<sup>6</sup> This raises another question: Are academic librarians more prolific than others, and if so, why? Is it because of the publish or perish syndrome? Are salaries, status, and promotion dependent on publishing? In many institutions where librarians have faculty status, they have been

forced to meet this publishing requirement. Perhaps more would publish if it were clearly understood that it is expected of them. It has been suggested that if this happened library science periodicals would proliferate. Is that a bad thing in itself? Couldn't the academic environment likewise have an effect on the quality of publications?

What really creates the climate to publish? Here are a number of elements to consider:

1. Do you want to publish? Is your idea something that has not been covered in the literature before?
2. Do you have to publish in order to advance professionally?
3. Are you anxious to relate the results of research performed in a scientific manner?
4. Do you have a real commitment to writing, and have you made the distinction between scholarly research and "how to do it" articles? There is a place for both in the literature.

#### THE PRESSURES TO PUBLISH

If you are in the publish or perish situation, perhaps the next question becomes: "What sort of released time is given for individual research and writing?" This is certainly a problem for academic librarians.

In a 1958 study by Kellum and Barker 78 percent of seventy-two libraries surveyed said that time was allowed for staff members to prepare articles, though a few administrators stated that they also expect writers to work on their own time as well.<sup>7</sup> Seven out of eight of those library administrators give some kind of recognition for writing and publishing. A comparable study by Jesse and Mitchell of fifty-two ARL libraries and fifteen liberal arts colleges indicated that over half of the libraries al-



lowed released time and that some provided clerical assistance and free photocopying.<sup>8</sup> Despite that, only about 8 percent of the 2,523 university librarians and 14 percent of the 106 college librarians had taken advantage of the opportunity in the previous three years. Is that because the interest was not there or because they didn't know how to begin? By far the most common action taken by administrators and committees in regard to librarians' publishing was in recommending advancement in rank or salary or in recommending tenure. But even if that incentive is not there, we all know that we find time for what we really want to do; it is simply a matter of establishing priorities. If writing has a high priority, then we write. After that it's contagious.

Another factor to consider is the continuing education aspect of writing in library-related areas. A point often overlooked is the one that Jim Matarazo made in a speech to the Long Island Special Libraries Association Group, in which he maintained that professional literature can be used as a source of continuing education and is, in fact, the *primary* source of continuing education for most professionals. We should all have a commitment to this aspect, whether we are library educators or practicing librarians.

The recent study prepared for the National Commission on Libraries and Information Science on continuing education proposes a cassette service which would review and record outstanding articles, the idea being that librarians would be better able to keep up-to-date with what's going on by listening.<sup>9</sup> However, one could question whether we would listen any more than we read. In writing, one should keep that in mind and look closer at the quality of one's own writing. This would help editors a great deal.

In 1915 Dr. Abraham Flexner stated that "the evolution toward professional status can be measured by the quality of publication set forth."<sup>10</sup> This, then, is a measure for our writings.

#### TECHNICAL ASPECTS OF WRITING JOURNAL ARTICLES

If you are writing for the first time, you must decide whether you are going to aim at the big market, such as *Library Journal*, *American Libraries*, or *AAUP Bulletin*, or at a smaller audience, first, such as a state or regional journal. There are many smaller, quality journals which don't receive the same number of manuscripts as do the large ones. The Illinois, California, and Wisconsin state publications are good examples of this kind of journal. Perhaps that's a good place to begin. Very few professional journals these days, even including the large ones, can pay for articles published. This is one major difference between writing for a professional journal and writing for a more commercial one.

One should be prepared for, but not discouraged by, rejection notices or suggestions that the manuscript be rewritten or submitted to another journal. Often what is the right article for one publication may not be right—subject, length, etc.—for another. Sometimes the editor may feel the article has a good theme but that the writing or documentation needs to be tightened. In those cases the editor will often make suggestions.

There seem to be several steps in the manuscript writing process:

Identifying the *subject*: Do you have anything to say that has not been said before? Think seriously about this. Surely there are enough new things, new ideas, new philosophies emerging that one doesn't necessarily have to rehash a topic. Do a little search in the area:

What special knowledge do you possess? Remember the search may start in the materials found in libraries; but field research, or applied research, is just as important. Once you have selected the idea, do some basic searching to establish that there is ample material available for a worthwhile article. Use up-to-date material in your research, unless it's a historical paper. Nothing is more frustrating to a reader than to see out-of-date statistics or citations being used to substantiate arguments.

Reaching the *audience*: The aim of writing is communication. You should not waste your time if there is no market for your ideas.

*Structure and form* are important: Establish what you want the article to say, and prepare an outline of your material so that the article will do what you intend it to do. The organization should capture the reader's interest; give direction to the article; report evidence to support the points being made; and make the reader feel well repaid for having read it.

Philip G. Becker in his tongue-in-cheek article indicates that an article should have four sections: the introduction, the main body, the summary, and the conclusion. Most importantly, the body occupies itself with a discussion of the theme of the article; and the author can do a magnificent job when the mind is set to it. For instance, the theme of an article might be: "The more books you have, the bigger the library collection." In ordinary writing, perhaps, the meaning of this statement would be relatively clear. However, an author might find that it was a little *too* clear. This is indicated by the opening paragraph. Becker concludes by saying: "In dealing with the administrative difficulties inherent in problems of this nature, it is essential to bear in mind that the organizational and administra-

tive capacity of the library is governed in a directly proportioned manner by the amount of material which the library has collected by means of its acquisitional policy, through gifts and exchanges, as well as through normal acquisitional channels."<sup>11</sup> Enough said.

*Development* of the article prepares the reader to understand how all parts hang together as a whole. The summary, as a final element, can answer this question. Someone said the summary is a recording of what you've written in an effort to determine what you've said; and one often finds that nothing has been said at all.

Finally, one must check the *tone* of the article—tone being style, grace, wit, anger, condescension, etc.

#### CONCLUSION

Writing the first few articles is not easy. It becomes easier for someone who enjoys writing and who has written enough to have developed a sound technique. This is where the difference between an amateur and a professional begins to show. When the beginning writer completes the first draft, the author reads it through to correct typographical errors and considers the job done. When the professional writer completes the first draft, that is usually just the beginning of the writing process. The difference in attitude is the difference between amateur and professional.

A final warning is that writers must protect themselves from their own egos, whether in the form of uncritical pride or uncritical self-destruction. As poet John Ciardi once said: "The last act of writing must be to become one's own reader. It is, I suppose, a schizophrenic process, to begin passionately and to end critically, to begin hot and to end cold; and, more important, to be passion-hot and critic-cold at the same time."

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## The Influx of Ph.D.s into Librarianship: Intrusion or Transfusion?

*In a survey of seventy-two university libraries and forty-four library schools, the entry of subject Ph.D.s into librarianship during the past three years was measured and evaluated. It was discovered that the number of subject Ph.D.s enrolling in library schools is increasing rapidly, that job opportunities for subject Ph.D.s in librarianship are very good, and that subject Ph.D.s are generally employed in choice positions.*

**F**EW ACADEMIC LIBRARIANS or faculty members in library schools would doubt that the profession is being infused at an increasing rate by persons who hold a Ph.D. or another terminal degree in a subject field other than library science. Two decades ago Phyllis Richmond observed that subject Ph.D.s enter the field of librarianship for two reasons: (1) their interest in libraries developed from teaching or research in their subject field, or (2) they enter by design perhaps because they do not want to teach.<sup>1</sup> Today we can add a third reason—the academic job crisis!

It is obvious that the influx into librarianship of subject Ph.D.s is being accelerated by the strained job market in many academic disciplines. Persons who have recently received a terminal degree and even those who once felt secure in their teaching positions are finding themselves thrown into the wolfish employer's market in which there are often hundreds of applicants

for every opening. Opportunities for displaced or unemployed academics are extremely narrow, and many have moved into libraries as a last ditch effort to remain in academia.

The result of the influx of subject Ph.D.s has been to spark discussion among librarians and library educators concerning the desirability of allowing these "subject specialists" to "seek cover" in librarianship. It has also led to a challenge by at least one "convert," W. A. Moffett, who wrote that the academic job crisis provides librarianship with an opportunity to recruit highly capable librarians from the ranks of new Ph.D.s as well as out-of-work experienced scholars. Moffett cites several shortcomings on the part of library schools and libraries in failing to take advantage of this opportunity afforded by the job crisis.<sup>2</sup>

The question of whether or not libraries should employ subject Ph.D.s is hardly a new issue. Controversy over the subject Ph.D. in libraries dates from the development of the first Ph.D. program in library science at the University of Chicago in 1928. Most librarians dis-

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agreed when Dean Louis Wilson wrote in the first issue of *College & Research Libraries* that the doctorate in library science was preferable to the subject degree for librarians.<sup>3</sup> In the same issue, C. C. Williamson, Sydney B. Mitchell, Carl M. White, Robert J. Kerner, and Nathan Van Patten expressed the opinion that the subject doctorate was the proper training for academic librarians.<sup>4</sup> Nathan Van Patten went so far as to state: "It seems clear to me that it is much better to attempt to make a librarian from a man or woman who is already well established in the practice of one of the older recognized professions."<sup>5</sup> Robert Downs added his name to the list of supporters of subject Ph.D.s in 1946. Downs also stated that library school faculties should be composed of subject specialists.<sup>6</sup>

During the decades from 1930 to 1960, subject Ph.D. degrees were emphasized by librarians as the most appropriate terminal degree. The library literature of that period dealing with this issue culminated in 1957 with the publication of an article by Phyllis Richmond. The article, entitled "The Subject Ph.D. and Librarianship," provided insight into the job opportunities for subject Ph.D.s in libraries.<sup>7</sup> However she failed to mention the field of library education in this regard. Her conclusion that a subject Ph.D. would have the best of both worlds (status with faculty members as well as with other librarians) was an accurate reflection of the prestige enjoyed by those subject Ph.D.s who entered the field of librarianship in those decades.

Since 1960 the major emphasis in librarianship in regard to terminal degrees has been on the Ph.D. degree in library science. The development of library science as a full-fledged "profession" has meant divorcing it from subject areas and a redefinition in terms of information science. Today there are

approximately twenty library schools which offer the Ph.D. degree, and this number will surely continue to increase in the future. However, since the number of Ph.D.s granted by them is relatively few, subject Ph.D.s continue to fill the gaps in administration and teaching.

A major study of the opinions of library science Ph.D.s was conducted by Ray and Patricia Carpenter and published in the *Journal of Education for Librarianship* in 1970.<sup>8</sup> It showed that despite the emphasis on that degree, most persons holding a Ph.D. in library science consider the prestige of the degree to be very low in relation to other fields. The Carpenters' study also implied that subject Ph.D.s have encouraging job prospects in library school teaching since 41 percent of the library science Ph.D.s surveyed believed that subject doctors should be represented on library school faculties "in strength," and another 25 percent felt that they should constitute at least half of such faculties. Their conclusion was that there are not nearly enough Ph.D.s in library science to meet the demand and that, therefore, subject Ph.D.s will continue to be utilized.

Despite the encouragement of the Carpenter study for subject Ph.D.s in librarianship, the situation in 1976 is far different from that in 1970 if only that there are many more subject Ph.D.s searching for job opportunities in libraries. Some questions remain unanswered. This study attempts to fill in a few of the gaps in our knowledge of this situation. It attempts to assess the present extent to which subject Ph.D.s are employed in librarianship, to gauge the influx of subject Ph.D.s into library schools, to compare the attitudes of educators with those of librarians in regard to this phenomenon, and to discover practical opportunities and limitations in libraries for subject Ph.D.s. In short, is the influx of subject Ph.D.s an

unwanted intrusion or a needed trans-  
fusion of fresh talent?

#### THE STUDY

With the aid of a research grant from the University of Mississippi, the author was able to survey ninety-two large university libraries between December 17, 1974, and February 1, 1975. This population consisted of all American university libraries in the Association of Research Libraries as well as the members of the Association of South-eastern Research Libraries which do not belong to ARL. In addition to libraries, all American Library Association accredited library schools were surveyed with a separate questionnaire. Replies were received from seventy-two libraries and forty-four library schools. This represents a return rate of 78 percent for libraries and 80 percent for library schools. Since these research libraries would probably employ a larger number and percentage of subject specialists than smaller college and university libraries, the results are not meant to be applied universally.

One major purpose of this study was to determine the number of subject Ph.D.s either currently employed in the field or enrolled in library schools. Library directors were asked to give the number of Ph.D.s currently employed in professional positions in their libraries, the number of subject Ph.D.s employed, and the number of subject Ph.D.s with a master's degree in library science employed. Deans of library schools were asked to give current enrollment figures (fall 1974) for the master's degree program, the number of students with a subject Ph.D. degree, and the number of master's degrees awarded to Ph.D.s during the previous two years (1972-73, 1973-74).

A surprisingly large number of subject Ph.D.s were employed in the seventy-two libraries responding to the questionnaire (Table 1). The total number

of subject Ph.D.s was 175 out of a total number of 207 Ph.D.s employed. In other words, 84.5 percent of all Ph.D.s who held professional positions in these libraries were subject Ph.D.s. Of the subject Ph.D.s employed in these libraries, 106 or 60.6 percent had some library science training.

TABLE 1  
CURRENT NUMBER OF SUBJECT PH.D.S  
EMPLOYED IN 72 LIBRARIES AS OF  
FEBRUARY 1, 1975

Total number of Ph.D.s employed	207
Total number with subject Ph.D.	175
Percentage of Ph.D.s with subject degree	84.5
Total number of subject Ph.D.s with M.L.S.	106
Percentage of subject Ph.D.s with M.L.S.	60.6

In the fall 1974 the forty-four accredited library schools which responded to the questionnaire had enrolled a total of 9,224 master's degree students (Table 2). Of this number 125 held the Ph.D. degree. Only twelve library schools or 27.3 percent of those responding had no Ph.D.s enrolled, and 72.7 percent had at least one Ph.D. The number of subject Ph.D.s enrolled in master's degree programs may not seem excessively large since they constitute only 1.4 percent of the total student bodies; but when compared with the figures given for the past two years, a marked increase is readily apparent. For the previous two years there were a total of 101 Ph.D.s enrolled in these forty-four schools. Although no figures are available by year for comparison, an average figure of 50.5 per year is assumed. Since the figures for the current year include only the fall quarter (or semester), the total number of subject Ph.D.s in these programs for the entire year should be larger than 125. Disregarding this fact, the average number of subject Ph.D.s enrolled in these library schools has risen in two years from an average of 1.2 per school to 2.7 per school.

TABLE 2  
SUBJECT PH.D.S ENROLLED IN 44 ACCREDITED  
LIBRARY SCHOOLS

Total enrollments in master's program	9,224
Number with subject Ph.D.	125
Percentage with subject Ph.D.	1.4
Average number/library school	2.8
Average number/library school during past 2 years	1.2
Total number with subject Ph.D. during past 2 years	101

Another indication of the extent of the influx of subject Ph.D.s into library schools was gained from a question which asked deans to indicate whether the number of Ph.D.s entering librarianship is increasing markedly, increasing somewhat, stable, or decreasing. A majority (55.9 percent) of the deans stated that the number was increasing somewhat, and only 18.9 percent felt that the number was increasing markedly. Yet the enrollment figures for the past three years seem to indicate a marked increase overall. One respondent who had no subject Ph.D.s currently enrolled but who had interviewed several prospective students who held Ph.D.s remarked: "I am beginning to wonder if the real deluge is now about to hit us."

#### PLACEMENT OF SUBJECT PH.D.S

Another important consideration concerning subject Ph.D.s in librarianship is the specific areas within the library in which they are employed most often. In other words, in which particular positions are subject Ph.D.s considered desirable by administrators? Library directors were asked to give the number of subject Ph.D.s employed in the areas of administration, archives/special collections, subject bibliography, reference, and technical services. Not surprisingly, the largest number of subject Ph.D.s (52) were employed in archives and special collections. Large numbers were also employed in administration (39) and subject bibliography (44). Reference and technical services accounted for

thirty-four Ph.D.s altogether with six employed as branch librarians.

Library school deans were also asked for information concerning the areas of employment in which subject Ph.D.s were placed upon completion of the master's degree during the past two years. The same five basic categories were included as possibilities with the addition of library education. However, deans were not asked to give the number placed in each of the categories since the information would not be readily available. Of the thirty-two library schools which have placed subject Ph.D.s during the past two years, 48.4 percent have placed at least one Ph.D. in the area of reference, 45.2 percent have placed Ph.D.s in subject bibliography, and 29 percent have placed people in administrative positions, while an equal percentage have teaching positions.

The questionnaires were designed not only to elicit factual information concerning the employment of subject Ph.D.s in libraries but also to discover the attitudes of both library school deans and library directors concerning the areas of librarianship in which subject Ph.D.s could best be utilized. Both groups were asked to mark those areas for which subject Ph.D.s should be considered; and this question was designed to find out if there is substantial agreement between deans and administrators concerning the desirability of hiring subject Ph.D.s in various areas (Table 3).

The deans of library schools tended to be more optimistic about the types of positions in which a subject Ph.D. might be employed than were the library directors. Of the thirty-four deans who responded to this question, 74.2 percent felt that subject Ph.D.s should be employed in administrative positions in academic libraries. On the other hand, only 50 percent of the directors felt that a subject Ph.D. would

TABLE 3  
ATTITUDES OF LIBRARY DIRECTORS AND DEANS CONCERNING  
DESIRABILITY OF HIRING PH.D.S IN VARIOUS POSITIONS

	Administration %	Library Education %	Reference %	Bibliography %	Archives %	Technical Services %
Library Directors (N = 72)	50	NA	70.8	87.5	86.1	34.7
Library School Deans (N = 34)	74.2	67.7	83.9	93.6	87.1	3.2

enhance a person's qualifications for such a position. Likewise, a larger proportion of library school deans felt that subject Ph.D.s should be employed in reference and bibliography than did directors. At the "lower end" of the spectrum, a much larger percentage of library directors than deans felt that a subject Ph.D. would be an asset in technical services.

In order to assess further the opinions of administrators of both libraries and library schools concerning job opportunities in librarianship for subject Ph.D.s, each group was asked to categorize the job possibilities for subject Ph.D.s as either excellent, very good, fair, or poor (Table 4). Although library school deans tend to be optimistic in terms of the beginning level of employment for subject Ph.D.s, as seen in Table 3, library directors are more optimistic concerning the overall job opportunities for subject Ph.D.s in the field. Almost 20 percent of the library administrators rated the opportunities for subject Ph.D.s as excellent, while only 2.6 percent of the library school deans agreed. The largest proportion of both groups felt that the opportunities were very good, while sizable percentages felt that the subject Ph.D. has only a fair chance to find suitable employment in library science.

#### SALARIES FOR SUBJECT PH.D.S

Important factors in regard to the job opportunities in librarianship for subject Ph.D.s are the amount and nature of the experience required. Library

school deans were surveyed as to the salary levels of the graduates as well as their opinions concerning the level at which a subject Ph.D. with an M.L.S. should begin. Of the thirty-nine deans who responded to this question, 71 percent stated that the subject Ph.D.s placed by them had no previous library experience. Despite this fact 60.7 percent received positions with advanced salaries. When asked at which salary level, advanced or beginning, a subject Ph.D. with an M.L.S. should begin, 63.2 percent felt that such a person should begin at an advanced position while only 13.2 percent felt he should begin on the same level with other master's students. The remainder believed that a subject Ph.D. could be hired at either level depending upon such factors as his or her competence, experience, or the position for which the candidate was being considered.

Library directors were also asked their opinion concerning the salary level at which a subject Ph.D. should be hired as well as whether or not they would hire a Ph.D. with no previous library experience. The opinions of sixty-eight library directors proved to be rather ambiguous. When asked if they would hire a subject Ph.D. with no library experience for an advanced salaried position, 42.7 percent stated that they would and 45.6 percent stated they would not. The remaining respondents qualified their answer as to the position or the individual or both. However, when asked what the beginning level of the subject Ph.D.



TABLE 4  
ASSESSMENT OF OVERALL JOB OPPORTUNITIES FOR SUBJECT  
PH.D.S IN LIBRARIANSHIP

	Excellent		Very Good		Fair		Poor		Depends	
	No.	%	No.	%	No.	%	No.	%	No.	%
Library Directors (N = 68)	13	19.1	31	45.6	19	27.9	5	7.4	0	0
Library School Deans (N = 38)	1	2.6	20	52.6	14	36.9	2	5.3	1	2.6

with an M.L.S. would be in relation to a person with the M.L.S. only, 64.7 percent stated that they would hire the Ph.D. at a higher level and only 26.5 percent at the same level.

Clearly the person with a Ph.D. degree commands a higher salary than a person with a M.L.S. only. But experience is also an important factor to library directors. An average of 2.6 years of experience would be required by those who stated that they would not hire a subject Ph.D. for an advanced salary.

#### SUBJECT BACKGROUND

Library directors strongly rejected the notions that either academic preparation (graduate study for the Ph.D.) or prior teaching experience are equivalent to library experience in determining salary levels. Only 22.4 percent stated that they would allow academic preparation to be considered library experience while 68.6 percent would not; and the remaining 9 percent would also consider the type of position. Directors were even more opposed to previous teaching experience influencing salary levels in the library. Fully 76.1 percent were opposed to this concept; while 16.4 percent favored it; and 7.5 percent approved it with conditions.

One interesting characteristic of the subject Ph.D.s in librarianship was the dispersment of subject fields represented by their degrees. The questionnaire sent to library schools listed the fields of history, English, education, and law with space for others to be written in. Of those Ph.D.s enrolled in master's

degree programs during the past two years, 16.9 percent held degrees in history and a like amount in English; 9.6 percent were from education; 7.2 percent were from languages; 4.8 percent were from law; and 3.6 percent came from music. The remainder held subject Ph.D.s in fields ranging from biochemistry and biology to political science and theology. Although the fields in the humanities and social sciences, hardest hit by the current job crisis, also represented the highest percentages of Ph.D.s entering librarianship, there appears to be an influx of subject specialists from a wide range of areas.

#### EDUCATION FOR LIBRARIANSHIP

Another important factor in assessing the job opportunities in librarianship for subject Ph.D.s is the area of education for librarianship. Ray and Patricia Carpenter have pointed out in a study of attitudes of library science Ph.D.s that not only is there a shortage of persons with the Ph.D. in library science to fill faculty positions in library schools, but a vast majority of library science faculty members with the Ph.D. in library science feel that library schools should include on their faculties subject doctorates "in strength."<sup>9</sup> In the library schools surveyed and responding to the present survey, 41.8 percent of the faculty members held subject Ph.D. degrees. When asked if it would be necessary for a subject Ph.D. to have practical library experience to be considered for a faculty position, 69.2 percent replied yes and 30.8 percent replied no. The surprising figure is the number of

library schools which would not require practical library experience for persons holding the terminal degree in a subject field for positions on their staffs. At least one dean of a large university library school indicated that he had recently hired a subject Ph.D. with no practical experience, although he would have preferred experience. This seems to bear out the Carpenters' conclusion concerning the lack of experienced doctorates for faculty positions.

One of the reasons for the possibilities of teaching in library schools for subject Ph.D.s is the small number of Ph.D. degrees awarded in library science annually. Of the thirteen schools replying which give Ph.D. degrees, only 113 degrees were awarded for the past two years. Of this number thirty-one did not seek employment. Of the eighty-two who did seek positions in librarianship, 43.9 percent went into library administration. Only forty-six of the Ph.D.s from these schools were employed in teaching positions.

#### CONCLUSION

The primary result of this survey was to confirm the beliefs of many in the profession that a sizable influx of subject Ph.D.s is occurring. It would appear that the number of subject Ph.D.s enrolled in library schools has at least doubled during the past year.

At the present time job opportunities in libraries for subject Ph.D.s appear to be very good despite the current job pinch in librarianship. When asked which degree, subject Ph.D. or library science Ph.D., they would prefer for positions in their libraries, directors invariably chose the subject Ph.D. over the library science Ph.D. or stated that it would depend on the type of position. Not one director surveyed would automatically prefer a library science Ph.D. One director summed up his feelings by stating:

There are positions for which a library

school Ph.D. would be preferred to a subject Ph.D., but generally speaking, I believe the subject Ph.D. preferable for most university library positions.

The majority of library directors would hire a subject Ph.D. at a salary level somewhat higher than a person without a terminal degree but not at what they would define as an advanced position (one requiring some library experience).

On the other hand, despite the apparently favorable market for subject Ph.D.s in university libraries, there has been little encouragement for Ph.D.s to enter library school. Although 88 percent of library school deans responding to this survey stated that an influx of subject Ph.D.s would not be detrimental to the profession, not one actively recruited subject Ph.D.s and several were openly hostile to the idea. The dean of the University of Michigan library school in his "Report to the Alumni" for 1974 dealt with this problem and correctly pointed out the frustrations and roadblocks a subject Ph.D. can expect in a library position. He pointed out the fact that library directors or other librarians may resent the degree. However, he failed to point out that many library school faculty members, especially those without terminal degrees, present an equally frustrating problem. The net result of this announcement is to discourage subject Ph.D.s even though it is intended only to let them know the difficulties ahead.

It is discouraging to note that not one responding library school dean could point to a single special program of study designed to utilize the specialties of the subject Ph.D.<sup>10</sup> Library school deans are overlooking entirely several areas of possible employment for subject Ph.D.s. If librarianship is to respond to Moffett's challenge, programs must be designed in such areas as archives and special collections, law librarianship, and subject bibliography

beyond the basic courses taken by all students. For example, librarians have been content to hire archivists and special collections librarians who have no background in library science or only a degree in library science and no background in history. Degree programs should be developed in library schools to attract persons with Ph.D.s in appropriate areas of history so that they can be given an appreciation of the library and its functions. At the present time there are no degree programs for archivists, and the library schools should not abdicate this important opportunity. Certainly, special programs of study can be developed for other subject specialties as well. The broad diversity of subject Ph.D.s enrolled in library schools

reflects not only the tight job market in academic circles, but also the opportunities and possibilities in the library profession for persons within a varied range of special talents.

The number of subject Ph.D.s seeking positions in the field of librarianship is increasing rapidly and will continue to increase into the foreseeable future. How the profession reacts to this fact will determine whether these subject Ph.D.s will provide a transfusion of specialized talents which will be beneficial to the profession or "pseudo professionals" who will be unable to adapt their specialties to library situations. Should the latter occur, the influx of subject Ph.D.s will be an unwelcome and detrimental intrusion.

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# Letters

## Bibliography of Africana

To the Editor:

Hans Panofsky's *Bibliography of Africana* may be every bit as bad as Peter Duignan says it is (*C&RL*, November 1975), but at that it is no worse than the judgment of whoever selects the *C&RL* reviewers (and Mr. Duignan's judgment in accepting the assignment). Surely someone less personally involved could have been found. If "this bibliography cannot stand on its own; it must be used in conjunction with another reference book—*Guide to Research and Reference Works on Sub-Saharan Africa*, edited by Peter Duignan," the same Peter Duignan seems hardly the one to tell us.—*Thelma Freides, Swarthmore College Library, Swarthmore, Pennsylvania.*

## Response

To the Editor:

I do not understand the Freides objection. Is she saying that reviewers should not review books in fields in which they have written? That's a preposterous view! The normal scholarly view is that the person who has written on the subject of the book to be reviewed is the best one to review that book. All book review editors that I know and have reviewed for operate on that premise. I clearly am qualified to pass judgment on Panofsky's book. Others seem to agree—three journals asked me to review the book. A most unusual consensus of book review editors! The *C&RL* editor is to be congratulated, not condemned.

The major defect of Panofsky's work is that it is not a *Bibliography of Africana*; it is a truncated survey which mostly covers

material published between 1970 and 1973. To label the book a *Bibliography of Africana* is inaccurate and misleading to buyer and user. And this I said; not, however, to exalt my own work or to remove the threat of a competitor but simply because it was true. Panofsky himself continually refers the reader to "Duignan's *Guide*"! Why would not I as a reviewer do the same things since it is relevant. Likewise, there was no personal malice involved; Panofsky and I have been friends for over 15 years and have worked on national committees for as long a time. The book is simply a badly conceived and executed bibliography. It would have been unprofessional of me not to have reviewed it.

Finally, my comments about the bibliography not being able to stand on its own only take up two paragraphs; eight paragraphs deal with other concrete defects of the work.—*Peter Duignan, Director of Africa Program, Hoover Institution, Stanford, California.*

## Interlibrary Loan

To the Editor:

The review of Thomson's *Interlibrary Loan Policies Directory* (*C&RL*, Sept. 1975), states that there is only other work of similar nature: A.L.A.'s *Directory of Reprographic Services*. Both are valuable; however, any librarian in Canada or one who deals with Canadian libraries should be aware of the Canadian Library Association's *Directory of Interlibrary Loan Policies and Photocopy Services in Canadian Libraries*, Ottawa, 1973.—*Judy Kelly, Reference Department, Library, University of Saskatchewan.*

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## BOOK REVIEWS

Hayes, Robert M., and Becker, Joseph. *Handbook of Data Processing for Libraries*. 2d ed. Sponsored by the Council on Library Resources. A Wiley-Becker & Hayes Series Book. Los Angeles: Melville Publishing Company, 1974. 688p. (LC 74-9690) (ISBN 0-471-36483-5)

This handbook includes twenty chapters, a glossary, and a fairly detailed index. The twenty chapters are organized into four broad sections. The first, "Introduction to Library Data Processing," has four chapters on systems and networks, representative projects, scientific management, and cost accounting. Section two, "Management of Library Data Processing," has four chapters on management planning, methods of system description, system budgeting and evaluation, and system implementation. Section three covers "Data Processing Technology" in five chapters dealing with machine language, data processing, input, output, display, storage, and data communication. The last section, "Library Subsystems," includes administration, ordering, cataloging, serials records, circulation, interlibrary loan, and mechanized information services.

The listing above makes the scope of this work apparent. To bring together in one volume such a large amount of materials in so recent a field is a tremendous achievement. As will be shown, I have faults to find and have detailed these in what I hope is an objective manner. Nevertheless, I do not want these negative comments to overshadow my enormous respect for the arduous task Hayes and Becker set themselves in writing this book. The scope, complexity, and diversity of this task make it inevitable that unevenness would occur and criticisms be made. I, knowing reasonably well the difficulties the authors faced and recognizing the solid achievement made, feel somewhat as if I were attacking an elephant with a popgun. Nevertheless, the attack:

The second edition of the Hayes and Becker *Handbook* raises two questions. Are there enough significant differences be-

tween editions to warrant purchase of the second by those holding the first, and is the second edition a timely and useful volume for those lacking the first? The answer to the first question is "No," and, to the second, a qualified "Yes." The reasons for this assessment are discussed below.

This work presents a serious problem for the reviewer! To what degree should the reviewer be swayed by the authors' statement of the intended audience and purpose of their work? This edition reaffirms the goals of the first: to provide the librarian "a concrete, factual guide" to assist decision making, to provide the student a textbook to give insight into the methodology and interrelationship between data processing and the library, and to give the systems analyst a "state of the art" survey. These goals are only partially fulfilled.

Although the second edition has been rewritten in parts, in general the content does not sufficiently reflect current developments or issues in library data processing. The glossary, for example, does not define terms such as "light pen," "bar-coded label," and "computer-output-microform"; and these developments are briefly treated in the text. The discussions of machine-readable data bases, bibliographic standards, and networks are essentially unchanged between editions.

There are, also, strange gaps in the treatment of libraries as systems. The section on cataloging does not include the problems of authority control for names and subjects. Terms such as "subject heading," "thesaurus," and "content analysis" are not listed in the index. A brief definition of "thesaurus" can be located, through the index, by use of the term, "search." File access methods are not treated comprehensively; the now widely used search code algorithms are not discussed.

What do we make of a state-of-the-art textbook that cites only the 1968 edition of the MARC monograph format? Neither the 1972 edition of this format, the fifth, nor the nine supplementary addenda are mentioned. The work on the MARC serials format is not mentioned in the section on serials cataloging and is but briefly treated as part of the National Serials Data Program; the published version of the MARC



serials format is not cited. None of the MARC formats for nonbook materials, e.g., films, maps, etc., are even mentioned.

The chapters on library data processing include many tables that could mislead the reader. Some tables seem to be quite specific in detailing production rates, costs, salaries, etc. In only a few cases are we told how these data are to be used and how they were derived; in most instances the labor costs have not been updated since the first edition. The impression remains that these tables were derived as a sort of academic exercise and are not based on actual operational library data.

Overall, the treatment of the various aspects of system analysis and library data processing is uneven. What appear to be minor points are often covered in great detail, whereas some major topics are not covered at all. Thus, in a work whose aim is to support decision making and state-of-the-art knowledge, a curious bias toward irrelevant matters and a curious tendency toward the historical obscures the identification of and concentration on significant developments and aspects of library automation. For example, the OCLC system is given a highly summarized treatment, whereas thirty-five detailed pages are devoted to the Association of Research Libraries' SILC (System for Interlibrary Communication) study. Space is given to the invention of the punched card, the history of the role of the Council on Library Resources in library automation, to a conference held at the Folger Library in 1955, to COSATI, ASTIA, etc. More attention is given to the history of the MARC Pilot Project than to what is happening to MARC today. Readers may have difficulty in ascertaining which developments and groups are still functioning, since the demise of a group or the culmination of a project is often not noted.

Viewed in this light, the *Handbook* fails to meet its objectives and is not well suited for its intended audience. However, if the book is reviewed without regard to its authors' objectives, a different assessment can be made. The *Handbook* is a useful compendium covering several important facets of library automation. It is of interest to see what two knowledgeable and perceptive

practitioners believe to be of value and importance. The authors' first-hand experience on such projects as the SILC study, the EDUCOM studies, and the National Commission on Library and Information Science and on state networking provide personal insights and information not found elsewhere. The work is lucidly written and treats an enormous variety of topics; this variety made it difficult for the authors to give even treatment in the first edition, let alone provide uniform updating in the second. If a third edition is prepared, it might be better to divide this work into two parts: a volume dealing with background and history and a volume dealing with systems aspects. (The real merit of the section on data processing technology and the chapters on automation of circulation and information retrieval are obscured in so voluminous a work.)

Regardless of the flaws in this book, the field has been enriched by the efforts Hayes and Becker have made toward an analytical structure of the library automation field. In summary, while this new edition, as did the first, fails in its stated objectives, it seems to this reviewer to meet some quite different objectives very well. In the future it will be regarded as a valuable sourcebook for the history of library automation activities for the period covered. Those seeking a broad, historical introduction to library data processing will find this a useful, and, indeed, a unique resource.—*Barbara Evans Markuson, Indiana Cooperative Library Services Authority.*

Bramley, Gerald. *World Trends in Library Education*. Hamden, Conn.: Linnet Books & Clive Bingley, 1975. 234p. \$10.00. (LC 74-34355) (ISBN 0-208-01368-7)

Gerald Bramley, British librarian and teacher, author of *A History of Library Education* (1969), in which he traced practices in the United Kingdom, the United States, South Africa, Australia, and India, has written a survey of some current library education trends. In the brief introduction Mr. Bramley indicates that he plans to examine the direction library education is taking today and in the future, concentrating upon Anglo-American library education

and only summarizing significant developments in selected countries.

Part I begins with an interesting description of the predominantly undergraduate programs in the United Kingdom (twenty-one pages). The chapter on the United States (eighteen pages) is based on outdated sources: *North American Library Education: Directory and Statistics, 1969-1971* (ALA, 1972), now superseded by the 1971-1973 edition (Kathryn Weintraub and Sarah R. Reed, 1974); the eighteenth (1973) edition of the *Bowker Annual* is the last edition cited. The author predicts that within a decade the United States will introduce a two-year master's program. An informative survey of Canada (eleven pages) is followed by a brief discussion of Australia and New Zealand (nine pages). A comparison of certification and accreditation practices in the United Kingdom and the United States produces perceptive comments: "Non-Americans can only marvel at the elaborate rituals which the COA [Committee on Accreditation] over the years has managed to introduce into the process of accreditation" (p.87). The author concludes that other solutions may have to be considered in the future.

Part II, entitled "Europe," includes brief, factual surveys of a few selected countries, such as the Federal Republic of Germany, the four Scandinavian countries, the USSR, and the German Democratic Republic (thirty-three pages). Part III deals with the developing countries, highlighting developments in Nigeria, Ghana, Dakar, and Uganda and the problem of either educating a library "elite" or training the needed number of librarians (fourteen pages). Under the heading "The New Colonialists" (seven pages), American influence on library education in developing countries, including some Asian areas, is broadly surveyed. Regrettably, the many generalizations are not documented, and only four references are appended.

Part IV, "The Practice of Library Education," surveys practices at library schools, curricula, teaching methods, core courses, and new developments in the United Kingdom and the United States (seventy pages). The author finds fault with the American way of conducting seminars,

requiring research-oriented contributions from students, a practice contrary to that of the British so that "the American use of the seminar would appear to miss the value of the seminar as a means of developing the individual" (p.184)—an ambiguous statement. Mr. Bramley favors either a "practicum" during library studies, or requiring previous experience in library work. American library educators will take issue with this assumption that students who have previously worked in a library possess more "poise and self-confidence" than those coming directly from college and should be given preference in admission. The longest chapter is devoted to methods of teaching the "core curriculum," i.e., library management, reference, and cataloging and classification. Various methods, including simulation games, case studies, "in-tray" or "in-basket" exercises are mentioned; and contributions of American educators such as Thomas Galvin and Mary Jane Zachert are acknowledged, whereas the British are called "less innovative." Mr. Bramley feels that cataloging and classification are "no longer the cornerstones of librarianship," (p.205) not revealing what is, nor referring to the newer terms preferred today in American library schools, such as "organization of knowledge." Finally, the author singles out two "problem areas": information science and its incorporation in the curriculum, and education for children's librarianship and its relationship to school librarianship. The latter chapter is mainly based on an IFLA Report of 1970 and somewhat abruptly concludes the book. A six and one-half-page index contains specific references which seem accurate, but the coverage of personal names is inadequate and sporadic.

The book is published simultaneously in the United States and England. Most of the chapters have a brief list of references attached, though more documentation for some of the statements would be desirable. The title, *World Trends*, is difficult to justify, since a large segment of the globe, such as Latin America, the rest of Europe, the Middle East, and Asia are not included. There are a number of careless typographical errors and some mis-set lines (p.17, 141). German entries, both in text and index, are frequently misspelled.

The author writes in a very readable style, at times with flair. However, it is astonishing to discover the following statement on the possible introduction of two-year master-level programs at British Polytechnics: "Librarianship is, in any case, a predominantly female profession. For girls [sic] whose working career may be cut short by the vicissitudes of marriage, the prospects of an additional two-year vocational course may seem an unnecessary luxury" (p.34).

If one keeps in mind the limitations, confined coverage, and at times superficial treatment, the book is particularly useful to American readers in making some of the complexities of British library education clear. As to American library education, readers will find more in-depth treatment in *Toward the Improvement of Library Education*, edited by Martha Boaz (Libraries Unlimited, 1973).—*Josephine Riss Fang, Professor of Library Science, Simmons College, Boston.*

Churchwell, Charles D. *The Shaping of American Library Education*. (ACRL Publications in Librarianship, no.36) Chicago: American Library Assn., 1975. 130p. \$8.50. (LC 74-23989) (ISBN 0-8389-0170-0)

This slender monograph of 102 pages plus notes, bibliography, and index, is, in essence, the published form of Churchwell's doctoral dissertation which was completed at Illinois in 1966 under the title, "Education for Librarianship in the United States: Some Factors Which Influenced Its Development between 1919 and 1939." Now with its more felicitous, though less descriptive title, and the imprimatur of ALA, it appears as number 36 in ACRL's Publications in Librarianship Series.

The blue-and-white paperback format is pleasing, the typography attractive, and the index quite adequate. However, as a history of American library education, its new title is somewhat misleading and its contents incomplete. The author cannot be faulted for this, since, as the earlier title suggests, he is concerned with only two decades in the history of library education.

Churchwell's work needs to be read in connection with two other segments of the

story which have appeared in print (again as published doctoral dissertations) under the titles *Training for Librarianship before 1923*, by Sarah K. Vann, and *The Professionalization of Education for Librarianship with Special Reference to the Years 1940-1960*, by C. Edward Carroll. Taken together, these three volumes, each building consciously upon the other, give an adequate and even detailed picture of the profession's efforts to provide and regulate the preparation of its practicing librarians.

The period from 1960 to the present remains unchronicled except for a few periodical articles including a very perceptive one by Summers<sup>1</sup> and a chapter in a recent symposium on library education by this reviewer.<sup>2</sup> The excellent monograph by Shera is more a philosophic examination than a historical account of recent developments in library education.<sup>3</sup>

But, back to Churchwell. Taking his cue from a landmark article written by Louis Round Wilson in 1932,<sup>4</sup> Churchwell decided to explore in greater detail those "most important movements, events, and influences that . . . characterized the development" of education for librarianship. Wilson had enumerated ten such influences beginning with the founding of Dewey's School of Library Economy at Columbia in 1887. Churchwell, wisely limiting his scope, and beginning where Vann had left off, decided to explain and analyze those which occurred between 1919 and 1939, roughly the period between the two world wars.

He discusses (1) the work of the Temporary Library Board, (2) the Board of Education for Librarianship, (3) the Carnegie Corporation's Ten-Year Program for Library Education (which produced both the famous Williamson Report and the Chicago Graduate Library School), (4) the role of the Association of American Library Schools, and (5) the effects of the great depression on library education.

The relationships and interactions among these various forces have not always been clearly understood. Churchwell does much to set them in perspective and to show the part each played. Reading this volume not only sets the record straight, but may also throw some light on current problems vex-



ing library education. For example, the cry to limit enrollments and curtail accreditation activities because of an oversupply of librarians is not new.

In 1932 the Board of Education for Librarianship (predecessor to the COA) capitulated to the unemployment situation and asked accredited schools to reduce their enrollments.<sup>5</sup> What the board failed to see, according to Churchwell, was that unemployment among librarians was due to the great depression and not to an oversupply of trained personnel (p.40). The peak of unemployment was over by 1934, and the situation was greatly improved by 1937. Yet the effects of the board's 1932 decision probably caused acute shortages immediately before and during World War II. It is to be hoped that current pressure on the Committee of Accreditation do not result in similar unwise decisions.

A reading of Churchwell by graduate students will also demonstrate how a brief span of educational history can be illuminated by a careful use of documents and a concern for detail. This small monograph has made a not so small contribution to our understanding of library education.—*C. Edward Carroll, Professor of Library Science, University of Missouri-Columbia.*

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1. William Summers, "The Emergence of Library Education," *American Libraries* 3:792 (July-Aug. 1972).
2. Mary B. Cassata and Herman L. Totten, eds., *The Administrative Aspects of Education for Librarianship* (Metuchen, N.J.: Scarecrow, 1975), p.1-28.
3. Jesse Shera, *The Foundations of Education for Librarianship* (New York: Becker and Hayes, 1972).
4. Louis R. Wilson, "Aspects of Education for Librarianship in America," *Library Quarterly* 2:1-10 (Jan. 1932).
5. "Unemployment among Librarians," *ALA Bulletin* 27:178 (March 1932).

Harris, Michael H., ed. *The Age of Jewett: Charles Coffin Jewett and American Librarianship, 1841-1868*. (The Heritage of Librarianship Series, no.1) Littleton, Colo.: Libraries Unlimited, Inc., 1975. 166p. \$11.50. (LC 75-14205) (ISBN 0-87287-113-4)

The plan for the new Heritage of Librarianship Series issued by Libraries Unlimited is to present a "carefully selected" collection of the writings of prominent American and European librarians preceded by a "substantive critical essay" assessing the subject's significance for librarianship, past and present. Michael H. Harris, the general editor of the series, is also the editor of this first volume of selections from Charles Coffin Jewett's writings and author of the essay on Jewett. Although European librarians are to be included, the subjects announced for the second and third volumes are also Americans: Ainsworth Rand Spofford by John Y. Cole and Charles Ammi Cutter by Francis Miksa. The project, albeit ambitious, appears promising if judged from the qualifications of these three editor/authors.

Approximately two-thirds of the present volume consists of writings by Jewett. The earliest is a part of his preface to the Brown University Library catalog of 1843, including the regulations of the Library. His 1846 paper opposing tariffs on imported books is reprinted in full as is his presidential address and paper given at the Librarians' Conference of 1853.

The selections from his first, second, third, and fifth (last) annual reports at the Smithsonian are exceptionally important. These documents reveal his visions of his two now famous failures, the Smithsonian as the national library and the production of library catalogs from clay stereotype plates. The reports also include other products of his fertile mind such as international exchange of duplicates, a monthly bulletin of accessions, and the plan, partially executed, for a national union catalog on cards. Omissions in these selections are indicated by the standard ellipses but the extent and general content of the omitted material are not. This was noted particularly in the excerpt from his second report in which he refers to his first (p.94). The plan of work referred to, the "general catalog of American libraries," was omitted from the first selection although it might well have been included as the original method for the compilation of union catalogs.

The selection from *On the Construction*



of *Catalogues of Libraries* includes all thirty-nine of the rules and a substantial portion of the preliminary essay. The omissions from the latter are mainly lengthy quotations supporting Jewett's arguments in addition to the seven opening pages repeating (from other sources included) his plan for stereotyping the catalog entries. The omission of the two pages on the "Preparation of Titles so as to Serve for both General and Particular Catalogues" is to be regretted, however, as important to later cataloging codes on such matters as editions, copies, and size.

The book is a valuable source for those not having access to the complete works. Nevertheless this reviewer was somewhat disappointed, especially by the quality of Harris' essay. It is more a biographical than a "substantive critical" essay and its tone is more panegyric than critical. Furthermore, a more sophisticated style might be expected from a writer of Harris' experience.—*Edith Scott, The Library of Congress.*

Goodell, John S. *Libraries and Work Sampling*. (Challenge to Change: Library Applications of New Concepts, no.1) Littleton, Colo.: Libraries Unlimited, Inc., 1975. 60p. \$5.00 pa. (LC 74-79026) (ISBN 0-87287-087-1)

Goodell's book is an auspicious beginning for this new series, giving an easy-to-understand presentation of a technical subject. For those unfamiliar with the topic, an example of work sampling is the use of statistical methods to determine the percentages of the total time circulation clerks spend on their various duties. The information obtained can then be used to establish a better work schedule. Properly performed, work sampling can be a valuable management tool for making more effective use of limited resources.

The author does a commendable job of presenting a library-oriented introduction to work sampling. He first reviews the theory of sampling and then explains the five steps of a typical study. There are numerous examples, tables of statistical information, clear instructions for using the tables, and finally there is a review of the literature of sampling as applied to li-

braries. Statistical terminology and mathematics have been kept to a minimum, and few people will have trouble understanding the material.

This compact book must be read with great care: Its brevity leaves too little room for discussion of areas where the beginner may encounter problems. One can obtain poor results through the use of a biased sample, or through failure to define the problem properly, or through a lack of approval and cooperation by the people concerned. Goodell touches on these areas, but his warnings are not strong enough. Inaccurate work sampling studies can have harmful effects that may be difficult to overcome.

With proper regard for the techniques of work sampling, almost anyone can produce useful studies with only a little experience. Goodell's book is an excellent one for the librarian or graduate student interested in learning the basics, but further information will be necessary. Detailed guidance on making and using work sampling studies will have to come from experienced practitioners and through studying the publications the author lists in his bibliography.—*Edward Gibson, Assistant Librarian, Washington College, Chestertown, Maryland.*

Davies, D. W. *Public Libraries as Culture and Social Centers: The Origin of the Concept*. Metuchen, N.J.: Scarecrow, 1974. 167p. \$6.00. (LC 74-8420) (ISBN 0-8108-0738-6)

David W. Davies, long an academic librarian and a historian and typophile as well, here turns a critical, somewhat ironical eye on the relationship between goals and programs of public libraries in Great Britain and North America. On the basis of both his particular point of view and his research—which is stronger for the early nineteenth century than for later years, especially our own time—he sees public libraries as having been diverted from their legitimate function, the provision of books and a place to read, by a faulty conception of their social role. Though he promises to follow the progress of scholarly along with popular libraries, the entire book, except for a few paragraphs, is devoted to the latter; there is no attention given to the re-

search collections and scholarly work of large public libraries as they may relate to his major theme.

Davies argues that public libraries, founded by nineteenth-century upper- and middle-class philanthropists convinced of the perfectibility of humankind, eager to uplift the masses, and persuaded that reading was intrinsically virtuous and refining, were, like other educational and cultural institutions, started by similar people and for similar reasons (lyceums, athenaeums, literary and scientific societies, mechanics' institutes), paternalistic and elitist. Being neither initiated by the people they were endeavoring to improve nor, as it turned out, heavily patronized by them, libraries suffered from the contradiction between the high aims of their founders and the low level of their use. Most people simply did not read, and even fewer would read serious books. So public libraries, unlike scholarly libraries with their ready-made and motivated clientele, resorted to "nonbook" activities to attract the populace: classes, festivals, exhibitions, lectures, contests, excursions, slide shows, performances of plays, film showings, concerts, even karate demonstrations. The object was thus to stimulate somehow the reading of books, and failing that, to make libraries "centers of culture" or "social and entertainment centers"—all without evidence of success and in face of a perpetually small reading public and competition from more powerful and more efficient purveyors of culture, social services, and entertainment. Unable or unwilling to confront these realities, public libraries remain anachronistic institutions on the nineteenth-century uplift model, mindlessly emulating the long gone lyceums, et al. They would do well instead to confine themselves to a perfectly respectable and useful role as specialized agencies dealing with books and with information gleaned from books.

This is an awfully simple solution to a not-so-simple set of problems, and therein is the basic limitation of Davies' book. The subject is bigger and more complex than his slender treatment of it, so that the strength of his views makes the book thesis-ridden. As a work of history, it is a sketchy survey, mildly provocative, slightly idiosyncratic,

and highly opinionated. This is too bad, as Davies does have something to say.—*Phyllis Dain, Associate Professor, School of Library Service, Columbia University.*

**Faculty Status for Academic Librarians: A History and Policy Statements.** Compiled by the Committee on Academic Status of the Association of College and Research Libraries. Chicago: American Library Assn., 1975. 55p. \$3.50. (LC 75-29403) (ISBN 0-8389-5455-8)

The object of this booklet, compiled by the Committee on Academic Status of ACRL, is to make available basic documents related to faculty status for academic librarians. It includes the "Standards for Faculty Status for College and University Librarians" (adopted by ACRL in June 1971); the 1974 "Statement on Faculty Status of College and University Librarians" as drafted by a committee of the ACRL, AAC, and AAUP; and a "Model Statement of Criteria and Procedures for Appointment, Promotion in Academic Rank, and Tenure for College and University Librarians" (approved by the ACRL in 1974).

It is good to have all of this material now available in one place. A special addition to this volume is the essay by the late Arthur M. McAnally, "Status of the University Librarian in the Academic Community," reprinted from the 1971 volume, *Research Librarianship: Essays in Honor of Robert B. Downs* (Bowker). As a review of the literature, it is excellent; and what he says is eminently sensible, especially about the evolution of librarian faculty status. As a brief summary of future developments, it is particularly interesting since four years have passed; and the budget situations at many schools now make some of his possibilities seem more elusive than ever, particularly the nine-month year. What he does emphasize is that the whole question of faculty status is complex and interrelated with many factors.

All library faculties or departments should reread the June 1971 ACRL "Standards for Faculty Status for College and University Librarians" and apply the criteria to themselves. How many can say "We do!" to all nine standards? Finally,

the "Model Statement of Criteria" would be useful to any library setting up by laws and personnel procedures.

All in all, this collection is useful to have at hand and will be referred to again and again.—John V. Crowley, Assistant Director, Milne Library, State University College, Oneonta, New York.

Anderson, Charles B., ed. *Bookselling in America and the World: Some Observations & Recollections in Celebration of the 75th Anniversary of the American Booksellers Association*. New York: Quadrangle/The New York Times Book Co., 1975. 214p. \$9.50. (LC 74-24294) (ISBN 0-8129-0539-3)

Delavenay, Emile. *For Books*. (Unesco and its Programme) Paris: Unesco, 1974. 74p. \$1.00. (Available from Unipub, Inc., P.O. Box 433, New York, NY 10016) (ISBN 92-3-101147-2)

The booktrade and book distribution are essential to the intellectual universe of which libraries are also part. Yet, all too many books we see about bookselling focus on a single facet: the lore of the antiquarian book shop and the memoirs of famous rare bookdealers. One, therefore, turns with considerable anticipation to two new volumes promising to deal more broadly with this important phase of information exchange. The collection edited by Anderson, a well-known bookdealer and former ABA president, is an "olla podrida" of presumably original essays and selections from previously issued materials. In the former category, John Tebbel and Sigfried Taubert offer short histories of American and world bookselling respectively. These are followed by brief sketches of the association since its founding in 1900 by former *Publishers Weekly* editor Chandler B. Grannis and a glimpse of best-sellers over the same period by Alice Payne Hackett. The other items are snippets and snappets by such bookdealers and book lovers as Sylvia Beach, H. L. Mencken, and Adolph Kroch.

My initial expectations were dampened by the fact that Anderson's book is more a keepsake of an event than a serious work. Although a memorial, it was put on the market for a price, and thus we are entitled to rate it for content and utility. Some-

times, it is difficult to tell what is original and what is not. Large chunks of Tebbel's otherwise rather good piece are quarried—almost word for word—from his monumental *History of Book Publishing in the United States* (1972- ). Taubert draws heavily on his earlier studies for his text and all his illustrations from his fascinating *Bibliopola* (1966). His essay proper is weakened by its nation-by-nation structure. This fragmentary approach is of doubtful validity. It leads, for example, to his offering a section on the Australian/New Zealand trade but none on those of the more important Lowlands, Switzerland, and Italy. Hackett merely updates her earlier chronicles on best-sellers and provides none of the insight or depth afforded by works like those of J. Hart and F. L. Mott on the subject. Somewhat more informative is Grannis on the association and its activities. One would dearly like to know more about the ABA as a trade lobby, how it applies pressures, and to what ends; also, which types of bookdealers wielded organizational strength and how. I was particularly intrigued by the several passing references to the expansion of the chain bookstore phenomenon and dearly wanted to know more about it.

Commemorations of the personal bookstore ("gentlest profession," "the happiest fraternity") are a recurring theme in the collection and must be pronounced unobjectionable in themselves. I for one have always rather enjoyed the treacly, nostalgic evocations of Christopher Morley and company. But, to strike a rural parallel, we ought not allow the persistent and haunting dream of "family farms" to shield us from the reality that the large-scale, corporate agribusiness is fast becoming the characteristic mode in agriculture. So, too, it appears that the number of full, personal bookstores may be declining with the growth of the chains which monotonously stress best-sellers and remainders as well as self-service. Is not this concentration-in-distribution, if true, a potentially ominous development in the free exchange of ideas? Librarians and others must remain vigilant to changes in this trend.

Anderson's collection, then, is less a handy compendium of current bookselling than a mish-mash of materials mostly available



elsewhere. Its contributors are not well served by it. Readers who may be familiar with an earlier and highly informative ABA publication, also edited by Anderson, *A Manual of Bookselling* (1969), can only be disappointed with this anthology.

Unesco's *For Books* sets out to show the problem of inequitable book distribution throughout the world and what the United Nations has tried to do about it. Delavenay declares: "As regards access to books, 70 per cent of the inhabitants of the globe are underdeveloped. Some thirty countries, representing 30 per cent of the world population produced 81 per cent of the book titles published in 1967," and that in 1969 "Europe, the U.S. and the U.S.S.R. between them produced more than 75 per cent of the books published throughout the world." Even more alarming is the impact of the world population explosion in the 1950s and 1960s which has meant that the number of books per readers in the underdeveloped countries has actually decreased! For me, Delavenay's phrase "book hunger" is a new but apt slogan. To meet that need, Unesco staff have engaged in a program for the past three decades to promote the reading habit and to accelerate the free flow of books. I was impressed with Unesco's efforts to liberalize copyright restrictions on certain texts so that they could be more readily translated into the vernaculars of emerging nations. Unesco has proceeded through a series of conferences held in Asia, Africa, and Latin America. Its best-known effort has, of course, been the International Book Year of 1972.

Steady readers of Unesco publications will not fail to find in this book that hallmark of international organization prose: innocuous platitudes set forth in thunderous and ringing phrases. Unesco's work in this area, nevertheless, is indeed important and should be better known. Delavenay's summaries of Unesco's related publication programs are useful. In sum, collection developers can skip the Anderson and acquire the Delavenay.—*Marc Gittelsohn, Undergraduate Librarian, University of California at San Diego, La Jolla.*

Auger, Charles P., ed. *Use of Reports Literature*. (Information Sources for Re-

search and Development) Hamden, Conn.: Archon Books, 1975. 226p. \$12.50. (LC 74-28477) (ISBN 0-208-01506-X)

Hope, like providence, must be our guide for the examination of a new work on acquiring, handling, and using technical reports. Perhaps it is the much improved bibliographic control over report literature which now permits disappointment when a new survey is itself weak and disorderly. This small but ambitious book lacks real focus. The editor intended it "to act as a guide . . . simply to show the way, and to eschew any thoughts of comprehensiveness or definitiveness." His intention was to benefit two groups of readers:

the subject specialists who seek to venture beyond the confines of conventional literature sources, and the librarians and documentation specialists who constantly strive to administer and exploit reports literature to its fullest advantage.

The book reads, however, rather like a primer somewhat casually assembled for library school students.

The first of the book's two sections is titled "Common Factors"; its six chapters have all been written by the editor. Although wide ranging—theses, translations, and meeting papers (as preprints) are included—his observations are generally elementary. A chapter on the writing of technical reports is included; the author recommends good English literary usage.

The second part, "Specific Subject Areas," was written by various specialists. The chapter titles are: "Aerospace"; "Agriculture and Food"; "Biology and Medicine"; "Business and Economics"; "Technical Reports in Education"; "Nuclear Energy"; "Science and Technology Applied in Industry." This should be the work's most promising section, but turns out to be quite uneven; no editorial consensus seems to have informed the authors about what constitutes a technical report in terms of the project at hand. The section on agriculture, for example, considers the publications of agricultural experiment stations; the section on applications in industry (written by the editor) identifies "Reports of Investigations" of the U.S. Bureau of Mines. These



ancient forms are not "nonconventional literature," for they have long been well organized and easily approached in the traditional ways of bibliography for the sciences. There is much repetition in the various papers, as the editor recognizes and comments—a tedious luxury in so short a treatment of so prodigious a set of problems.

The best chapter is that on nuclear energy. An analysis is given of *Nuclear Science Abstracts* (NSA), long a model of the mission-oriented index that developed in a thoroughly responsible way to become a great subject abstracting service. Other useful avenues to the literature of nuclear energy are also cited, and reliable descriptions are given. Even it is less than thorough, however, for in his detailed description of NSA, the author has not pointed out the great usefulness of references in its cumulated reports number indexes to subsequent publication of many of the AEC reports in the conventional literature.

The editor's summary chapter on applications in industry is his best contribution; it will benefit those who have had little exposure to the complexities of report literature and its bibliography. At the end of each chapter there are several lists. Not all the lists for each chapter are of quite the same sort, but they may well prove to be the most useful parts of the volume. With titles such as "References," "Additional Reading," "Principal Organisations Mentioned in the Text," and "Principal Announcement Services Mentioned in the Text," they can be convenient guides for those who want to further their knowledge of the bibliography and the nature of technical reports.—*Thomas D. Gillies, Director, Linda Hall Library, Kansas City, Missouri.*

Vickery, B. C. *Classification and Indexing in Science*. 3d ed. London: Butterworths, 1975. 228p. £ 5.75. (ISBN 0-408-70662-7)

It has been sixteen years since the second edition of *Classification and Indexing in Science* was published, and the appearance of the third edition is very welcome indeed. Classification theories controversial in the 1950s, specifically facet analysis, are now widely accepted and practiced. Vickery describes current theories and methods and

their development. The general outline for the organization of the material has remained essentially the same as in the previous edition: (1) "The Need for Classification," (2) "The Classification of a Subject Field," (3) "Classification for Arrangement" (4) "Notation for the Classified Catalogue," (5) "Classification in Indexing," and (6) "Classification in Post-Coordinate Systems." However, with some exceptions, most notably chapter 4, the text has been largely rewritten, and all of the bibliographies have been revised. Appendix A, "Historical Aspects of the Classification of Science," is the same and remains the most useful brief history of classification known to this reviewer. Appendix B gives examples of two faceted classifications, soil science and container manufacture. Appendix C, "Categories," remains the same except for the addition of comment on the concept of integrative levels. Appendix D, "The Classification of Chemical Substances," has not appeared in the earlier editions of this title.

Classification in the somewhat pragmatic terms in which it is generally practiced in American academic libraries is limited to the arrangement of books on library shelves by means of general schemes of bibliographic classification, most often the Dewey Decimal Classification or that of the Library of Congress. This is but one of four main areas in which classification is used in information retrieval as described by Vickery, the other three being (1) the direct use of classification for subject bibliography ranging from the classified catalog to systematic arrangements of references to papers, reports, and other documents; (2) the implicit use of classification, casually or systematically, by alphabetical indexes to subject matter; and (3) that in which classification is used "in what have been called 'manipulative' indexes, more often known as 'post-coordinate' systems." Classification, then, "in one form or another, at one stage or another, is almost universal in information storage and retrieval." Vickery discusses in detail the techniques of classificatory analysis which can be used to construct a fully developed and coded classification and also to structure an alphabetical word list or thesaurus.

This work is obviously of special interest to those involved with the literature of science and technology and its analysis and control. The numerous examples are drawn from scientific and technical fields. It is to be emphasized, however, that it should be of equal interest to librarians, library school faculty and students, and others, regardless of subject orientation, concerned with the classification, subject analysis, control, and retrieval of information. Although written within the framework of science and technology, the concepts and methods Vickery so clearly presents and reviews are not limited to a particular area of knowledge.—*J. R. Moore, Library Department, Brooklyn College of the City University of New York.*

Cassata, Mary B., and Totten, Herman L., eds. *The Administrative Aspects of Education for Librarianship: A Symposium*. Metuchen, N.J.: Scarecrow, 1975. 407p. \$14.50. (LC 75-15726) (ISBN 0-8108-0829-3)

The editor of *C&RL* might have gotten a better review, and more promptly, simply by reprinting the excellent short introduction to this book by Russel E. Bidlack, who also wrote one of the best chapters, "Standards for Accreditation, 1972."

To some degree, along with other recent writing on library education, this book is a response to *Targets for Research in Library Education*, edited by Harold Borko, published by ALA in 1973. The title is not quite descriptive—better to have omitted "Administrative Aspects" because it covers all aspects of the 1972 Standards (Bidlack points out in his introduction that the discussions range considerably beyond administration as one ordinarily thinks of the word); and better to have omitted "Symposium" because the papers did not result from a meeting where several speakers delivered short addresses on a topic (although symposium can also mean a collection of opinions on a subject). The twenty-two chapters, or papers, are organized, preceded by a prologue and followed by an epilogue, under eight sections, the core of which correspond to the headings of the 1972 ALA Standards for Accreditation. The Standards are reprinted as an appendix. Had I chosen the title, it would have been

*Education for Librarianship in the Context of the 1972 Standards for Accreditation.*

The two editors and twenty-five other authors are well qualified for their assignments. Among them are names long familiar in library literature as well as those of some relative newcomers. With one exception all of the papers were written specifically for this book; and the exception (Elizabeth Stone on the "Role of the Academic Institution in Continuing Library Education") was carefully reworked from a 1974 publication. Blessedly, this is not another "reader" with the hodgepodge of chronology, lack of focus, and perpetuation of obsolescent literature which that genre so often implies. There is an excellent, reliable index. The number of chapters is fairly well distributed among the sections: one on the history of library education; one on the 1972 Standards themselves; six on program goals and objectives; two on curriculum; only one on faculty; four on students; six on governance, administration, and financial support; one on physical resources and facilities; one on the accreditation visit; and the epilogue, "Library Education: Leader or Follower?" by Mary Cassata.

Multiple authorship has its advantages and disadvantages. On the positive side, it would have been impossible for any single one of the authors or editors to have done the research in adequate depth, and then the writing, within a reasonable time. It is refreshing to have several points of view. It is reassuring to know that the authors deal with specific topics in which they are already recognized as experts or in which the papers at hand demonstrate that they have become expert.

There are also the disadvantages—redundancy, lacunae, contradictions, unevenness—which even the most skillful and conscientious editors cannot eliminate when they assemble a collection of papers solicited from many authors. Inevitably, no two authors will work from the same corpus of source material; some will overlook a significant item which another has used; on the same issue, one will use a more current or reliable text than another. An example can be found in this book: Carroll (p.22-23) discusses the two-year master's degree and the need for specialization that cannot

be covered in the one-year program. He speaks of the Canadian example and "the gestures at UCLA" and states that "it does not appear that librarianship will return to the two-year master's degree program which it formally abandoned with the adoption of the 1951 *Standards*." So far as UCLA is concerned, the two-year program is not a gesture but an approved and operating program. He cites an obsolete document, a proposal rather than a finally approved program statement. As he is a UCLA alumnus, it seems strange he did not check out the program by a letter or phone call rather than label it a gesture. Winger (p.92) also discusses the length of the master's degree program, without citing the source of his 1972 statistics, which must have been those published by the American Library Association. Since Winger is the dean of the Graduate Library School of the University of Chicago, and since ALA headquarters is in Chicago, one wonders why he did not use more current information. He might then have learned that at least one school in the U.S. lengthened its program for the purpose of providing greater specialization and an element of research in its master's degree program. In fairness, he may have had in mind this school (UCLA), along with Chicago itself, among the "some schools" which he says have longer than one-year programs. Other authors in the book (see index under California, University at Los Angeles) have found more current information about UCLA, so it may really not matter. There is, however, at least some inconsistency.

This is an important, useful book. The editors are to be congratulated for bringing it together, the publisher for getting it into our hands in a good format at a reasonable price for these times, and the authors for their truly significant contributions. It will be of great value to library schools (deans, faculties, students, staffs), to persons concerned with accreditation, to university administrators, and to those members of the profession who recognize the crucial importance of professional education in the realization of the goals of library and information science which have been set by the profession in general.—*Andrew H. Horn, University of California, Los Angeles.*

Montgomery, Leon. *Document Retrieval Systems: Factors Affecting Search Time.*

(Books in Library and Information Science, vol.14.) New York: Marcel Dekker, 1975. 144p. \$12.75. (LC 75-18692) (ISBN 0-8247-6195-2)

This monograph reports the results of an experiment which Montgomery conducted to explore those factors which were thought to affect search time in an information storage and retrieval system. The factors were selected for the explanation of search time and included the number of documents searched, the number of questions asked, and the file organization techniques.

These experiments were run in a batch-oriented system in a multiprogramming environment using the computer's clock as a timing device. Thus, the times reported are estimates and are so specified by the author. Not surprisingly, it was found that after an arbitrary number of documents the inverted file system gives search times consistently lower than the search times required for linear file organizations. The number of questions asked of a particular data base was also found to be related to search time. Specifically, the time was consistently lower with the inverted file, provided the number of questions was sufficiently large. The author finds that "the inverted file organization and search technique becomes more efficient from a search time point of view for situations having more than 32 questions and more than 512 documents." However, these findings are obviously limited to batch-oriented systems.

The book is directed toward the designers of information systems and not the casual reader. The results are interesting and do provide the reader with a significant experimental result, but these results are less generalizable than one would like due to their restriction to batch-oriented systems. Thus, the text is not directly useful to the individual designing an interactive information system.

One must question the validity of the presentation of the results of an experiment as an approach in a text. Certainly the author's findings would have made a valuable journal article. The book does provide an excellent example of experimental methodology and may perhaps be best used as a



model for future experiments resulting in interesting journal articles.—*Michael J. McGill, School of Information Studies, Syracuse University, Syracuse, New York.*

McGarry, K. J. *Communication, Knowledge and the Librarian*. Hamden, Conn.: Linnet Books, 1975. 207p. \$10.50. (LC 75-4864) (ISBN 0-208-01369-3)

K. J. McGarry has produced a primer for librarians in an area in which librarians urgently need a primer. He covers an enormous span of knowledge concisely and well. He structures a viable approach to a field of intellectual endeavor which, in common with several newly emerging fields of study, represents a confluence of several older disciplines and new concepts. Most remarkable of all, he recognizes and points out clearly that this new approach, while potentially extremely fruitful, provides only a partial view and leaves out of the discussion some very important aspects of librarianship and human knowledge.

McGarry's object is to discuss the library in terms of its place in the communication system of society. To do this he first treats the current state of knowledge of communication from the cybernetics, linguistics, sociological, psychological, and anthropological viewpoints. He surveys literature and concepts, discussing the use of models, information theory, entropy and redundancy, symbols, culture and the concept of self, social role theory, and other pertinent matters. He then examines the process of interpersonal communication and the necessities of that process.

Perhaps McGarry's gloomiest conclusion in relation to the human condition is that hierarchy is an omnipresent necessity of all life and interaction, including communications. One hopes that Warren Bennis and others of his school of thought have what will prove to be a more correct viewpoint in this regard. It would be very disturbing to many people and institutions if we were to discover that democratic processes of human interaction are inherently impossible.

McGarry proceeds, through a brief discussion of nonverbal communication, to an excellent analysis of the impact of the development of communications on society. In this context he discusses McLuhan's

ideas, set forth in English and treated in a sane and productive manner. He rightly points out the fallacy of subscribing to yet another form of simplistic determinism while recognizing the seminal nature of the concepts McLuhan presents. This discussion is long and very valuable as a conceptual framework for the study of the history of books, media of other sorts, and libraries.

The attempt to make direct application of the theories so well discussed in this volume to the library scene is not entirely successful. This is usually the case when attempts at practical application are made early in the development of a new body of knowledge.

The attempts must, of course, be made because it is from them that a significant force and direction are given to further theoretical development. The importance of the process of theory building and practical application is underscored by a quotation from Eric de Grolier (p.123), "Now the death of a civilization can be interpreted as the death of its information mechanisms." We, whose civilization has developed and become dependent upon an information mechanism of unprecedented magnitude, complexity, and fragility must struggle successfully to preserve and improve that mechanism. The consequences of failure could be as cataclysmic as the consequences of failure to keep the peace.

This terse and literate book provides a carefully selected and structured guide to the study necessary to achieve understanding of the subject. Hopefully, the book will serve as a starting place for course work in many library schools.—*Ernest W. Toy, Jr., California State University, Fullerton.*

*Überregionale Literaturversorgung von Wissenschaft und Forschung in der Bundesrepublik Deutschland: Denkschrift.* (Supra-Regional Provision of Literature in the Federal Republic of Germany: Memorandum.) Bibliotheksausschuss der Deutschen Forschungsgemeinschaft. Boppard: Harald Boldt Verlag KG, 1975. 116p. (ISBN 3-7646-1621-0)

One of the major goals of the Library Committee of the German Research Society (GRS) has been the development of an ef-



fective cooperative acquisitions program which would insure that one copy of every publication of current or potential scholarly importance would find its way into some German research library and would become available to all users in the Federal Republic through efficient information and inter-library loan services. A classified subject scheme was devised, and certain libraries with staffs capable of selecting and acquiring the materials and administrative officers willing to assume what became national responsibilities were assigned one or more subject categories. They were urged to collect creatively and comprehensively. In return, the GRS provided funds for acquisitions, salaries, and equipment in the participating libraries and served as the central coordinating organization.

This important "Memorandum" analyzes the program's strengths and weaknesses, describes the organizational changes and updating needed to make it more effective, and considers such issues as whether a national lending library on the British model should replace the decentralized system and whether additional central subject libraries should be created. Among the weaknesses are the problems of adequately defining responsibilities when traditional subject divisions are being eroded by new fields, such as environmental studies; the varying intensities of collection development among the participating libraries (evidently some were not being sufficiently comprehensive in their collecting); and a cumbersome inter-library loan system. Judged against these deficiencies were the development and access for scholars of subject specialist librarians, the future of collections which have been developed through this program, and the inability to show that within the German context centralization would be more effective. On balance the GRS opted to continue the present program but recommended many changes to make it more responsive to current needs, among them provision of additional funds for certain technical services, for travel for specialist librarians, and for other costs unique to the subjects being covered. Discussions of the need for a central lending library are also to continue.

Several appendixes, including the list of

subjects and the libraries responsible for them, conclude the volume. A brief English-language summary of main points accompanies the volume, but, for thorough understanding of the system and its working, one must have access to the German text.

This description of a fascinating plan to develop a national research collection is of intrinsic interest but also implicitly raises questions related to the general merit of a decentralized versus a centralized approach to national resource development. Contrast German federal spending, for example, with the aborted Farmington Plan, the approximate American equivalent of the GRS scheme, which relied solely on local means to satisfy what were defined as national needs. Although even generous support has not solved all problems, one does wonder, amid the general discussion of a national information system for the United States and the financial potential of revenue sharing, whether the GRS plan is not suggestive of a means to help maintain the unique collections in some research libraries foundering amid rising costs and diminished local financing.—*Erwin K. Welsch, Memorial Library, University of Wisconsin—Madison.*

Veit, Fritz. *The Community College Library*. Contributions in Librarianship and Information Science, Number 14. Westport, Conn.: Greenwood Press, 1975. 221p. \$13.95. (LC 72-843) (ISBN 0-8371-6412-5)

The literature of the community college library has been enriched by Dr. Veit's masterful presentation in this state-of-the-art volume. It is comprehensive, well documented, and readable. As the author indicates, it is intended not only for students in the field, but also for community college library staffs and the general reader. An index facilitates the location of references to specific aspects of library operation.

Dr. Veit defines his terms explaining that "community college" refers to all public postsecondary two-year institutions and that "library" includes both the traditional library and the learning resource center. The author points out that the community college library is similar in many respects to

other college libraries. However, the community college library is different in that it must support the goals and programs of the unique institution of which it is a part.

A discussion of the historical development of community colleges in the United States precedes chapters on personnel; administrative organization; technical services; learning materials and equipment; microforms; user services; cooperation and extension of service; standards and guidelines; planning the building; and "Movements and Developments with Strong Impact." Details abound, including everything from comments on on-approval order plans to a discussion of examples of television operations.

Statistical tables, library floor plans, and organization charts illustrate the text. Bibliographies are included at the end of each chapter. Frequent references to the practices in community college libraries across the country are interspersed in the text. The chapter on standards and guidelines deals specifically with efforts of the Association of College and Research Libraries to formulate national standards for community college libraries, and there is frequent reference to the 1972 *Guidelines* throughout the text. Reference is also made to state standards such as those in Washington, California, and Illinois.

Although the text is factual for the most part, Dr. Veit interjects his own opinions or recommendations from time to time. In the chapter on technical services, the following statement appears (p.93): "It is more difficult to maintain a multi-media catalog than separate catalogs for book and non-book media." Similarly, in the chapter on learning materials and equipment, the following is stated (p.103): "A community college should very closely consider the implications of becoming a government publications depository, especially a federal depository."

Some information in the text is unavoidably dated. It is hoped that the reader will consult library literature to learn recent developments in the operation of the Ohio College Library Center, for example, or to secure current evaluations of dial-access systems.

Dr. Veit has painstakingly assembled a

wealth of information which should admirably serve the needs of the uninitiated.—*Alice B. Griffith, Library Director, Mohawk Valley Community College, Utica, New York.*

Ingram, K. E., and Jefferson, Albertina A., eds. *Libraries and the Challenge of Change*. Papers of the International Library Conference held in Kingston, Jamaica, 24-29 April 1972. Published for the Jamaica Library Association and the Jamaica Library Service. London: Mansell, 1975. 265p. \$20.00. (ISBN 0-7201-0523-4) Distributed in North America by International Scholarly Book Services, Inc., P.O. Box 4347, Portland, OR 97208.

I should admit to begin with that the papers of a conference are not my favorite literature, but since I was prevented by circumstances from attending this conference and had heard good things about it, I agreed to review the publication. I'm glad I did.

Held under the sponsorship of the Jamaica Library Association, with the government of Jamaica and the Jamaica Library Service as cosponsors, the conference was designed to "focus the attention of the public, of government and of other agencies upon the role and value of libraries and upon the nature of the profession of librarianship . . ." with the hope of "winning for them a greater measure of moral and financial support in these tasks"—a noble purpose for the Caribbean area where such support is certainly needed. Each of the ten sessions was devoted to a different topic: public, national, university, and special libraries; libraries for youth; library education; technology; UNESCO; cooperation; national plans; and professional associations. Typically, an internationally recognized representative of the specialty was invited to speak on the topic in general, followed by a Jamaican representative who discussed the local and/or Caribbean situation. The discussion which ensued in each session was synopsisized by the editors from tape recordings.

Without exception, the papers are well constructed and informative. It may, therefore, be misleading to single out any for

comment, but this reviewer found particularly interesting the contribution by Dr. Margareet Wijnstroom, General Secretary of IFLA, on library developments in North West Europe; the survey of public libraries in the Commonwealth Caribbean by Joyce Robinson, Director of the Jamaica Library Service; the clear and incisive analysis of academic library problems in developing areas such as the Caribbean, by Kenneth Ingram, Librarian, University of the West Indies, Jamaica; and the excellent update on library cooperation in the West Indies with its extensive bibliography, by Dr. Alma Jordan, Librarian, University of the West Indies, Trinidad. As is true typically of conference papers, one has a sense of reading a collection, since they are not chapters by a single author. But the variety here imparts a real and attractive sense of looking in at an international conference, where not only the facts but the attitudes differ.

Finally it must be said, the whole event is a credit to Kenneth E. Ingram, then chairman of the program subcommittee, later chairman of the conference, president of the Jamaica Library Association, and editor, along with Mrs. Jefferson, his assistant in Jamaica, of the papers. The outline of topics, the choice of speakers, the synopsis of the discussion periods, and the overall editing of the papers and of the publication itself have put together a happening that anyone would be proud of.—G. A. Harrer, *Director of Libraries, University of Florida*.

Mount, Ellis. *University Science and Engineering Libraries: Their Operation, Collections, and Facilities*. Contributions in Librarianship and Information Science, Number 15. Westport, Conn.: Greenwood Press, 1975. 214p. \$15.00. (LC 74-34562) (ISBN 0-8371-7955-6)

The author, who has been associated with the science and engineering libraries at Columbia University since 1964, covers most major topics of concern to those involved in such libraries. The first half of the book deals with the nature of technical libraries at universities—organizational patterns and location, administration, staffing

and personnel management, collections (including weeding), facilities and equipment, and relationships with other groups (e.g., other university library units; other library systems; and industrial, governmental, and other organizations). He discusses basic principles and practical issues, with pros and cons, and frequently gives examples from a variety of institutions, supported by data and numerous bibliographic citations. The approach is practical, direct, and quite up to date. The style is primarily narrative, rather than categorized or outlined. Cost data are as of 1973 and need to be adjusted to 1976 inflated rates.

There are some topics which are scarcely mentioned. For example, there is little about the selection, acquisition, storage, and servicing of microforms, especially technical reports, although there is a brief discussion of microform readers and printers.

Library personnel, from the subprofessional working in such a library to the university librarian, and even faculty library committee members, would benefit from a reading of this book, through the insights it provides of the complexities involved in the administration and functioning of these units. Library school students expecting to work in such libraries can find out what to expect.

In spite of the wide variety of organizational patterns of practices in such libraries throughout the United States, the author has managed to convey the essence of the common problems and suggests solutions and warns of pitfalls to avoid.

The second half of the book consists primarily of selected examples of basic titles representing various types of sci-tech literature. Each category is preceded by a discussion of its characteristics. All monographic titles are annotated to show scope. The first category is guides to the literature, of which there now are a number of excellent titles in most sci-tech disciplines. Other categories include annual reviews, technical reports, patents, directories, standards, translations, theses, tables, data banks, and audiovisual aids, as well as handbooks, periodicals, abstracting services, etc. The titles show care in selection, and



the category commentaries are relevant and to the point.

Because the selection of titles is very limited, many basic reference tools which sci-tech librarians use constantly are not included. Two titles for conference literature and five for technical reports seem rather skimpy. A much more comprehensive treatment of the literature with extensive lists is Dennis Grogan's *Science and Technology: An Introduction to the Literature* (2d ed., Shoe String Press, 1973).

The author deserves the thanks of university science and engineering librarians for having covered many fine points of the subject. The index could have been expanded somewhat. The print is rather small and margins narrow, making reading for any length of time difficult.—*Johanna E. Tallman, Director of Libraries, California Institute of Technology, Pasadena.*

Norton, Margaret Cross. *Norton on Archives: The Writings of Margaret Cross Norton on Archival & Records Management*. Edited with an introduction by Thornton W. Mitchell. Foreword by Ernst Posner. Carbondale and Edwardsville: Southern Illinois Univ. Pr., 1975. 288p. \$10.00 (LC 75-20410) (ISBN 0-8093-0738-3)

Margaret Cross Norton served as Illinois State Archivist from 1922 to 1957. During those thirty-five years she contributed to the formulation of archival procedures, policy, and philosophy at the state as well as national level due to her active participation in many of the professional associations. She is especially known for her position against allowing the historians to preempt the field of archival care and preservation and asserted, rather, that archives management was entitled to full public support and thus complete public-oriented service. However, her writings consisted mainly of journal articles that appeared between 1930 and 1956 in *American Archivist*, *Illinois Libraries*, and a number of lesser-known publications. The purpose of this volume is to bring together those articles into one com-

prehensive work representative of Norton's thought on archives.

The articles have not been reprinted by chronological or subject order. Rather, thirteen chapters were created, each based on at least two or more related articles. The editorial work is outstanding. Despite some repetition (pages 214-15 and 237-38 on micrographics, for example), T. W. Mitchell has organized and made coherent a presentation of some thirty articles written over a twenty-six-year period. This formidable task is successful largely because of his severe criteria for inclusion, format, and style which he imposed on the various articles. Bibliographic notes and index extend the usefulness of the volume.

The contents of this work emphasize "the timelessness of her understanding of the philosophical as well as the technical aspects of the archivist's work." The chapters on the scope and function of archives; the purpose and nature of archives; and the services and resources of archives contain stimulating thought and are as relevant today as when she wrote them—especially in light of the current controversy surrounding the status of presidential tapes. But other chapters which are of a technical or procedural nature, such as photographic and micrographic reproduction of records, records disposal, and the handling and repair of fragile documents, present a treatment that is obviously dated, less useful, and sometimes misleading. The lesson being that there is a limit as to how relevant an editor can make writings that are ten to twenty-five years old.

There is nothing new in this volume for the harried archives manager looking for better or more efficient operating procedures. Standard works by Theodore Schellenberg or the recent issue of *Drexel Library Quarterly* (Jan. 1975) will retain their spaces on the archivist's bookshelves. Yet, there is much food for thought in this volume, and the archivist or records manager who still takes an interest in and has a concern for understanding the nature and use of archives and their value to society will surely benefit from reading the crisp and clear thoughts of Margaret Cross Norton.—*Charles R. McClure, Graduate School of Library Service, Rutgers University.*



## OTHER PUBLICATIONS OF INTEREST TO ACADEMIC LIBRARIANS

- Anglo-American Cataloging Rules, Chapter 12*. Rev. ed. Chicago: American Library Association, 1975. 64p. \$1.50 pa. (75-28192). (ISBN 0-8389-3174-X).
- Anniversaries and Holidays*. 3d ed. Chicago: American Library Association, 1975. 260p. \$10.50. (75-23163) (ISBN 0-8389-0200-6).
- Aptheker, Herbert. *Annotated Bibliography of the Published Writings of W. E. B. DuBois*. Millwood, N.Y.: Kraus-Thomson, 1973. 626p. (73-13805).
- Awards, Honors, and Prizes*. 3d ed. (Vol. 1: United States and Canada; Vol. 2: International and Foreign) Detroit: Gale, 1975. 2 vol. (75-4632) (ISBN 0-8103-0376-0, v.1; 0-8103-0377-9, v.2).
- Banks, Arthur. *A Military Atlas of the First World War*. New York: Taplinger, 1975. 338p. \$29.95. (77-179660). (ISBN 0-8008-5242-7).
- Besterman, Theodore. *A World Bibliography of African Bibliographies*. Rev. ed. Totowa, N.J.: Rowman and Littlefield, 1975. Unpaged. \$25.00. (75-17790). (ISBN 0-87471-749-3).
- Besterman, Theodore. *A World Bibliography of Oriental Bibliographies*. Totowa, N.J.: Rowman and Littlefield, 1975. Unpaged. \$75.00. (75-17936). (ISBN 0-87471-750-7).
- Bibliografia Chicana: A Guide to Information Sources*, ed. by Arnulfo Trejo. (Ethnic Studies Information Guide Series, vol. 1) Detroit: Gale, 1975. 193p. \$18.00. (74-11562). (ISBN 0-8103-1311-1).
- Boner, Marian. *A Reference Guide to Texas Law and Legal History; Sources and Documentation*. Austin: University of Texas, 1976. 108p. (75-19408). (ISBN 0-292-77007-3).
- British Books in Print 1975*. New York: Bowker, 1975. 2 vol. \$65.00. (2-7496). (ISBN 0-85021-084-4).
- Buchanan, Brian. *A Glossary of Indexing Terms*. Hamden, Conn.: Shoe String, 1975. 144p. \$9.00. (75-20312). (ISBN 0-208-01377-6).
- Burns, Robert W., and Hasty, Ronald W. *A Survey of User Attitudes Toward Selected Services Offered by the Colorado State University Libraries*. (Occasional Paper, no. 121) Champaign, Ill.: University of Illinois, Graduate School of Library Science, 1975. 51p. \$2.00 prepaid.
- Cass, James, and Birnbaum, Max. *Comparative Guide to American Colleges for Students, Parents and Counselors*. 7th ed. New York: Harper and Row, 1975. 749p. \$15.00. (75-6332). (ISBN 0-06-010657-3).
- Congressional Quarterly, Inc. *Guide to U.S. Elections*. Washington, D.C.: Congressional Quarterly, 1975. 1103p. \$48.50. (75-659). (ISBN 0-87187-072-X).
- Cornell University Libraries. *Petrarch: Catalogue of the Petrarch Collection in Cornell University Library*. Millwood, N.Y.: Kraus-Thomson, 1974. 737p. (74-3398). (ISBN 0-527-19700-9).
- Dictionaries, Encyclopedias, and Other Word-related Books, 1966-1974*, ed. by Annie M. Brewer. Detroit: Gale, 1975. 591p. \$48.00. (75-22201). (ISBN 0-8103-1128-3).
- Dougherty, James J.; Byrnes, Robin; and Lesso, Maryann C. *Writings on American History 1973-74; A Subject Bibliography of Articles*. Washington, D.C.: American Historical Association; Millwood, N.Y.: Kraus-Thomson, 1974. 266p. (74-13435). (ISBN 0-527-00371-9).
- Educational Media Yearbook, 1975-1976*. New York: Bowker, 1975. 559p. \$21.95. (73-4891). (ISBN 0-8352-0834-6).
- Eisenberg, Diane U. *Malcolm Cowley: A Checklist of His Writings; 1916-1973*. Carbondale: Southern Illinois Univ. Pr., 1975. 240p. \$8.95. (75-8953). (ISBN 0-8093-0748-0).
- Fisher, Margery. *Who's Who in Children's Books: A Treasury of Familiar Characters of Childhood*. New York: Holt, Rinehart and Winston, 1975. 399p. \$22.95. (75-5463). (ISBN 0-03-015091-4).
- Foster, David W. *The 20th Century Spanish-American Novel: A Bibliographic Guide*. Metuchen, N.J.: Scarecrow, 1975. 234p. \$8.50. (75-25787). (ISBN 0-8108-0871-4).
- Fundaburk, Emma L., and Foreman, Mary D., comps. *Art in the Environ-*

- ment in the United States. Luverne, Ala.: Emma Lila Fundaburk, 1975. 223p. \$12.00. (75-24620). (ISBN 0-910642-02-8).
- Gardiner, George L. *Computer Assisted Indexing in the Central State University Library*. (Occasional Paper, no.120) Champaign, Ill.: University of Illinois, Graduate School of Library Science, 1975. 24p. \$2.00 prepaid.
- Guide to the Microfilm of the Papers of William Penn*. Philadelphia: Historical Society of Pennsylvania, 1975. 56p. \$2.00.
- Havlice, Patricia Pate. *Popular Song Index*. Metuchen, N.J.: Scarecrow, 1975. 933p. \$30.00. (75-9896). (ISBN 0-8108-0820-X).
- Hixon, Don L., and Hennessee, Don. *Women in Music: A Biobibliography*. Metuchen, N.J.: Scarecrow, 1975. 358p. \$12.50. (75-23075). (ISBN 0-8108-0869-2).
- Humby, Michael. *A Guide to the Literature of Education*. (Education Libraries Bulletin, Supplement 1). 3d ed. London: University of London, Institute of Education Libraries, 1975. 142p. (ISBN 0-900008-20-2).
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- Langefors, Börje, and Sundgren, Bo. *Information Systems Architecture*. New York: Petrocelli/Charter, 1975. 366p. \$19.95. (75-5521). (ISBN 0-88405-300-8).
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- Mason, Lauris. *Print Reference Sources: A Select Bibliography, 18th-20th Centuries*. Millwood, N.Y.: Kraus-Thomson, 1975. 246p. (74-79901). (ISBN 0-527-00372-7).
- Ricks, Beatrice, comp. *Henry James: A Bibliography of Secondary Works*. (The Scarecrow Bibliographies, no.24) Metuchen, N.J.: Scarecrow, 1975. 483p. \$17.50. (75-22128). (ISBN 0-8108-0853-6).
- Seltzer, George. *The Professional Symphony Orchestra in the United States*. Metuchen, N.J.: Scarecrow, 1975. 493p. \$17.50. (75-19271). (ISBN 0-8108-0855-2).
- Society for Technical Communication. *Proceedings of the 22nd International Technical Communication Conference, Anaheim, California, May 14-17, 1975*. Tazana, Calif.: Univelt, Inc., 1975. 411p. \$25.00. (ISBN 0-914548-08-05).
- Stanley, Janet L. *Nigerian Government Publications 1966-73: A Bibliography*. Ile-Ife, Nigeria: University of Ife Press, 1975. 193p. \$19.00.
- U.S. Library of Congress. Rare Book Division. *Children's Books in the Rare Book Division of the Library of Congress*. Totowa, N.J.: Rowman and Littlefield, 1975. 2 vol. \$100.00. (75-9605). (ISBN 0-87471-579-2).
- Ulrich's International Periodicals Directory, 1975-1976*. 16th ed. New York: Bowker, 1975. 2289p. \$50.00. (32-16320). (ISBN 0-8352-0824-9).
- A Union List of Selected Microforms in Libraries in the New York Metropolitan Area*. (METRO Miscellaneous Publication, no.8) New York: METRO (New York Metropolitan Reference and Research Library Agency), 1975. 322p. \$22.75 prepaid; \$25.00 with invoice requested.
- United Nations Documents Index. Cumulated Index Volumes, 1-13, 1950-1962*. New York: Kraus-Thomson, 1974. 4 vol. (ISBN 0-527-91530-0).
- Wheeler, Helen R. *Womanhood Media Supplement: Additional Current Resources About Women*. Metuchen, N.J.: Scarecrow, 1975. 489p. \$15.00. (72-7396). (ISBN 0-8108-0858-7).
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- Yonab, Michael Avi, and Shatzman, Israel. *Illustrated Encyclopedia of the Classical World*. New York: Harper and Row, 1975. 509p. \$20.00. (73-14245). (ISBN 0-06-010178-4).
- Zachert, Martha Jane K. *Standards and Planning Guide for Pharmacy Library Service*. Bethesda, Md.: American Association of Colleges of Pharmacy, 1975. 89p. (75-30293).

## ABSTRACTS

*The following abstracts are based on those prepared by the ERIC Clearinghouse on Information Resources, Stanford Center for Research and Development in Teaching, School of Education, Stanford University.*

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***Learning Materials and Services at the University of North Carolina at Charlotte.*** J. Murrey Atkins Library, North Carolina Univ., Charlotte, 1974. 43p. (ED 107 260, MF—\$0.76, HC—\$1.95).

The Media Committee of the Atkins Library performed a three-month study to review the library's existing policies on media resources and services and to make recommendations for improvement and expansion. As a result, the integration of all learning materials and services at the university was proposed, with the desired objective of attaining better overall services for the university community through more efficient use of personnel and resources. A

major administrative reorganization was proposed to lodge all responsibility for media resources, services, and programming within one campus agency. Further specific recommendations were made covering staffing, facilities, services, and the handling of nonprint media.

***Using the Morgan Library: A Tour and Exercise.*** By Joel S. Ruthstein and Betty Hacker. Libraries, Colorado State Univ., Fort Collins, 1975. 20p. (ED 107 265, MF—\$0.76, HC—\$1.58).

For the past two years the Morgan Library at Colorado State University has made use of self-guided exercises to orient new students to the physical layout of the library and to teach them about basic tools and methods of library research. Students may choose from instructional units on different topics, but all have the same format. Each requires the student to conduct a hypothetical literature search, making use of the card catalog and periodical indexes, then locate the appropriate materials on the shelves. Test questions throughout the unit gauge the student's progress. This report contains three sample units on the topics of moving pictures, rock music, and sexism in education.

***NASIC at MIT. Final Report, 1 March 1974 through 28 February 1975.*** By Alan R. Benefeld and others. Electronic Systems Lab., Massachusetts Inst. of Tech., Cambridge, 1975. 103p. (ED 107 226, MF—\$0.76, HC—\$5.70).

Computer-based reference search services were provided to users on a fee-for-service basis at MIT as the first, and experimental, node in the development of the Northeast Academic Science Information Center (NASIC). Development of a training program for information specialists and training materials are described. Testing, user surveys, and fifteen months of operational experience show that (1) a moderate but growing demand exists for computer-based reference search services; (2) 77 percent of users perceive the service to be cost-effective; (3) promotional efforts need to be very intense both to increase general awareness of the service and to turn awareness into actual use; (4) many different

promotional mechanisms are needed: the best are oriented toward the immediate, personal needs of the potential user; (5) cost affects the class of user, but it is only one of many factors that influence a person's decision to use the service; (6) searches are often interdisciplinary and require several sources; (7) information specialists need extensive training and practice searching to attain desirable levels of competence; and (8) integration of these services within the library environment may require organizational staffing accommodation in addition to the commitment and enthusiasm of participants.

***Current and Retrospective Sources of Machine Readable Monograph Cataloging Records: A Study of Their Potential Cost and Utility in Automated System Development at the University of Minnesota.*** By Audrey N. Grosch. Bio-Medical Lib., Univ. Libs., Univ. of Minnesota, Minneapolis, 1975. 56p. (ED 107 280, MF—\$0.76, HC—\$3.32).

Alternative approaches to the building of monographic bibliography files for an on-line data management system using mini-computers at the University of Minnesota Libraries' Twin Cities Campus center are described. Secondary and primary sources of the Machine-Readable Cataloging (MARC) II records are considered—including Blackwell-North America, Information Dynamics Corporation, BIBNET, and the Ohio College Library Center (OCLC)—as potential sources of retrospective and current MARC II records. File overlap comparisons and a sample of the University of Minnesota Libraries' Twin Cities Campus Union Catalog are included. In addition, methods of partial retrospective conversion and costs of using other bibliographic files in machine-readable form are presented—specifically the University of Chicago Library, the University of California at Berkeley, and the New York Public Library Research Libraries files. Cost-effectiveness analyses of the various alternatives are presented.

***A Mathematical Model of the Illinois Interlibrary Loan Network: Project Report Number Two.*** By William B. Rouse and

others. Coordinated Science, Lab., Univ. of Illinois, Urbana. 1975. 56p. (ED 107 287, MF—\$0.76, HC—\$3.32).

The development of a mathematical model of the Illinois Library and Information Network (ILLINET) is described. Based on queueing network theory, the model predicts the probability of a request being satisfied, the average time from the initiation of a request to the receipt of the desired resources, the costs, and the processing loads. Using a hypothetical network, two sets of operating policies are analyzed: those emphasizing minimum delay and those that maximize the probability of successfully meeting user requests. Cost constraints and value judgments about tradeoffs between delays and the probability of satisfying user requests are considered in the context of network operating policies. The impact of union listings of holdings, automated circulation at the individual libraries, and computer-controlled networks are analyzed. Future plans for network modeling together with the equations used in the network simulation are also presented.

***Black Religion: A Bibliography of Fisk University Library Materials Relating to Various Aspects of Black Religious Life.*** By Johnny J. Wheelbarger. Fisk Univ., Nashville, Tenn., 1974. 22p. (ED 107 309, MF—\$0.76, HC—\$1.58).

Undertaken as a project in the ethnic studies internship program at Fisk University in 1974, this bibliography identifies materials of potential interest to those studying black religion. Entries are listed under seven categories: (1) black religion, (2) the church and race relations, (3) church and state in relation to black religion, (4) church work, (5) ministers and the ministry, (6) oral history taped interviews, and (7) audiotape collections.

***Report of the Commission on Librarianship at Stanford.*** Libraries, Stanford Univ., Stanford, Calif. 1975. 144p. (ED 108 564, MF—\$0.76, HC—\$6.97).

The Commission on Librarianship at Stanford was created in May 1972 to examine the role and status of librarians at the university including professional rela-



tionships, effective use of librarians, salaries and personnel practices, and the involvement of librarians in the library and university environment. The commission's study groups conducted their inquiry through literature reviews and through questionnaires distributed at Stanford and at other academic and research libraries in the United States. The prime recommendation of the study was that a Librarians' Assembly be founded consisting of all librarians at the university. The assembly would serve to improve communication between librarians, increase staff involvement in policy formation, and formulate recommendations to the chief library administrative officers on library operations and personnel policies. The study also examined the role and responsibilities of Stanford librarians in terms of collection development, bibliographic control, public service, library instruction, and management. Twenty-two additional recommendations were made concerning salaries, personnel classification schedules, personnel practices, and employment benefits for librarians.

**Procedures for Salvage of Water-Damaged Library Materials.** By Peter Waters. Administrative Dept., Library of Congress, Washington, D.C., 1975. 40p. (ED 108 657, MF—\$0.76, HC—\$1.95).

Procedures for salvaging water-damaged books, film, archives, and other library materials are outlined, from assessment of damage to final returning of books to shelves. Advice is given on removing the materials, packing, freezing, drying, treating for mold, sterilizing, removing mud, forming a salvage team, evaluating losses, salvaging the catalog, keeping records, controlling humidity and temperatures in work and storage areas, and handling the chemicals necessary in the process. Initial emergency procedures are summarized. Appendixes list sources of assistance, services, supplies, and equipment.

**Planning for Priorities: A Survey of Academic Library Use.** By Gail Schlachter. California State Univ., Long Beach, 1975. 62p. (ED 108 669, MF—\$0.76, HC—\$3.32).

At California State University, Long

Beach, 1,263 students and faculty members responded to a questionnaire regarding the university library. The four-part instrument questioned the respondents' faculty position or student class, course level, and major; their use of the library, both type and frequency; attitudes toward staff collection, and hours; and desired evening and weekend hours for various service areas. The major results of the survey were indications of a strong desire for more weekend hours, especially for the reserve book room, current periodicals, and microforms.

**Handbook for English 48: Introduction to Library Research and Bibliography.** Edited by Carol A. Rominger. Univ. Library, Univ. of California, Davis, 1975. 121p. (ED 108 670, MF—\$0.76, HC—\$5.70).

A handbook has been produced at the University of California at Davis for an English course titled "Introduction to Library Research and Bibliography." The course includes term project, practical assignments, and eight lectures. Objectives for the student include familiarizing himself or herself with the library's resources, increasing competence in information location techniques, developing a systematic method of research, and learning the principles and forms of documentation. Students also learn about library history, organization, procedures, and terminology.

**Cooperative Information Network Interlibrary Loan Non-Filled Request Study.** By Jack Plotkin. Cooperative Information Network, Stanford, California, 1975. 45p. (ED 110 020, MF—\$0.76, HC—\$1.95).

To explain why member libraries were failing to fill interlibrary loan requests, this study surveyed twenty-six public, school, community college, university, and special libraries throughout the Cooperative Information Network (CIN). The study was designed to discover: which libraries were chosen for loans, how soon patrons wanted loan information, how long it took to fulfill patrons' requests, the effectiveness of the source choice, and material (by subject area) that was not available. It was determined that CIN was fulfilling its major objective of providing better library service to all its constituents, but there was room

for improvement in the number of nonfilled requests with no reply (32 percent in this study).

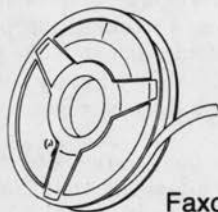
**Quantitative Approaches to the Management of Information/Document Retrieval at the University of Illinois.** Edited by William B. Rouse. Grad. School of Library Science and Dept. of Mechanical and Industrial Engineering, Univ. of Illinois, Urbana, 1975. 48p. (ED 110 025, MF—\$0.76, HC—\$1.95).

Three papers based on projects produced in a course entitled Operations Research and Library Management, jointly sponsored by the Department of Mechanical and Industrial Engineering and the Graduate School of Library Science are reported and explained. Topics covered include an assessment of faculty interest in an information retrieval service; modeling closed-stacks document retrieval; and the effect

of geographic dispersion of the collection on document retrieval time.

**Evaluation of Service at the General Reference Desk, University of Oregon Library.** By Wyma Jane Hood and Monte James Gittings. School of Librarianship, Univ. of Oregon, Eugene, 1975. 65p. (ED 110 038, MF—\$0.76, HC—\$3.32).

A descriptive study was conducted employing questionnaires distributed to users and staff members. The adequacy of information and instructional staff performances, their attitude toward patrons, and the relative proportions of reference and nonreference questions were explored. It was recommended to the staff that methods of performance evaluation should be instituted and periodic self-evaluations should be undertaken, according to reference service standards set by the American Library Association.



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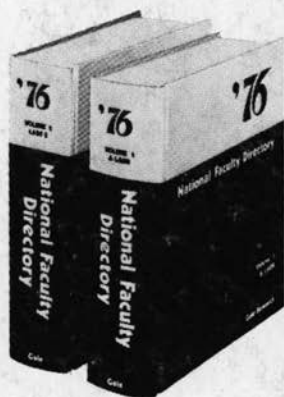
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