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Editorial

A recent cartoon in the *New Yorker* struck home: A man and a woman are walking along a beach, the man thoughtfully looking ahead as the woman says to him, "I do think your problems are serious, Richard. They're just not very interesting." This thought, to a new editor, prompts him to remember that he has a dual mission to the readers of this journal: through his choice and arrangement of articles to present a serious and responsible consideration of pertinent matters and to present them in a way that will engage and retain the attention of his readers.

It has been stated in the past, and we reiterate that *College & Research Libraries* is a journal presenting the reports of scholarly research. It will cover the variety of subjects germane to academic and research librarianship. In this issue, for example, a number of such subjects are represented: resources, interlibrary cooperation, library management, specific library operations as shown in inventory and loan procedures, library automation, and international librarianship. We welcome and encourage new manuscripts for consideration for publication and in this issue present guidelines to authors preparing manuscripts for the journal.

As we encourage new manuscripts, we also trust that authors will present their thoughts in such a way to hold their readers. Recently, the editor of a new journal in the field of higher education, *Change*, gave the back of his hand to library periodicals. Replying to an inquiry, he abruptly dismissed a librarian's questioning the methodology employed in an article in his journal. In the process he accused the library profession in general with an undue emphasis on research methodology "strung out like so much wash." This led him to suggest that this is one reason his journal is read and library journals are not.

That editor's comments notwithstanding, we hope our journal will be read and that as necessary we shall display our methodology discreetly and neatly so as not to offend or discourage our readers.

Through the articles in this journal we shall address many of the recurring problems that confront academic librarianship, with the hope we shall understand them better and possibly achieve some solutions.

RICHARD D. JOHNSON
JESSIE CARNEY SMITH

Special Collections of Black Literature in the Traditionally Black College

A study of collections of black literature in black colleges and universities, including discussions of eight principal collections in these institutions and one major collection in a public library; the organization, administration, and personnel for such collections; kinds of materials collected; programs and services furnished by them; and financial provisions made for their development.

As we view it today, black librarianship, like black education, is between two worlds. The full entrance of black librarianship into the mainstream of librarianship in general is yet to be achieved, and it continues to lie in the outer realm of those institutions which were created to serve a purely segregated society. The high mechanization, massive collections, and generous budgets that characterize many of the prestigious libraries in America are unknown to black libraries. Black institutions and their libraries were born and survived against great odds: those imposed by the society in which these libraries were created, and those imposed as the result of chronic underfinancing.

In his study of the predominantly Negro colleges and universities, Earl J. McGrath concluded that these colleges as a group “lack their share of distinctive or exceptional libraries.” This conclusion may be challenged when critical insight is given to the primary and secondary resource materials collected by some of these libraries. Almost immediately, the incompleteness of scholarship is clearly visible as the untapped sources of black studies materials are identified in the black libraries. While, as a whole, these libraries may be indistinctive and unexceptional, elements of some of them are both distinctive and exceptional.

Libraries in the black institutions have been neither self-sufficient nor self-contained. Despite the fact that there are unique elements among them, the development of these libraries and their collections in black studies materials gives evidence of their potential for contributing to the development of scholarship. The depth that these collections have achieved may be directly attributed to the foresight of early librarians, or sometimes faculty persons, who were endowed with the determination, dedication, and interest necessary.

Mrs. Smith is university librarian, Fisk University, Nashville, Tennessee. This article is based on a chapter of the volume Black Academic Libraries and Research Collections, scheduled for publication by the Scarecrow Press. This project was supported by a grant from the Council on Library Resources.
to preserve black history and culture in records.

**HISTORICAL BACKGROUND**

Patterns in the development of special collections of black literature in the traditionally black colleges vary. In some cases, materials on this subject were in the collection which was established when the college was founded, while in other cases it was through the generosity of benefactors, either in gifts of funds or of materials, that their collections were established. As may be seen in the history of black libraries in general, full histories of the development of these collections are lacking. Through bits and pieces given in some of their records, however, a sketch history can be given.

Special collections of black culture may be found in various types of libraries throughout the United States. One group of these comprises the black institutions—libraries in black colleges and universities, black branches of public libraries, special black research centers, black museums, and black associations and organizations. Other groups include college libraries in the predominantly white institutions; university libraries; private or university-related research libraries; larger public libraries; state libraries; libraries of associations and learned societies (including groups that have religious affiliations); historical societies of states, cities, and counties; museums; and governmental libraries (including the National Archives, presidential libraries, and the Library of Congress).

Libraries in various types of black institutions, whether public or private, academic, political, or social, provide rich and valuable collections of manuscript and archival materials for research in black culture. Unlike the special collections that are found in the predominantly white colleges and universities, special collections that are

found in black colleges and universities tend to be limited to subjects on blacks, or subjects that are black-related. For example, it would not be impossible to find in the black institutions papers of an organization or of a leader that related in some way to the black man's struggles.

Throughout the years, libraries in the black colleges have included materials on black subjects in their collections as they were required to meet the needs of curricular programs in black history or black literature. It may be said that black studies have their founding in the curricular programs offered early in the black colleges. Not infrequently these few courses were offered as a requirement for all students. For the most part, materials supporting these courses were added to the general collection. An examination of collections in many of these institutions for the purpose of a survey of libraries and research collections in the traditionally black colleges which this writer conducted revealed that first editions of important works long since out of print were located on the open shelves, attesting to the fact that librarians or faculties in these institutions had an early interest in gathering black materials.

Collection practices also resulted in the purchase of black newspapers and periodicals. The *National Survey of Higher Education of Negroes* reported in 1942 that

In their holdings of Negro periodicals and newspapers . . . the collections of the Negro institutions are more substantial [than their holdings in other newspaper and periodical titles]. Twenty-five colleges were checked for their holdings of 5 Negro periodicals: *The Crisis, Journal of Negro Education, Journal of Negro History, Opportunity,* and *Quarterly Review of Higher Education Among Negroes*. With but two exceptions they hold all or all but one of the 5 Negro periodi-
cal s mentioned. These same institutions were asked also to report on their holdings of Negro newspapers. The returns to the questionnaire show that their holdings of Negro newspapers are fairly strong.2

Libraries in eight of the traditionally black colleges examined for this survey maintain exceptionally rich resources in black studies. These are Atlanta University, Dillard University, Fisk University, Hampton Institute, Texas Southern University, Lincoln University (Pennsylvania), Tuskegee Institute, and Howard University. While only seven of these libraries participated in the survey, the eighth, Howard University, is being reported because of its significance to the purpose of the survey. Each of the eight libraries was visited in connection with the project, and their collections of black materials were examined in as much detail as possible.

Atlanta University

At Atlanta University, the history of the Negro collection as a separate department dates back to 1946, when the university purchased the famous Henry P. Slaughter Collection. Represented in this collection were materials by and about the black man from many countries. In 1932 Anson Phelps presented to the Trevor Arnett Library at Atlanta University a collection of papers of Thomas Clarkson, English abolitionist, who lived between 1760 and 1846. The larger Negro Collection also contains a Countee Cullen Memorial Collection of black materials, founded at the university in 1942 by Harold Jackman, a friend of the late Countee Cullen. The founder moved in artistically creative circles in America and in Europe and was associated with the brilliance of the Harlem Renaissance during the 1920s and 1930s. An authority on arts and letters, he was also consistently devoted to the major artistic movements in Harlem and in Greater New York. He met some of the notable par-

ticipants of the Harlem Renaissance (a literary and cultural movement among black people, centered in Harlem), such as Langston Hughes, Rose McClendon, Claude McKay, and Countee Cullen. The Harold Jackman Memorial Committee continues the efforts of Jackman by presenting additions to the collection periodically.3

The Thayer Lincoln Collection was opened in the Atlanta library in 1953. Items there form perhaps the most important collection on "The Great Emancipator" that is located in the South. The collection was a gift of Mrs. Anna Chrit tendon Thayer of New York, who maintained a lifetime interest in Lincoln.

Recent additions to the collections are the papers of Irwin McDuffie, Clark Foreman, the Chocotoquah Circle, and C. Eric Lincoln, who has written on the Black Muslims in America and who served on the Atlanta faculty.

Dillard University

In 1969, when the Amistad Research Center moved from Fisk to Dillard, it took an unusual collection of research items to a campus where few materials of that nature had been maintained. Although not properly a part of the Dillard library or of the university, it may be counted among the collections on the black campuses. The American Missionary Association Archives, which form the major portion of the collection, were formerly at Fisk University, where they were deposited in 1947.

Other materials in the Amistad Center include the Countee Cullen Collection, the American Home Missionary Society Archives, the Mary McLeod Bethune Papers, the Marguerite D. Cartwright Papers, and Archives of the Race Relations Department of the United Church Board for Homeland Ministries.

Fisk University

One of the oldest, most exhaustive,
and most distinguished collections of black studies materials is housed in the Fisk University Library. The history of the institution indicates that, when it was founded in 1866, there were some materials about the black man in the library which was already established at that time. When a new building was erected in 1908 to serve as a library and for other purposes, provisions were made in it to house special black materials.

Fisk made its first systematic effort to assemble materials by and about the black people in 1929-30, when it made special provision for housing these items in a separate collection as a part of the library's resources. Foreign dealers were consulted in an effort to obtain materials. Some of the outstanding purchases of the day included manuscripts which dealt with the early history of the black domestic servant in Europe.

Arthur A. Schomburg, a Puerto Rican of African descent, was appointed curator of the collection in 1929. Later associated with the Schomburg Collection of the New York Public Library as curator, Schomburg provided the impetus for maintaining a collection which was similar to his own distinguished one.

In 1936 the Fisk library received its first big boost, both in financial support and in materials acquired. In that year Fisk purchased the entire library of the Southern YMCA College located in Nashville, Tennessee. The YMCA College library existed under the direction of W. D. Weatherford, who was a local pioneer in collecting materials in the field of race problems. The YMCA library specialized in securing materials relating to the black man since 1865. As the YMCA collection merged with the Fisk collection, which specialized in black materials prior to 1865, an outstanding group of research materials was formed.

The Fisk collection has been greatly augmented by periodic gifts and purchases. The E. R. Alexander Collection, founded at Fisk in 1945, is an example of this. Established by Mrs. Alexander in honor of her husband, the intention was to provide for Fisk the opportunity of acquiring items that might be too costly for the university to purchase otherwise. Of particular importance among the materials there were the more than 200 published minstrel sketches.

A small, yet valuable, group of manuscripts, photographs, programs, sheet music, and other items was presented to Fisk in 1948, forming the Scott Joplin Collection. The Langston Hughes Collection, presented to Fisk in the 1940s by the author himself, also helped to enrich the history and resources of the library. Upon the author's death in 1967, and under terms specified in his will, a large collection of tape and disc recordings was added to the existing Langston Hughes Collection.

The Charles Waddell Chesnutt Collection, acquired by Fisk in 1952, includes important research materials relating to this popular figure.

In 1962 Mrs. Jean Toomer presented to the Fisk library the papers of her husband, one of the most significant writers of the Harlem Renaissance. An additional group of papers was added in 1967, after the death of Jean Toomer.

Among other groups of materials which the Fisk library acquired were the papers of Charles Spurgeon Johnson in 1967, the Julius Rosenwald Fund Archives in 1948, and a considerable number of items of W. E. B. DuBois in 1961.

Although not dealing exclusively with black subjects, the George Gershwin Memorial Collection of Music and Musical Literature is a valuable source of materials relating to the black man. The collection was presented to Fisk in 1944 by
Carl Van Vechten, in honor of his close friend.

An unusual part of the Fisk collection is a group of paintings which form the Baldridge Collection. These sketches were presented to the library in 1931 by Samuel Insull of Chicago.

More recent additions to the Fisk collection include a group of 1,334 notable titles on the black man in Africa and America, the Goodman-Schwerner-Cheney Collection of black books for children, and smaller manuscript collections such as those of Naomi Long Madgett, Slater King, John W. Work, Louise Meriwether, William Lloyd Imes, and Robert Burgette Johnson, son of Charles Spurgeon Johnson.

**Hampton Institute**

The Hampton collection was established in 1905, when George Foster Peabody purchased 1,400 books, pamphlets, and other documents from Tucker A. Malone and loaned them to the library. The loan was changed to a gift in 1908.

In 1914 the private collection of Phil B. Brooks of Washington, D.C., was purchased. This collection of 10,000 books, pamphlets, and documents dealt with slavery and reconstruction in the United States. Included were original bills of slaves and inventories of slaves on plantations.

Among the archival materials in the collection, some of which date back to 1868, are items on the proceedings of the Lake Mohonk Negro Conference; slavery documents; records and correspondence relating to the American Missionary Association and Hampton Negro Conference; 3,000 photographs of persons and events in the history of the institute; and papers relating to Hollis Burke Frissell, Samuel C. Armstrong, Booker T. Washington, Alexander Crummell, Frederick Douglass, James Weldon Johnson, and Mary McLeod Bethune. Other items in the collection include transcripts of interviews with former slaves in Virginia.

Hampton's early emphasis on education for black as well as Indian students is represented in the archives. Letters to Indians and materials on the Indian Rights Association are included.

Beginning in 1970, rigorous efforts were made to expand and to update substantially the collection of black titles. The Hampton collection is perhaps the foremost untapped source for research in black studies. Unlike libraries at Howard, Fisk, and Tuskegee, the Hampton collection has been overlooked by scholars who write on black subjects.

**Howard University**

In 1914 the Moorland Foundation, the Library of Negro Life and History, was established by the board of trustees of Howard University. At that time one of the trustees, Jesse E. Moorland, gave the university his private library of more than 3,000 items relating to black subjects, many of which were engravings, portraits, manuscripts, curios, pictures, and clippings. Through a combination of the Moorland materials and those of Lewis Tappan, which had been donated to the library in 1873, one of the most valuable collections on antislavery literature was formed.

Through the years numerous collections have gravitated to the Moorland Foundation and have thus made possible a constantly growing collection of great significance.

The Moorland Foundation is not unlike the notable black collections assembled in such black institutions as Hampton, Tuskegee, and Fisk in the manner in which it developed during the years. Although the Moorland Foundation was built around two private libraries, the distinguishing feature of its development has been in its relationship to the curriculum. Its focus and expansion were basically conditioned by courses which Howard offered in black life and
culture as well as by its traditional courses which also included a study of black subjects.

At the time of this investigation, the collection contained over 100,000 cataloged and indexed volumes. Some of the manuscript materials in the collection include papers of Blanche Kelso Bruce, Thomas Clarkson, Frederick Douglass, E. Franklin Frazier, the Grimke family, Oliver Otis Howard, Alain Leroy Locke, Kelly Miller, the Washington, D.C., branch of the NAACP, P. B. S. Pinchback, Rosey Pool, Joel E. Spingarn, Arthur E. Spingarn, Mary Church Terrell, U.S. Colored Troops, Booker T. Washington, and Daniel Hale Williams.

**Texas Southern University**

The Heartman Negro Collection of Texas Southern University was purchased in 1948 from Charles Frederick Heartman, a book dealer and author, who spent from forty to fifty years gathering the materials for his private collection. Most of the collection was developed near Biloxi, Mississippi. For many years the Heartman Collection had a historical emphasis, while in recent years the entire emphasis of the collection of black literature has centered on more contemporary items.

The private collection of another individual, whose identity has not been determined, also helped form the basis for the development of the black collection at Texas Southern. Together these two collections helped form perhaps the largest and most important collection of this type in the southwestern part of the United States. The library also houses the university’s archives, which date from the founding of Texas Southern in 1947.

**Lincoln University**

While the exact origin of the Negro Collection at Lincoln University (Pennsylvania) is unknown, the collection was established between 1935 and 1940. Holdings include over 6,000 volumes, numerous periodicals, pamphlets, and other items. Books on Africa, which are included, emphasize the area south of the Sahara.

University archives, dating back to 1845, have been collected. In addition, the library contains the minutes of the Pennsylvania Colonization Society, covering the period 1838–1913. Of particular importance is the Langston Hughes Collection, which contains the personal library and certain literary effects of this noted Harlem Renaissance writer.

Special gifts which the library has received in recent years include the Langston Hughes Collection of 3,000 items; the Reid Collection, which consists of 500 books on Africa, the Negro, and sociology; and the Scott Collection, which consists of 375 general titles on black subjects. In 1968–69 the Negro Collection was greatly augmented through the purchase of the entire holdings of a local bookstore.

**Tuskegee Institute**

The Tuskegee Institute collections were established in the early 1900s by bringing together materials of the older Department of Records and Research at Tuskegee, which was begun by Monroe Nathan Work and continued by Jessie Guzman. In more recent times, additional items in different collections have been assembled and acquired by the present archivist, including materials on the history of the poll tax in the South.

**Schomburg Collection**

Although not associated with a black college, the Schomburg Collection of the New York Public Library (the 135th Street Branch) should be recorded among the significant collections of black materials available for research. The collection is considered one of the most important centers in the world for research and study in black culture.

The Schomburg Collection has three histories, each playing a central part in its development. In the infancy of the
New York Public Library itself, some interest was shown in collecting black materials. Materials relating to the American Colonization Society and items on slavery were collected by the library in this early period.

The Harlem community, in which the Schomburg Collection is located, is equally significant in its history. In 1905 the 135th Street Branch of the New York Public Library was established to serve a neighborhood of affluent American Jewish people. An influx of black people changed the ethnic composition of the community, so that by 1920, it was half-black. Ernestine Rose was appointed librarian and charged with the responsibility of adapting the collection to serve an altered public.

By 1924 the Harlem Renaissance, a cultural revolution in which black writers, musicians, artists, and scholars were beginning to express their talents, was in bloom. The Renaissance leaders and their works attracted talent and leadership from black people all over the United States and the Caribbean, and they joined the 150,000 black persons who had migrated to Harlem by 1924. Harlem was thus the acknowledged capital of black America.

The rigorous efforts of Ernestine Rose and such leaders as Arthur A. Schomburg, Louise Latimer, J. E. Bruce, James Weldon Johnson, John B. Nail, and others culminated in the founding of the new Division of Negro Literature, History, and Prints on May 8, 1925, at the 135th Street Branch.

In 1926 the Carnegie Corporation of New York purchased the private library of Arthur A. Schomburg and presented it to the 135th Street Branch. This acquisition of between 5,000 and 6,000 volumes, 3,000 manuscripts, 2,000 etchings, and thousands of pamphlets formed the nucleus of the materials in the Division of Negro Literature, History, and Prints. Schomburg was retained as curator of the collection in 1932 through a financial gift from the Carnegie Corporation.

The Schomburg Collection, the title by which the 135th Street Branch is commonly known, now represents a reference and research library which provides various types of manuscript and archival items relating to black authorship, history, and historical works, photographs, broadsides, and other materials. Papers of such notable black persons as Ira Aldridge, William Stanley Braithwaite, Alexander Crummell, Countee Cullen, Jupiter Hammon, Langston Hughes, Alain Leroy Locke, Rose McClendon, Claude McKay, Hiram Rhoades Revels, Arthur A. Schomburg, Harriet Tubman, Booker T. Washington, and Richard Wright are included in the collection.

During the years black collections in such libraries as the 135th Street Branch of the New York Public, Howard, Fisk, Yale, UCLA, and others have felt the influence of such persons as Arthur A. Schomburg, Carl Van Vechten, Langston Hughes, and Arthur Spingarn, either through materials which they presented to these libraries to enrich their collections or through the purchase of collections which they had assembled. Such persons have therefore had a marked effect on the development of notable collections of black literature.

In addition to their focus on black materials, the common element in the history of black libraries just described, including the Schomburg Collection, is the lack of proper financial support, staff, and quarters for processing and preserving the rich materials and for making them more readily available to scholars. While they have relied heavily upon gifts of notable materials to help build the collections, these libraries have been handicapped by lack of financial support required to maintain the collections. At the other extreme are the rewards that these collections can bring to scholars by the mere fact that they
have survived in spite of undue hardships.\textsuperscript{4}

\textbf{ADMINISTRATION, ORGANIZATION, AND PERSONNEL}

A study of the administrative organization of black libraries housing materials in black studies indicates that twenty-seven, or 41.5 percent, of sixty-five libraries reporting have established separate collections of black studies materials, or special collections. Thirty, or 46.1 percent of the total, reported that black materials in their libraries were distributed among items in the general collection. Eight libraries failed to return this portion of the questionnaire which was used to gather data.

Patterns in administration of the special collections of black materials vary. Five of the libraries reported that their special collections departments were administered by a full-time librarian whose primary responsibility lay in that area. Seven reported that the collections were administered by a librarian with shared responsibility, devoting a part of his or her services to directing activities in special collections. The remaining collections were directly supervised by the head librarian.

Reporting on the assignment of staff members to special collections departments, findings show that thirteen libraries followed this plan, with five reporting that their services to the collection were full time. One of these assigned two professionals to the collection on a full-time basis. Ten libraries employed semiprofessional staff members in the collection, with two libraries reporting that their services were full time in the collection. The number of hours of student assistance for the collections was generally unavailable.

In each instance in which the collection was administered separately by persons other than the head librarian, such persons held the master's degree. Subprofessional and clerical persons assigned to the collections held at least a bachelor's degree.

Thirteen libraries indicated that staff persons serving these collections continued their professional development through attendance at in-service meetings, workshops, and conferences of professional organizations. These included annual meetings of the Association for the Study of Negro Life and History (now the Association for the Study of Afro-American Life and History); an institute in the Selection, Organization, and Use of Materials by and about Negroes, held at Fisk University; conferences on the administration of archives; a conference on Materials by and about American Negroes, held at Atlanta University; institutes on archival preservation; an institute on Bibliographic Sources for a Study of the Negro, held at Howard University; and short-term conferences and institutes on more local levels. Seven libraries reported that their staffs had received additional formal education beyond their last degree.

Conferences with staff persons indicated that each of the twenty-seven libraries housing separate and special collections of black literature is seriously understaffed in these areas. Such libraries as Atlanta, Fisk, and Tuskegee, which are used heavily by researchers from various parts of the country, are especially burdened. They are required to serve increasing needs of students and faculty as well as to lend research assistance, each demanding more time than present staffs can provide. Other libraries such as Hampton, Lincoln (Pennsylvania), and Florida A&M, which are anxious to broaden their services, are handicapped in their activities because of staffing inadequacies.

It would appear that the staff persons serving these collections, although limited in number, are well-trained and continue their education through workshops, institutes, and other activities. To
overcome their difficulties, however, all of the libraries that have plans to improve their services will be required to increase their staffs. In reporting the staff needs for the five-year period beginning July 1, 1969, and ending June 30, 1974, eighteen libraries indicated that they require an additional seventy persons, with most of these needs in professional positions. Only three libraries indicated that they need to add archivists to their staffs.

Written policies governing the administration and use of these collections were available in nine libraries, with the remaining fifty-six reporting that no such policies were prepared.

Profiles of the Collections

If maximum benefits are to be reaped from special collections of black materials, the collections must be organized and indexed in an appropriate manner. Where book collections are concerned, this necessarily means that an accepted scheme of classification must be adopted. In terms of classification schemes used, findings show that eleven of the twenty-seven libraries who have separate collections of black materials used the Dewey Decimal Classification for processing materials in special collections. Three libraries reported that they used the Library of Congress Classification, while ten reported that they used both LC and DDC. Three libraries had no substantial cataloging arrearages in monographic works.

Visits to the libraries showed that, where archival materials were concerned, the processing of such materials was incomplete. For the most part, these materials had been collected and were housed either in the library building or elsewhere on campus. Little had been done to index them. Collections at Hampton, Howard, Fisk, Lincoln (Pennsylvania), and Tuskegee, which included vast amounts of original research materials, were partially indexed and preserved either through microfilming or by storing them in acid-free folders and in manuscript boxes. Equally large amounts of materials were unprocessed and, consequently, unavailable for use. In addition, some of these materials were collected years ago but were unprocessed because funds were unavailable to provide staff of sufficient number and expertise to handle them.

Analysis of the scope and content of materials on black subjects housed in the traditionally black college libraries revealed that for the most part, and with the exception of the few research collections, increasing amounts of materials were gathered to support the epidemic of black studies programs. Archival materials that were in many of these collections had been housed earlier in administrative offices and recently added to the library.

Thirty-five of the institutions reported curricular programs in black studies, with degrees given in four and a minor offered in three. Fourteen offered programs in African Studies, with degrees offered in two institutions and a minor offered also in two institutions. These new emphases, or a re-emphasis on black subjects already offered in these institutions over the years, stress the need for developing strong collections of black materials to support the programs.

In general, the scope of the collections in black studies in the historically black college libraries is geared to the curricular program. Several of these libraries, most of them privately supported, have gathered other valuable research items along with their collections of books and periodicals. Such collections, therefore, serve curricular as well as research requirements in black studies.

Descriptions of the larger, richer collections (particularly manuscript materials), such as those at Hampton, Atlanta, Fisk, Lincoln (Pennsylvania), and Tuskegee, have been presented in vari-
ous published guides. These include the *National Union Catalog of Manuscript Collections*, *Directory of Afro-American Resources* by Schatz, *Guide to Manuscript Collections* by Hamer, and *Subject Collections* by Ash. In addition to these sources, many of the black libraries have published handbooks, guides, acquisition lists, and other items which record and/or describe the contents of the collections. Examples of these are "Guide to Manuscripts and Archives in the Negro Collection of Trevor Arnett Library" and "Special Collections in the Fisk University Library."

Five of the libraries included in the survey have published book catalogs of their collections. These are Hampton, Florida A&M, Jackson State, Lincoln (Pennsylvania), and Texas Southern. Libraries not reporting in the survey who have issued notable book catalogs are Howard and the Schomburg Collection of the New York Public Library.

Statistics of the number of volumes in black studies were available from nineteen libraries, each maintaining separate special collections. Table 1 shows that as of September 1969 there was a total of 132,578 volumes in black studies in these libraries, the largest reported at 30,000 volumes, and the smallest at 50. Collections housing sizeable amounts of black studies materials were Atlanta (21,000), Fisk (30,000), Hampton (11,314), and Texas Southern (18,000). The table shows further the percent of total library materials identified as those in black studies. It must be pointed out that certain libraries, such as those at Southern, Grambling, and Prairie View, have other black studies materials in the

TABLE 1

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Volumes in Black Studies</th>
<th>Total Volumes in Library</th>
<th>Percent in Black Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>pAlabama A &amp; M</td>
<td>2,103</td>
<td>104,641</td>
<td>2.0</td>
</tr>
<tr>
<td>pArkansas A M &amp; M</td>
<td>1,700</td>
<td>59,523</td>
<td>2.8</td>
</tr>
<tr>
<td>vAtlanta</td>
<td>21,000</td>
<td>240,000</td>
<td>8.7</td>
</tr>
<tr>
<td>vBenedict</td>
<td>6,000</td>
<td>49,261</td>
<td>12.1</td>
</tr>
<tr>
<td>pCentral State</td>
<td>2,000</td>
<td>90,000</td>
<td>2.2</td>
</tr>
<tr>
<td>pCheyney</td>
<td>2,000</td>
<td>86,760</td>
<td>2.3</td>
</tr>
<tr>
<td>vClaflin</td>
<td>767</td>
<td>36,385</td>
<td>1.9</td>
</tr>
<tr>
<td>vFisk</td>
<td>30,000</td>
<td>163,467</td>
<td>18.3</td>
</tr>
<tr>
<td>vFlorida Memorial</td>
<td>2,000</td>
<td>41,862</td>
<td>4.7</td>
</tr>
<tr>
<td>pGrambling</td>
<td>1,250</td>
<td>80,754</td>
<td>1.5</td>
</tr>
<tr>
<td>vHampton Institute</td>
<td>11,314</td>
<td>120,616</td>
<td>9.3</td>
</tr>
<tr>
<td>vJarvis Christian</td>
<td>910</td>
<td>38,522</td>
<td>2.3</td>
</tr>
<tr>
<td>pKentucky State</td>
<td>4,305</td>
<td>58,806</td>
<td>7.3</td>
</tr>
<tr>
<td>pLangston</td>
<td>1,714</td>
<td>108,218</td>
<td>1.5</td>
</tr>
<tr>
<td>vLeMoyne-Owen</td>
<td>3,000</td>
<td>50,586</td>
<td>5.9</td>
</tr>
<tr>
<td>vLincoln (Pennsylvania)</td>
<td>6,893</td>
<td>117,612</td>
<td>5.8</td>
</tr>
<tr>
<td>vLivingstone</td>
<td>2,476</td>
<td>44,156</td>
<td>5.6</td>
</tr>
<tr>
<td>vMorris</td>
<td>1,900</td>
<td>21,025</td>
<td>9.0</td>
</tr>
<tr>
<td>vPaul Quinn</td>
<td>2,000</td>
<td>25,150</td>
<td>7.9</td>
</tr>
<tr>
<td>pPrairie View</td>
<td>1,696</td>
<td>116,385</td>
<td>1.4</td>
</tr>
<tr>
<td>vSt. Augustine</td>
<td>4,000</td>
<td>49,009</td>
<td>8.1</td>
</tr>
<tr>
<td>vSouthern University</td>
<td>700</td>
<td>212,435</td>
<td>0.3</td>
</tr>
<tr>
<td>vStillman</td>
<td>850</td>
<td>38,121</td>
<td>2.1</td>
</tr>
<tr>
<td>pTexas Southern</td>
<td>18,000</td>
<td>179,866</td>
<td>10.0</td>
</tr>
<tr>
<td>vXavier</td>
<td>4,000</td>
<td>102,891</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>132,578</strong></td>
<td><strong>2,239,024</strong></td>
<td><strong>13.68</strong></td>
</tr>
</tbody>
</table>

p—Publicly supported.

v—Privately supported.
general collection that were not reported.

Materials in forms other than books, periodicals, and newspapers were found in a number of these libraries, particularly in the special collections of black materials. Types of materials reported in the various libraries are shown in Table 2. As the table indicates, slightly more than one-third of the libraries included in the survey reported no holdings in black studies materials in the form of microfilm, Microcard, and Microprint. Thirty-five libraries reported that college archives are collected. Other types of materials are generally less well represented in these collections.

Special gifts of materials that have been added to these libraries during the past five years include a number of manuscript collections in such libraries as Atlanta, Hampton, Fisk, Lincoln (Pennsylvania), Tuskegee, Virginia State, Kentucky State, and Livingstone. Some of these collections also include books. In 1969 the Southern Association of Colleges and Schools presented collections of paperback books in black studies to each of the black college libraries. The purpose of the gift was to enrich holdings in this area and to make the materials easily accessible to students, particularly in libraries where few materials of this type had been collected. An examination of the collections in these libraries revealed that these materials greatly enriched black studies materials already gathered, frequently forming the nucleus of newer collections in that area.

Of particular significance to those colleges who were members of the United Negro College Fund in 1969, the 3M Company helped to supplement and to enrich their special collections and general materials on black studies by presenting a collection of materials on microfilm as well as two reader-printers for their use. The collection consisted primarily of black studies materials filmed in the Schomburg Collection of the New York Public Library and was designed for use in curriculum enrichment.

Frequently, the development of collections along desirable lines is more easily assured when acquisition policy statements are prepared and observed. Ten libraries reported that such policies had been developed for collecting black materials, with eight of these reported in libraries where separate special black collections were established.

Materials used for book selection in these libraries generally included such sources as Bibliographic Survey, Ebony, Black World, Journal of Negro History, Negro History Bulletin, Publishers' Weekly, Choice, Freedomways, Bibliography of the Negro in Africa and America, and catalogs of various reprint companies. Atlanta and Fisk reported use of Library of Congress catalog cards, which have been sent to them continuously over the years expressly for the purpose of selection in this area. A few libraries used the Dictionary Cata-
log of the Schomburg Collection of Negro Literature and History for building collections.

Responsibility for selection of materials was generally placed with the library staff, with the faculty assuming much less responsibility in this area. In some instances, however, the faculty and the library staff shared this responsibility.

The physical condition of materials on black subjects in these libraries was generally good. Four reported that the materials were in fair condition, while two reported that their condition was poor. Some of the manuscript and archival materials in the larger research collections were brittle and fragile, as they succumbed to extreme conditions of heat, humidity, and dust over the years, at times before they were acquired by the library and at other times after they were collected.

FACILITIES, SERVICES, AND PROGRAMS

Standards of the American Library Association suggest that the success of a library's services is presupposed by an adequate library building, with ample quarters for processing and similar activities. Ideally, services which the library undertakes must be provided for in areas that are well-planned. These standards are immediately applicable when special collections are provided. Buildings must take into consideration the functions that special collections are to serve, particularly when these functions involve service to the students and faculty as well as research functions, as is the case with several of the black colleges.

In studying facilities for housing and servicing special black collections in the twenty-six libraries reporting, it was found that quarters in three libraries were excellent, those in fourteen were good, those in four were fair, and those in four were poor. Two responses were not given. Nineteen of the libraries reported that quarters for special collections were air-conditioned. The condition of furniture in these libraries ranged from excellent to poor and was about evenly divided in the various categories.

Size of quarters varied. Two libraries had exceeded their capacity; another, a new facility, had already reached its capacity; while ten had room for expanding the collection. For the most part, seating was provided at tables in special collections areas, with few provisions made for individual as well as informal seating.

Access to stack areas housing these materials was provided for undergraduate students in seventeen libraries, with ten reporting that stacks were closed. Graduate students were provided direct access to stacks housing black studies materials in seven libraries, although some of the reporting libraries had no graduate students. Faculty access to the stacks was provided in seventeen libraries. Eight libraries reported that stacks were closed to all patrons.

As in libraries generally, loss of materials through theft was a common problem. Frequently, such losses reached serious proportions and deprived students and faculties of items needed almost daily for class work. Popular and classic works such as Soul on Ice, The Negro in American Culture, and From Slavery to Freedom were nearly always lost. New materials placed on the shelves frequently disappeared immediately when they met the current interests of patrons.

Equipment available in the special collections areas generally included microfilm readers, microfilm readers-printers, record players, filmstrip projectors, and slide projectors.

Hours of service varied from a high of ninety per week to a low of forty-four. Service at night was provided in twenty libraries, with the highest number of night hours reported at twenty-
nine, and the lowest at four. Sunday hours were provided in nineteen libraries, with a high of eight hours provided in one library as compared with a low of three in another.

Statistics on use of the collections, including interlibrary loan, were generally unavailable, as many libraries counted use of the collections with those of the general circulating collection. Materials in the majority of these libraries were available for use outside the library, with twelve libraries reporting that materials were restricted to room use only.

Thirty-one libraries reported that they provided special services, such as preparation of bibliographies. Common practices among the libraries were assistance to faculty, students, and members of the community in compiling bibliographies; presenting special book reviews, lectures, and other activities during Negro History Week; and generally lending assistance as needed. Libraries housing sizeable amounts of original research materials reported that they provided research assistance to visiting scholars and assisted in the use of these materials.

Of those collections housed separately, six libraries reported that they contributed to union lists of materials; nine participated in cooperative acquisition programs with other libraries in the region, while seven were involved in special agreements concerning use of materials with other libraries. Of those libraries incorporating black materials in the general collection, six were engaged in consortia activities which involved the collection and/or use of black materials.

Plans for automating various activities in special collections were reported under consideration in three libraries. These included information retrieval and preparation of bibliographies.

FINANCIAL ASPECTS

As is true with general library collections, adequate financial support must be provided to permit proper development of the collection. When special collections are provided, it follows that increased budgets will be needed to support the development of services for which these collections are maintained. Special collections may require additional staff persons, depending on the administrative organization of this part of the library.

Separate budgets for the support of special collections were generally not provided in the libraries reporting. In only two instances were separate budgets established. Libraries indicated that funds from the regular library budgets were used for this purpose.

In attempting to determine whether or not special financial grants had been provided to support these collections during the years 1964–65 through 1968–69, it was found that six libraries received a total of $83,961 during the years in question. Grants varied from a high of $32,000 to a low of $1,200. None of the collections was endowed.

A full appraisal of the expenditures for library materials in black studies in the reporting institutions, including grants and gifts as well as funds from the general library budget, cannot be made.

Expenditures for materials in black studies were generally made by the library staff, with a few instances of allocations to departments. Such departmental allocations were made in connection with total library development, rather than with a view toward exclusive development of special collections. Proper development of the collections was attempted by strengthening weak areas as well as by gearing selection practices to fit the needs of the curricular and research programs.

PROJECTIONS FOR THE FUTURE

Libraries were asked to report any special problems they faced which af-
fected the development or use of their special collections. Responses may be summed up in terms of spatial and financial needs, as many of the quarters were crowded, with little provision for staff work space. A number of the libraries were understaffed, particularly in terms of librarians with expertise needed to administer the collections. All libraries reported inadequacies in the financial support received, asserting that their unfilled needs were the primary reasons behind their problems.

Projections for the future included strengthening and greatly expanding the book collections, gathering college archives, expanding collection practices to gather other materials in the region, enlarging quarters, moving into new quarters, adding new staff, and developing black oral history programs.

SUMMARY OF FINDINGS

The development of collections of black literature in the traditionally black college libraries showed varying patterns, with some libraries reporting the inclusion of such materials in their libraries from the year of inception and others reporting the establishment of collections in later years by interested benefactors. Still others, in more recent years, established these collections to support the epidemic of curricular programs in black studies or, in some instances, as a response to the demands of students protesting the absence of such materials in forms more visible to them.

The exceptional libraries found in the black colleges are those that have developed rich collections in black studies materials. Although they may be lacking in other areas, the libraries in which these collections are found have become notable. Even with this achievement, the libraries have not been without problems of underfinancing, cramped quarters, and insufficient staffs to process materials and to serve the needs of students, faculty, and scholars who use the collections.

Collections of black literature now found in the traditionally black libraries serve one or more purposes, depending on the nature of the resources. Some may be geared to serve only the instructional program of the institution; some serve the curricular needs as well as the research requirements of scholars; and, in almost every instance, each responds to the requirements of the community by providing resources in this area. If these needs are to be met, and if these libraries are to continue to function in their traditional roles simultaneously, they will require additional and substantial financial support.

The history of black people, black colleges, and black libraries supports the conclusion that the black heritage must be preserved. Black students, and others, must be introduced to this heritage more completely through larger, richer collections of black literature. The traditionally black colleges and their libraries share this responsibility.

REFERENCES

A Study of Interlibrary Loan

From an examination of the data in several recent studies of interlibrary loans, an estimate of the present volume and general statements about interlibrary loan for all types of libraries in the United States can be made. Differences in interlibrary loan activity according to the type and size of library, the format, subject, recency, and language of material most requested, the success rate, time, and cost per transaction are noted.

Apart from our oaths, our threats, our tears and fears and resolutions and promises, apart from all of our emotional responses, what do we really know about interlibrary loan? Who borrows what from whom for what purposes? How good is the present system, and what is its future? The writer examined recent literature on interlibrary loan as part of a study of the feasibility of a national and of regionalized interlibrary loan centers made in 1972-73 for the Association of Research Libraries.1 What was most apparent in this examination was how little is known about interlibrary loan in the United States on any general scale. The most complete study was the doctoral dissertation of Sarah Thomson completed in 1968 at Columbia University, “General Interlibrary Loan Services in Major Academic Libraries in the United States.”2 A more recent but less thorough survey was made for the Association of Research Libraries by the Westat Corporation: Vernon Palmour and others, A Study of the Characteristics, Costs, and Magnitude of Interlibrary Loans in Academic Libraries (1972).3 These are the only studies of nationwide interlibrary loan but are limited to loans by or to academic libraries.

Loans involving an academic library as lender or borrower or both have traditionally been thought to make up the major part of interlibrary loans. Several recent studies involving all types of libraries in a state or an interstate region have indicated, however, that academic loans are only a part of the picture and a small part at that. Studies of interlibrary loan within a state or interstate region vary from brief journal articles or studies of various cooperative services in the area, of which interlibrary loan is only a part, to full-scale studies of interlibrary loan services. The best examples of the latter are the several studies made by Nelson Associates, Inc., of NYSILL, the interlibrary loan system developed for New York State, and especially Interlibrary Loan in New York State.4 From an examination and comparison of the data provided by the two national studies and by several recent studies of state or regional areas, a number of generalizations can be made of the characteristics of interlibrary loan today. In this paper an attempt will be made to provide answers to the following: What types of libraries borrow most on interlibrary loan? What types are the principal lenders? What is the
geography of interlibrary loan? What is the nature of the items borrowed? What degree of success in completion of interlibrary loan is usual? What is the average time necessary to complete loans? What is the cost to the lender, and what is the cost to the borrower? Finally, what changes in interlibrary loan may be expected in the near future?

Sarah Thomson reported 845,000 requests received by academic libraries in the United States in the year 1963/1964.\(^5\) By 1969/1970 the number received by academic libraries had more than doubled, 1,750,000, based on a sampling made by the Westat Corporation.\(^6\) No one knows what the total quantity of interlibrary loan requests handled by nonacademic libraries might be at the present time. The study of interlibrary loan in New York State indicated that less than 10 percent of the 644,000 requests from libraries of all types in New York State in 1968 were sent to college and university libraries in or outside of the state. This finding cannot be taken at face value, however, because it does not account for the loan requests handled by the state's large university libraries when functioning as part of regional networks or of NYSILL, the state's interlibrary loan system.\(^7\) Nevertheless, by a conservative estimate, the total quantity of interlibrary loan activity in the United States now could well be between six million and seven million requests per year.

**Types and Sizes of Libraries**

Which types of libraries originate most of these requests? In the Thomson study and in the study by Vernon Palmour and colleagues at Westat Research, Inc., it was shown that 75 percent and 60 percent, respectively, originate from academic libraries.\(^8\) Both of these studies, however, were restricted to academic libraries either as borrowers or lenders or both. The type of library requesting most titles after academic libraries in the Thomson and Palmour studies was the special library, from which 19 percent and 17 percent of the requests originated, while the public library initiated only 5 percent and 8 percent of the requests. A quite different order of types of libraries making most requests is provided in the New York State study.\(^9\) Of the 87,220 requests from all types of libraries in the state processed at the New York State Library in 1968 by NYSILL, 74 percent came from public libraries and 24 percent from academic libraries. Not included in this statistic were loans handled directly between libraries, without processing through NYSILL, whether inside or outside the state.

Some further information on the proportion of requests from the different types may be obtained from the study of the Bibliographic Center for Research, Rocky Mountain Region, by Casey, from two studies of the Pacific Northwest Bibliographic Center by Currier and Taylor, and from a study of network capabilities in the state of Washington by Reynolds. In these studies of interlibrary loan requests from all types of libraries within a state or region, from 51 percent to 63 percent of the requests came from public and state libraries.\(^10\) The justification for combining state library requests with those from public libraries is that state libraries have most often served as resource libraries for the public libraries in the state. The evidence leans toward ranking public libraries, public library systems, and state libraries as the heaviest borrowers. Academic and special libraries initiate less than half of the requests, when interlibrary loan activity among all types of libraries is considered.

What types of libraries are most frequently the recipients of requests? It
has long been assumed that a handful of large research libraries bears the greatest part of the burden of supplying items requested on interlibrary loan, and Thomson's data show, in fact, that the forty-three largest libraries (less than 6 percent of the academic libraries) account for more than 80 percent of the total number of items lent. Palmour's data indicate that more than 75 percent of requests are addressed to the 113 academic libraries with collections over 500,000 volumes. But it must be noted again that both studies were restricted to academic libraries. When all types of libraries are considered, local library systems, large public libraries, and state libraries are seen to receive a large share of the interlibrary loan requests, ranging from 35 percent to almost 90 percent of those originating within the state or interstate region. These data are obtained from studies of states and regions having centralized interlibrary loan systems and may not be typical for areas not having such systems.

Both Thomson and Palmour show that the geography of loan is directly related to the size of library. The largest academic libraries lend more out-of-state and to more distant states than do smaller libraries. They also borrow more from out-of-state and from more distant states. Comparable data are not available for public libraries and other types, but it has been shown in general that borrowing by public libraries is much more localized than that by academic, special, and medical libraries regardless of size of borrowing library.

KINDS OF MATERIAL REQUESTED

What kind of material is most often requested on interlibrary loan? Here will be considered the form, the subject, the recency, and the language of material. In large part these characteristics are affected by the restrictions of the National Interlibrary Loan Code, which frowns on borrowing items which are easily and inexpensively acquired, items requested by undergraduate students, materials wanted for recreational rather than informational or research needs, and materials needed frequently enough by the borrowing library that they should be part of its collections. These restrictions are not always observed scrupulously, and they are generally ignored in intrastate and intraregional borrowing where interlibrary loan has been organized in a system, as in New York, Illinois, the Rocky Mountain region, and the Pacific Northwest region. But their effect is noted in the statistics gathered on a national scale. When requests are classified by form of material (Table 1), it can be seen that half or less of requests to academic libraries are for books, but books predominate in the requests to systems involving public and other kinds of libraries. The same difference is noted in the first report of MINITEX (Minnesota Interlibrary Teletype Experiment).

<table>
<thead>
<tr>
<th>Study</th>
<th>Book</th>
<th>Serial</th>
<th>Dissertation/Thesis</th>
<th>Other</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomson</td>
<td>50%</td>
<td>34%</td>
<td>9%</td>
<td>7%</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Palmour</td>
<td>48</td>
<td>34</td>
<td>6</td>
<td>12%</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>NYSILL</td>
<td>62</td>
<td>24*</td>
<td>14%</td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Currier</td>
<td>84</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

* In the NYSILL study, 24 percent of the requests were for "nonbooks." This includes serials, theses, AV, and other forms.
TABLE 2
SUBJECT OF REQUESTED MATERIAL

<table>
<thead>
<tr>
<th>Study</th>
<th>Humanities</th>
<th>Social Science</th>
<th>Science/Technology</th>
<th>Other</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomson</td>
<td>26%</td>
<td>23%</td>
<td>15%</td>
<td>15%</td>
<td>21%</td>
<td>100%</td>
</tr>
<tr>
<td>Palmour</td>
<td>27</td>
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<td>12</td>
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<td>100%</td>
</tr>
<tr>
<td>NYSILL</td>
<td>24</td>
<td>16</td>
<td>35</td>
<td>12</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>Currier</td>
<td>38</td>
<td>17</td>
<td>25</td>
<td>12</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>U. of Washington</td>
<td>42</td>
<td>18</td>
<td>40</td>
<td>10</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Washington State Library</td>
<td>41</td>
<td>21</td>
<td>28</td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

In the division of requests according to subject (Table 2), no significant pattern can be seen either in the frequency of demand of one broad subject field over another or in the subject needs of one type of library over another.18 Thomson, who classified requests according to the instructional department of the requester, used the rubric “other” for professional schools; in other studies “other” refers to fiction, biography, and categories not classified by subject. Reynolds compared requests received by the University of Washington Library with those received by the Washington State Library, where again the differences are minimal except in the categories “science/technology” and “other.”

In the analysis of requests by recency of publication, a strong pattern is seen, but it is similar for all types of libraries.19 In Table 3, it can be seen that approximately 20 percent of the requests are for items published within the previous three years, and more than half are for items published within the previous ten years. Currier’s data, which could not be fitted to this table, show the same degree of recency of the requested items.

Another characteristic of the titles requested on interlibrary loan noted in most of the studies is the language of the material. All studies found a preponderance of the material to be in English, ranging from 67 percent to 99 percent, with a median of 86 percent. Palmour broke language down further to note the subject and format most associated with language. Humanities serials were most often in a language other than English, and monographs in the humanities next most often in a foreign language. Social science and pure/applied science materials have nearly the same percents in English; their serials are least likely to be in English (84-89 percent) and theses most likely (97-100 percent). Frequencies of other languages are shown by Palmour to be: German and French, each 4 percent; Spanish, 2 percent; Italian and Russian, each 1 percent.20

TABLE 3
CUMULATED PERCENT BY RECENCY OF MATERIAL

<table>
<thead>
<tr>
<th>Study</th>
<th>Last 3 Years</th>
<th>Last 10 Years</th>
<th>Last 70 Years</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palmour</td>
<td>21%</td>
<td>58%</td>
<td>92%</td>
<td>2%</td>
</tr>
<tr>
<td>Taylor</td>
<td>17</td>
<td>49</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>Reynolds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. of Washington</td>
<td>19</td>
<td>54</td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>Washington State Library</td>
<td>25</td>
<td>70</td>
<td>99</td>
<td></td>
</tr>
</tbody>
</table>
THE SUCCESS RATE

Estimates of the average rate of filling requests successfully are difficult to obtain from previous studies because most data are based on success or failure at the first library to which the request was sent, or on a "single pass," and do not reflect the eventual success after several passes. The percent of requests filled on the first pass is seen from Table 4 to be almost two-thirds or more. Those not supplied are most often not owned by the library from which they were first sought. Less often they are not available: lost, in use, on reserve, in the bindery, or a non-owned volume of a serial title which the library does hold. "Noncirculating" means that because of poor condition or rarity the library does not permit its loan outside the building. Only 6.6 percent of the items requested in the Thomson study were not available because they were lost, in use at the time, on reserve, or at the bindery. In the Palmour survey, only 2 percent of the requested items were in use at the time. These findings are important in showing that lending an item apparently does not disrupt service at the lending library as much as is sometimes assumed.

Thomson showed (Table 5) that most success is met in obtaining a microform or a Master's essay, least in obtaining a government document or a technical report. "Not owned" is the most frequent cause of failure to supply technical reports, government documents, and books. "Noncirculating" is a frequent reason for not supplying dissertations and, to a lesser extent, newspapers and serials. Newspapers and serials are the forms most often reported "not available," and this probably means that the library has the title but not the issue requested.

The success rate reported for an interlibrary loan network or a bibliographic center is of interest. Table 4 reported success rates based on the average of reports from individual libraries. NYSILL reported 47 percent of the requests filled at the headquarters in New York State Library and an additional 17 percent filled by one of the referral libraries (e.g., Cornell University, Columbia University) to which they had been sent when not available at New York State Library.

### TABLE 4

<table>
<thead>
<tr>
<th>Study</th>
<th>Filled</th>
<th>Not Owned</th>
<th>Not Available</th>
<th>Noncirculating</th>
<th>Total Unfilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomson</td>
<td>64%</td>
<td>15%</td>
<td>10%</td>
<td>11%</td>
<td>36%</td>
</tr>
<tr>
<td>Palmour</td>
<td>71%</td>
<td>15%</td>
<td>8%</td>
<td>5%</td>
<td>17%</td>
</tr>
<tr>
<td>New York State</td>
<td>83%</td>
<td>15%</td>
<td>9%</td>
<td>5%</td>
<td>17%</td>
</tr>
</tbody>
</table>

### TABLE 5

<table>
<thead>
<tr>
<th>Format</th>
<th>Filled</th>
<th>Not Available</th>
<th>Noncirculating</th>
<th>Not Owned</th>
<th>Total Unfilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book</td>
<td>84%</td>
<td>10%</td>
<td>8%</td>
<td>18%</td>
<td>36%</td>
</tr>
<tr>
<td>Serial</td>
<td>63%</td>
<td>12%</td>
<td>16%</td>
<td>9%</td>
<td>37%</td>
</tr>
<tr>
<td>Government document</td>
<td>59%</td>
<td>11%</td>
<td>9%</td>
<td>21%</td>
<td>41%</td>
</tr>
<tr>
<td>Microform</td>
<td>85%</td>
<td>0%</td>
<td>6%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>Newspaper</td>
<td>69%</td>
<td>11%</td>
<td>13%</td>
<td>7%</td>
<td>31%</td>
</tr>
<tr>
<td>Technical report</td>
<td>61%</td>
<td>4%</td>
<td>4%</td>
<td>31%</td>
<td>39%</td>
</tr>
<tr>
<td>Dissertation</td>
<td>63%</td>
<td>4%</td>
<td>25%</td>
<td>7%</td>
<td>37%</td>
</tr>
<tr>
<td>Master's essay</td>
<td>82%</td>
<td>5%</td>
<td>9%</td>
<td>5%</td>
<td>18%</td>
</tr>
</tbody>
</table>
York State Library. This statistic seems to compare unfavorably with the 83 percent success rate reported in Table 4 and is deceptive. The 83 percent rate is the one reported on a questionnaire by libraries of New York State for having their requests filled from any source. The rate of 64 percent refers to requests which could not be filled in the local public library system or the local R&R system and which were subsequently sent to NYSILL. These requests included many for fiction, recent books, or other categories not usually honored in interlibrary loan; requests of these types were not referred beyond the New York State Library, if they could not be filled there, but were returned to the requesting library. If those requests (22 percent) were eliminated from the statistic, NYSILL’s success rate would approach 86 percent.

Several statistics have been reported for success in finding requested items by referral to the Pacific Northwest Bibliographic Center (PNBC). Currier reported locations found for 76 percent of a sample of items requested through PNBC in 1969. Two years later, Taylor studied a sample of requests sent to PNBC and reported 74 percent located in the region and another 9 percent located outside the region. "Locations," however, do not take into account items lost, no longer owned, in use, or otherwise not supplied by the library which is supposed to have them.

**Time Required**

Different studies of the time required to fill a request are difficult to compare because of the variation in the parts of the interlibrary loan process taken into account. Some studies report on the total elapsed time from sending the request out from the borrowing library to receipt of the material. Only the single pass is usually counted. Some studies have considered only the "cycle-time," or the amount of time the request is in the lending library until the material is shipped out or a not-filled report is sent back to the borrowing library. In the study of academic libraries made by Palmour and others at Westat Research, Inc., for the Association of Research Libraries, the material requested was received in the borrowing library within five days after the request had been sent out in nearly 20 percent of the successfully completed transactions and within ten days in 50 percent of the cases. This study did not include requests that could not be filled. Palmour also shows that material supplied in photocopy requires less total time than material supplied in original form and that material in science and technology is supplied faster (52 percent within ten days) than that in the humanities and social sciences (46 percent within ten days).

The average time for NYSILL to supply requested material to the borrowing library or to report inability to fill the request was sixteen days when New York State Library could supply, twenty-six days when the request had to be sent to one "referral" library, and thirty days when it had to be forwarded to one, and then to a second referral library. But these statistics also included an average seven days spent in trying to find the item locally and then preparing a request to NYSILL for unfound items. Taylor showed that the mean time required for a library to send a request to the Pacific Northwest Bibliographic Center, for PNBC to locate the item in a member library, and for the item to reach the borrowing library was twenty days. If the initial step in the procedure, searching locally and sending a request to the network, is eliminated in order to make the studies comparable, the mean time found by Taylor is sixteen days and that for NYSILL is eighteen days.

**Cost per Transaction**

Studies of the cost per transaction are
not only few but also even more subject to local circumstances than are statistics of elapsed time. One of the primary purposes of the study by Palmour and colleagues was to determine the average cost per transaction. This study was very carefully made, but it is restricted to the costs of lending or borrowing by large academic libraries, those with collections of over 500,000 volumes. For the 113 academic libraries of this size in the United States, an estimate was made of the total annual cost of interlibrary loan based on detailed records supplied by 12, selected randomly. Total costs were based on data for direct labor costs and fringe benefit costs of personnel, postage, supplies, communication, and any other costs of interlibrary loan. An overhead of 50 percent of the direct labor cost was added. When this estimate was divided by the total number of completed interlibrary loan transactions, both borrowing and lending transactions, an estimate of $6.39 per transaction was derived. Data were also available dividing direct labor costs between borrowing and lending activities. These provided the base for a separate estimate of the annual costs of borrowing and of lending by the 113 large libraries. When these were divided by the total number of completed borrowing transactions (titles) and completed lending transactions (titles), the cost per borrowing transaction was estimated at $7.61, and the cost per lending transaction at $5.82. A difficulty with these estimates is that the total amount spent by the institutions on borrowing is divided by the number of only those requests which were filled, and similarly for lending costs. But the latter were further analyzed to produce an estimated cost per filled lending transaction, $4.60, and another per unfilled lending transaction, $2.12. These were deemed important because large libraries may wish to consider an adequate fee per transaction to offset its costs. Within the limits set, these are considered by the writer to be the most sound estimates of interlibrary loan costs made to date.

The volume, characteristics, outcome, and cost of interlibrary loan reported here are data from studies made during the past eight years, most during the past four years. Volume might increase dramatically in the near future, as service is extended to users and for purposes not previously recognized as suitable for interlibrary loan. This experience is already seen in New York and Illinois. The success in filling requests may well improve, and both speed and cost decrease in the near future, as the results of several studies and programs recently completed or undertaken by the Association of Research Libraries and the National Commission on Libraries and Information Science (NCLIS) are implemented. The association and NCLIS have wisely recognized the importance of interlibrary loan not only in research and study but also in making the nation’s library resources available to readers everywhere.

REFERENCES


7. Interlibrary Loan in New York State, p.30-32.
8. Thomson, Interlibrary Loan, p.7; Study of the Characteristics, p.36.
9. Interlibrary Loan in New York State, p.34.
15. Study of the Characteristics, p.36; Interlibrary Loan in New York State, p.32.
20. Thomson, Interlibrary Loan, p.31; Study of the Characteristics, p.41-42; Interlibrary Loan in New York State, p.103; Currier, Sharing Resources, p.60, 67.
21. Thomson, Interlibrary Loan, p.64-65; Study of the Characteristics, p.43, 46; Interlibrary Loan in New York State, p.27.
23. Interlibrary Loan in New York State, p.72.
Library Management by Objectives:
The Humane Way

As library management and administration become more complex in the seventies, management by objectives offers the library director a possible avenue for coping with the ensuing challenges. Theories of management and administration, including systems analysis, planning, organizing, and controlling, all require objectives and full staff participation for successful implementation. These approaches are discussed as they apply to library management and administration as well as to specific areas of library service and personnel problems.

The whole is greater than the sum of the parts.1

Any organization is greater as a whole than the summation of its services. Yet, the commonality of parts or services, and their integration into an interactive, nonstatic whole, represents a powerful concept when applied to management.

The systems, or systems-oriented, approach to either management by objectives or planning, programming, and budgeting systems attempts to assess performance, services, etc., against predetermined goals or objectives.2 The systems approach takes a wholistic view of administration and management. Edward H. Litchfield, when examining the major and minor propositions of administration, states that "the administrative process functions in the areas of: A. Policy, B. Resources, C. Execution," and that "the functional areas of administration are integrally related to one another." Subsequently, he remarks that "each of the functions is requisite to the total process."3 "No one entity can be isolated from the other, for they are in fact a continuum of reciprocating parts."4

The whole being greater than the sum of the parts, although a mathematical impossibility, is more meaningful if considered from the viewpoint of an organization. This is pivotal to the library, because its existence depends on service to people, and it is operated by people. Paul Wasserman very aptly reinforces this point when discussing library administration:

Libraries are nothing more than organizations of people enlisted in a common objective. ... What is crucially needed is increased knowledge and understanding of how to accomplish objectives through people.5

The summation of the goods and services of an entire staff existing solely for the service of people is somewhat overwhelming in its depth and breadth. The National Advisory Commission on Libraries even extends the concepts of service beyond the usual parameters by

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"Everything the library or librarian does is service." Certainly this statement exemplifies the position that libraries and the management and administration of them are “people” business.

Two basic, but often unrecognized, axioms of management are the universality of managerial functions and the necessary functions, phases, or stages all management must undergo.

1. The fundamental management functions of planning, organizing, motivating, and controlling are applicable to all types of enterprises—hospitals, governments, schools, business, armed forces, and libraries.

2. Managers perform the same functions regardless of their place in the organizational structure or the type of enterprise. The supervisor of pages and the director of libraries each perform the fundamental functions of management. The only differences between them are the differences in objectives, the magnitude of the decisions made, the amount of leadership required, and the complexity of the situations.

Management by objectives as defined here means the identification of objectives within the broad general areas of planning, organizing, controlling, and motivating. A general framework for library management by objectives is proposed here, and explanations as to how this approach is both systematic and humane are offered. It should be noted that each library situation will warrant some modification, but general management techniques and principles are universal in application. Many management situations or environments might identify objectives in planning, yet be totally void of management techniques within each phase in the planning process.

**PLANNING**

A plan or planning phase of any management endeavor can be compared to defining objectives in teaching or preparing research proposals. The plan or planning phase could be called a predetermined course for action.

Lowell, when discussing the various dimensions of preparing a lecture outline on staff objectives, lists the following as aspects important to staff-formulated objectives:

- Provide individual motivation to those who must fulfill the objectives
- Give direction to the library as a whole
- Serve as a basis for delegating and decentralizing work to be done
- Coordinate staff work
- Provide the basis for control: appraise results in terms of managerial goals and objectives

Each of these reasons for writing objectives has a compelling dimension when considered for management purposes. Key terms of motivation, direction, delegation, decentralization of work, coordination, controlling, and appraisal seem inherently human when examined in terms of an employee-employer relationship. The employee is patently aware of where the organization and he, as a part of the organization, are headed when goals are jointly planned. His position has been defined; he knows where he can go for direction and guidance, who will coordinate the operation, and where controls are applied and evaluations are made.

Formulating objectives by a joint process is most aptly illustrated in the following comments by G. S. Odiorne when defining management by objectives:

The system of management by objectives can be described as a process whereby the superior and subordinate jointly identify goals, define individual major areas of responsibility in terms of results expected of him, and use these measures as guides for operating the unit and assessing the contribution of each of its members.
Another view of how management by objectives attempts to involve people at all levels in the objective process, yet keep the parent organization’s major objective in focus, is expressed by Ryan:

Management by objectives is a method of leadership which successful executives have been using for generations. It requires the individual executive to develop his own managerial objectives as part of a team striving for a corporate objective agreed and understood by all. It allows the individual executive to accomplish the required results in his own way, so long as this does not interfere with achievement of his own or corporate objectives. In short: you organize your subordinates to help you win your objectives.11

Not only should the library have goals and objectives, but it is important for these goals to be compatible with the school, city, or corporation that the library serves. Goals and objectives developed specifically for the library by the parent organization, utilizing both library and nonlibrary staff, seem most likely to succeed, particularly when these goals are for the improvement of the parent organization; i.e., city, college, corporation, school system, or the individual library itself.

Another strong recommendation for library management by objectives is insistence on clear-cut, measurable objectives instead of vague generalizations. In addition, all staff should participate in planning objectives. The following definition of planning by Lowell is an example of how management by objectives can take input from virtually everyone on any staff.

Planning, as a function of management, involves selecting or establishing objectives and goals and implementing them by means of policies, procedures, rules, programs, and strategies. Planning and the responsibility for planning should be engaged in by all supervisors whether they are at the top, the middle, or the bottom of the organization structure. In other words, everyone employed in any kind of supervisory capacity should be concerned with planning, from the director of libraries down to the clerk in charge of after-school pages who do the shelving.12

Libraries have the opportunity to develop objectives for management within their planning phases. The opportunity for personnel to know what is expected of them, with whom they will work, and what interactions will take place as they go about their tasks can be communicated through an overall plan, developed and executed by all members of the library staff. The objectives of arranging the general organizational structure can also be written by, communicated to, and participated in by the staff.

ORGANIZING

Organizing requires developing the plan and successfully implementing its diversity within the organizational structure. Although it requires developing the framework from the planning phase, the organizing phase must have its own defined objectives and a method of measuring its success. Lowell defines organizing as “the framework in which people can work happily, productively, and effectively.”13

Major tenets of organizational structure are to organize personnel, priorities, facilities, responsibilities, and authority in accordance with goals.14 Personnel must be aware of the overall objectives of an organization; similarly, they must be aware of the objectives of the specific department and of each major division within the plan. The major advantage for awareness of planning and organization is staff morale. Personnel relegated to technical specialties, uninformed of the overall organizational plan and its receptiveness to their individual input, are victims of a bureau-

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cratic, hierarchical framework.

Although the organizational phase of library management by objectives is practical, there are a number of obstacles. The organizational structure of any library can be weakened by lack of responsiveness to both staff and users. Staff, unaware of library objectives or tied to a bureaucracy which is unresponsive to new input, cannot fully participate in the library's affairs. Libraries with objectives (created by the staff) for the organization phase can respond to staff input; they can also curb some of the bureaucracy lurking at the organization's every orifice.

CONTROLLING

Another function of management is controlling, which logically follows planning and organizing. Controlling by measuring, comparing, identifying, and analyzing feedback also requires objectives.

Lowell's interpretation of the control phase or stage of management consists of the following five steps:

1. determining or measuring what is being accomplished,
2. comparing performance with expected norms or standards,
3. identifying activities or operations not contributing to the attainment of goals,
4. locating the reasons for poor achievement, and
5. taking corrective or remedial action.¹⁵

Problems necessarily arise when measuring quantitative data in the control stage, but these measurements must be made to test and evaluate results. Wasserman, when discussing measurement, comments that "there is no other equally rational criterion for evaluating performance."¹⁶ He later states:

Without demonstrable, visible proof of its attainment using an acceptable managerial-type yardstick, the library (this department which defies accounting re-

sponsibility because it cannot be subjected to a break-even analysis) becomes an inevitable target of cost-conscious managements which wield that frightening instrument of internal destruction—the budget-cutting scalpel.¹⁷

A system of library management by objectives, as defined here, would necessitate an overall plan and specific objectives for the controlling aspect. Some specific recommendations in the form of questions the administration might ask are: How will the data be used for corrective or remedial action? Why was measurement decided upon? How could physical facilities and other portions of the working environment have affected poor achievement? How could the library staff and administration deal with activities or operations not contributing to goals? Finally, how can the entire staff take a long, second look at the original objectives in the planning phase? Perhaps they were unrealistic, or didn't really represent the priorities as they were conceived.

The control phase of any plan for library management by objectives must have a built-in, alternate plan for implementation when the original proves to be faulty. If an alternate plan is impossible or impractical, then the built-in flexibility for redirecting resources must be available.

Measurement of the measurable, once defined, is relatively simple! Measurement of many of the services offered by libraries, however, is extraordinarily difficult. The expeditious achievement of the stated goals of the program is one measure of success and a mark of accountability.¹⁸ The aspects ascribed to service are difficult to measure and yet vitally important. Some aspects of service are probably impossible to measure accurately at this time, yet they become extremely vulnerable under investigation.
Wasserman states that perhaps the best solution available for measuring services and qualitative use is to answer the following: “What are the results achieved as compared to the prospects without library services?” The following questions are other measurement techniques which might be applied to the more evasive areas. Are there any written, clear-cut statements about the fundamental goals of the parent organization and the library’s relationship to it? Is the person ultimately responsible in the library exerting every overt and covert attempt to operate within and supporting the overall goals, objectives, and philosophy agreed upon by all involved? 19

CONCLUSIONS

Direct reference to the human dimension of library management by objectives has been limited thus far. The premise that this theory of management is human rests largely in a basic philosophy of man’s nature. Many constructs upon which philosophic frameworks are built rest on how man is viewed. Is man inherently passive, active, interactive, good, bad, or neutral? If the good-active or interactive view of man is assumed, then library management by objectives can be considered humane since the total staff is involved in deciding its future.

Douglas M. McGregor, when delineating between an abstract X and Y Theory, suggests in Theory Y that man is not passive or resistant to organizational needs. McGregor maintains that passive resistant behavior is positively reinforced, whereas personal motivation, development, responsibility, and directive behavior are negatively reinforced. Man has a natural inquisitiveness and motivation; he thrives on responsibility and works toward goals. Management does not give these gifts to man; it needs only to establish an atmosphere wherein these human characteristics can be enhanced and recognized. Management must also provide conditions which not only help people in reaching their own goals but which will also eventually direct their efforts toward the organization’s objectives. 20

Rensis Likert found that, when employees were given job decision freedom and had interaction with their supervisors, production increased. He also found that the interaction with employees directly motivates them, if the interaction informs employees what is expected of them and if they have a major role in setting their own goals. 21

Management by objectives for libraries is of paramount importance. Phases of development, planning, organizing, controlling, and measuring are vital. Objectives within each phase or aspect of the organization, combined with the alternatives and the flexibility to incorporate them, are also essential. Total involvement by staff at all levels must be incorporated into any management scheme that intends to be humane and responsive. At a time when major budget cuts loom over almost every facet of public service, accountability is a virtual necessity; the time for a humane system of management by objectives is long overdue.

REFERENCES

3. Edward H. Litchfield, “Notes on a General Theory of Administration,” in Reader in Li-
Library Management by Objectives / 349

4. Ibid., p.25.

17. Ibid., p.174.
18. Ibid., p.175.
19. Ibid., p.178.
An Approach to Collection Inventory

All large libraries eventually face the problem of determining catalog accuracy. This paper recommends taking pilot samples of the collection to be followed by a selective inventory. The procedures and task times of the recent inventory of the Houston Public Library are included.

LARGE ACADEMIC AND PUBLIC LIBRARIES considering an inventory should be interested in the planning and results of the inventory of the Main Library of the Houston Public Library—the decision to inventory, the procedure, the time estimates, and the results of the inventory.

The library had taken its last complete inventory in 1924 and partial inventories in 1934 and 1943. But by 1968 staff and user complaints about the accuracy of the public card catalog led the library to consider the possibility of taking the first complete inventory in fifty years.

PILOT INVENTORY

The first step was to define book losses more accurately by checking a random sample of the shelflist against the shelves. The collection to be inventoried consisted of 236,519 titles held in 357,350 volumes. For the sample, a loss rate of 30 percent was assumed. Sampling tables indicated 600 titles needed to be pulled at random from the shelflist.

The sample cards were duplicated and sent to subject departments where their staff compared the shelflist cards with the titles on the shelves, marking the accession numbers located. Cards not matched with books initially were periodically checked again over five months. The results of the survey indicated that 41 percent ± 3.5 percent of the volumes and approximately 35 percent of the titles in the shelflist for the Main Library were missing. While there was a backlog of book cards for volumes reported lost that had not been withdrawn from the catalog, the backlog could not explain the losses indicated by the sample inventory. The library decided to inventory the Main Library.

PROCEDURE

The first step was to divide the collections into manageable sections for inventory and prepare a procedure. The chapter by R. E. Beck and J. R. McKinnon on the “Development of Methods and Time Standards for a Large Scale Library Inventory” was used in designing a procedure and estimating time.

The inventory of each collection divided itself into three parts: (1) the physical inventory of the volumes on the shelf; (2) post-inventory follow-up to check volumes in circulation during inventory; and (3) withdrawing the titles from the shelflist and pulling card sets from the public catalog. In the physical inventory each book was compared with its shelflist card, checking

Mr. Clark is chief, Technical Services, Houston Public Library, Houston, Texas.
An Approach to Collection Inventory

the accession number. One member of
the team read the call number from the
book as well as title and accession num-
ber. Another staff member, holding the
shelflist tray, located the correct shelf-
list card and wrote the year in red be-
side the accession numbers located. The
staff member holding the book marked
the book pocket and shelflist accession
number with a date ('70) in red. When
a shelflist could not be found for a ti-
tle, the staff prepared a duplicate shelf-
list on a three-by-five-inch slip. Later,
the cataloging staff either found or re-
created the shelflist and other necessary
records. Our first estimate for the time
to do the shelf inventory was fifty vol-
umes per man hour. The first inventory
indicated that forty-two volumes per
man hour was more realistic.

The inventory follow-up lasted for
120 days after the inventory. The staff
checked volumes returning from circu-
lation for evidence of inventory. For
each returning book that missed the
shelf inventory, the staff marked the
book pocket with the inventory date and
wrote a three-by-five-inch slip including
author, title, accession number, and call
number. This slip was used later to add
the inventory date to the shelflist.

The last phase of the inventory was
divided into three steps. The first was
marking "withdrawn" on the shelflist
card after the accession numbers not
found in inventory, pulling the shelf-
list card if dead for the system, and
turning up in the tray those cards dead
at Main Library only. This was done at
the rate of 300 per hour. These cards
were revised by a cataloger at the rate
of 900 cards per hour, and finally copy
slips were typed for the standing shelf-
list cards to be used to pull cards from
the public catalog.

The second step in the last phase of
the inventory was to pull catalog cards
from the official catalog, main public
catalog, and departmental catalog. Staff
members from technical service and
public service joined in pulling these
cards. This was done at a rate of forty
cards per hour.

Finally, the cards pulled were checked
for complete card sets at a rate of 1,600
cards per hour, retrieving any that were
overlooked and refiling cards pulled by
mistake. One unit card for each dead
title was then sent to the departmental
librarian to consider for replacement.

ACTUAL INVENTORY

The Business Technology collection
was selected as the first room for inven-
tory. It was relatively small (147 sec-
tions), and the inventory sample indi-
cated the room had a high loss rate. A
map of the room was prepared that
showed shelving, the call numbers for
each range, and the number of sections
per range. At a staff meeting before the
inventory, procedures were explained
and staff members were given copies of
the procedures, a room map, and their
team assignments. Teams of two staff
members were assigned specific portions
of the shelflist. Responsibility for the
teams was divided between two super-
visors responsible for the teams in their
respective areas. As each team completed
its first assignment, a supervisor reas-
signed the team another portion of the
shelflist. The supervisor tried to reas-
sign a team so that it would not run into
another team in the narrow aisles.

In this inventory of the Business
Technology collection almost 12,000 vol-
umes were found to be missing, repre-
senting 21 percent of the collection's ti-
tles. Two hundred volumes had errors
in either call number or accession num-
ber, and fifty volumes belonging to oth-
er units were removed. Some problems
with the inventory procedure were iden-
tified. Too many teams had been as-
signed to a supervisor. In following in-
ventories as many as four area super-
visors were used. Other changes includ-
ed showing team leaders the ranges that they were responsible for prior to the inventory and marking inventoried shelves with white paper slips instead of turning books down. The average time for actually inventorying the books was .7 minute per volume.

Following completion of the shelf inventory, volumes returning from circulation were checked as they came back to the library. At the end of the 120-day period, a check was made to estimate the error rate of the first inventory. A random group of 622 shelflist cards of the Business Technology Room was pulled and compared with books on the shelf. Nine volumes in the sample had not been inventoried, yielding an estimated error of 1.45 percent ± 3 percent. To confirm this, the shelves were checked a second time for the 5,200 titles that were indicated missing and only 36 titles (.05 percent) were located. Inventory reliability was judged sufficient, and the second search was dropped for inventories of other collections.

Over the next three years four other collections were inventoried. By the fall of 1972 shelf inventories were complete, but there remained a large number of cards not yet pulled from the catalogs. To complete this task each technical service unit was assigned fifteen hours per week for card pulling, and public service units later also made commitments. The inventory of the Main Library was completed in July 1973.

**RESULTS AND DISCUSSION**

What did the inventory accomplish? Removed from the public catalog were cards for 47,514 missing titles, representing 20 percent of the titles in the Main Library catalog. Before the inventory two out of every five cards referred the user to books that were not available. The ratio was probably higher since a large percent of requests are for material published in the last five years, and a large portion of the lost titles fell in this category. The losses by collection are listed in Table 1. The catalogs of the inventoried rooms prior to the project contained 236,519 titles, and the holdings were 357,350 volumes.

The inventory was done without the employment of a special inventory team and, consequently, at the expense of current operations. A better approach would have been one in which a full-time team of three were responsible for a selective inventory. The pilot inventory overestimated volume losses by 10 percent and titles by 15 percent. The error appeared to be the result of using many individuals unfamiliar with the shelflist to take the sample. However, the later survey in Business Technology indicated that much more precise results could be obtained by assigning it to a single staff member who was familiar with the project and shelflist.

**TABLE 1**

**INVENTORY RESULTS AT HOUSTON PUBLIC LIBRARY—MAIN LIBRARY**

<table>
<thead>
<tr>
<th>Collection</th>
<th>Missing Titles</th>
<th>Missing Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Technology Room</td>
<td>5,273</td>
<td>11,918</td>
</tr>
<tr>
<td>Fine Arts Room</td>
<td>3,627</td>
<td>10,502</td>
</tr>
<tr>
<td>Children's Room</td>
<td>5,222</td>
<td>10,629</td>
</tr>
<tr>
<td>Literature &amp; Biography</td>
<td>11,933</td>
<td>38,122</td>
</tr>
<tr>
<td>Remainder 000-500s</td>
<td>21,459</td>
<td>40,030</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47,514</strong></td>
<td><strong>111,201</strong></td>
</tr>
</tbody>
</table>

*20 percent of 236,519 titles missing = 47,514*  
*31.1 percent of 357,350 volumes missing = 111,201*
An Approach to Collection Inventory

With random sampling, a library that is uncertain of the accuracy of its public catalog can with a small expenditure of staff time obtain a reliable estimate of its catalog accuracy. Such a survey is certainly justified, considering the cost of staff time in inventory. The error rate that justifies an inventory is a matter of judgment, with libraries suggesting rates that vary from 1 percent to 5 percent. However, the interruption of normal processing or the cost of additional staff to inventory a large collection, I believe, makes a loss rate of 10 percent a more realistic guideline. A pilot inventory can be used to identify those collections that have an unacceptable discrepancy between the titles that the catalog shows and those actually available. Using the pilot inventory as a guide to the collections in need of inventory, libraries will find selective inventories a more effective approach than general inventories.

REFERENCES

Overdue Policies: A Comparison of Alternatives

Most library literature assumes that devices such as library fines and overdue notices are integral to the maintenance of book circulation. This study measures and compares the effects on book return rates when three different types of deterrent methods are applied in recovering books in a university library. The three methods examined include overdue notices and threat of encumbrance; overdue notices only; and no notification.

BACKGROUND

Overdue notices are assumed a necessary part of library circulation. Howell reports that college librarians seem so firmly committed to the routine of sending frequent overdue notices that it is easy to accept this practice as an integral part of good library service. The effectiveness of overdue notices in eliciting prompt return of library materials is rarely questioned in library circles. However, a search of library literature produces scant statistical data to support this assumption.

Available data are not concerned with the validity of the overdue notice itself, but with its application regarding timing, frequency, fines, etc. The professional literature does not consider the effectiveness of overdue notices per se. In contrast, a great deal of information is available on the subject of fines and their implications. Classed with fines as a common deterrent method is the encumbrance system; yet, little mention is made of encumbrance policies and their effectiveness in studies of threats of deterrence. Although differences do exist in the two deterrent methods, their similarities in philosophy allow for similar study applications.

With few exceptions, the trend in libraries is to abolish fines. Yet both sides of the fines controversy claim improved book return rates with their respective policies. Howard reports that the suspension of fines in Vigo County (Indiana) Library improved public relations, while the library experienced an increase in lending and a decrease in losses. A review of the literature reveals that several librarians have reported successful results from the suspension of fines, e.g., Windsor (Ontario) Public Library claimed overdues substantially reduced with the suspension of fines. From the 18,533 first notices sent, only 2,924 follow-ups were necessary. A later progress report from Windsor indicated that their first report had been overly optimistic, but they continued to support the basic findings of fewer overdue books following the cessation of fines.

On the other hand, Tootell disagrees, stating that although fines should never be used for income, their use is justified

The authors are staff members of the Instructional Media Research Unit, Libraries and Audio-Visual Center, Purdue University, West Lafayette, Indiana.
to insure prompt return of books. To support his statement, Tootell cites a 75 percent cut in overdue problems after implementation of a fine system. Thus far, the studies cited in reference to deterrence systems have been related to the library sciences. A cursory search of the fields of criminology and psychology resulted in only one pertinent study. The research of Chambliss on university parking violators supports the deterrence theory behind the encumbrance system. In his study, it was found that when parking meter violations were strictly enforced, the number of frequent offenders decreased significantly. Although this research in particular reinforces the possibility that threat may serve as a viable deterrent for some offenses, questions still remain because so little evidence is available concerning the effects of overdue notices or the threat of encumbrance.

PROBLEM

Taking a circulation overdue policy, a measurement and comparison were made among selected variations or levels of that policy. Three levels were judged critical in setting circulation overdue policies, and methods were devised to study them. The three levels of the overdue policy factor were identified and categorized as: Group A, overdue notices and threat of encumbrance; Group B, overdue notices and no threat of encumbrance; and Group C, no overdue notices and no threat of encumbrance. (For purposes of this study, encumbrance was a temporary holding of students' records so that they would be unable to register or receive a transcript of grades until such time as their library records were cleared.)

Answers were sought to four basic questions. What are the effects of non-notification of overdue books? Is the percentage of return for overdue books significantly affected by the receipt of a threat of encumbrance? What effect does an overdue notice and threat of encumbrance have on the rate of book return over time? Because the research evidence did not indicate which policy produced the highest percentage of return for overdue books, the hypotheses for this study, as shown, had no directional prediction.

1. Twenty-eight-day observation: There will be no significant difference in percentage of return for subjects (Ss) tested under three different treatment conditions: (A) overdue notices and threat of encumbrance, (B) overdue notices only, and (C) no notification, when observed twenty-eight days after checkout.

2. Thirty-five-day observation: There will be no significant difference in percentage of return for Ss tested under three different treatment conditions: (A) overdue notices and threat of encumbrance, (B) overdue notices only, and (C) no notification, when observed thirty-five days after checkout.

EXPERIMENTAL DESIGN AND PROCEDURES

The method selected for testing the hypotheses is described by Campbell and Stanley as a pretest-posttest-delayed posttrue experimental design. Using their graphic symbols, the design model took the following form:

\[
\begin{align*}
& R \ O_1 \ X_2 \ O_2 \ O_3 \\
& R \ O_4 \ X_4 \ O_5 \ O_6 \\
& R \ O_7 \ X_5 \ O_8 \ O_9 \\
\end{align*}
\]

The symbol R indicates that each book checkout or transaction was randomly assigned to either treatment group A, B, or C and that an observation had been made. Observations of the percentage of books returned, namely, \( O_1, O_4, \) and \( O_7 \), were made twenty-two days after
checkout. The twenty-two-day observations fell one day after all books were due for the three treatment groups. These observations were essentially premeasures in that no treatment conditions had been instituted at this time. Postmeasures, or observations O₂, O₅, and O₈, examined the percentage of books returned twenty-eight days after checkout, or one week after all books were due for these three groups. By this time all treatment conditions had been instituted at least six days before these observations were made. Delayed postmeasures, or observations O₃, O₆, and O₉, examined the percentage of books returned thirty-five days after checkout, or two weeks after all books were due for these three groups. Again, all treatment conditions had been instituted, in this case thirteen days before these final observations were made. The symbol X indicates an experimental or treatment variable. In the above design model, the variable Xₐ (Group A) represents those Ss with overdue books who received an overdue notice card and threat of encumbrance; Xₚ (Group B) represents those Ss with overdue books who received no notice of any kind.

Figure 1 further illustrates the design and specifies the number of Ss included in each group for each of the six observations. (For purposes of this study, it was assumed that each book checkout or transaction would represent a unique individual S assigned to a given group. However, when an individual S checked out more than one book at a time, all transactions for that S were randomly assigned to one of the three groups.) It can be seen under the twenty-two-day observation that originally a total of 969 Ss who checked out books were assigned to Group A, Group B was assigned 1,524 Ss, and Group C received 1,868 Ss. Also listed are the number of Ss who had not returned books after twenty-eight days (i.e., one week after due date) and the number of Ss who had not returned books after thirty-five days (i.e., two weeks after due date).

With the cooperation and help of the staff of the Purdue University General Library, a three-week time period was

<table>
<thead>
<tr>
<th>Group A (overdue notice and threat of encumbrance)</th>
<th>22-Day Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>969</td>
<td>Includes total Ss assigned to each group; the percentage of return up to date due was observed and compared for each group.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group B (overdue notice only)</th>
<th>28-Day Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,524</td>
<td>Includes Ss who had not returned books after 22 days; the percentage of return up to 28 days after checkout was observed and compared for each group.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group C (no overdue notice or threat of encumbrance)</th>
<th>35-Day Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,868</td>
<td>Includes Ss who had not returned books after 28 days; the percentage of return up to 35 days after checkout was observed and compared for each group.</td>
</tr>
</tbody>
</table>

Fig. 1
Study Design
selected for data collection, and arrangements were completed for running the study. All patrons who checked out General Library materials for the standard twenty-one-day loan period would serve as Ss. Upon arrival at the circulation desk with materials for checkout, each of the Ss was randomly assigned to one of the three study conditions. This was handled discreetly by the special numbering and lettering system found on each of the transaction cards.

As briefly mentioned earlier, the procedures progressed in the following manner. Two days after each due date, Ss in Group A were sent an overdue notice which listed the author, title, call number, and transaction number of each book. Students received a printed notice indicating the General Library renewals telephone number and a warning of possible encumbrance if the books were not returned. Faculty and other users were included in this group; however, they did not receive a threat of encumbrance. (Eventually for students in Group A, encumbrance proceedings were initiated in the traditional manner three to four weeks after the due date.) Group B Ss received the overdue notices including author, title, call number, transaction number, and the General Library renewals telephone number; however, no threat of encumbrance was enclosed. Group C Ss were not sent overdue notices during the study period.

Data for the three groups were tallied on a daily basis. This provided a record of the number of books checked out per day for each group, the number of books not returned by the date, and the number of books remaining on each successive day.

Results

The analysis of variance tests (using a single-factor analysis as described by Winer) for the twenty-eight-day and thirty-five-day observation periods are presented in summary Tables 1 and 2. As can be seen in Tables 1 and 2, significant differences were found. Once a significant overall F is achieved, it is accepted practice to examine the group means (in this case the percentage of books returned) to find the reason for these effects and to attempt to interpret their meaning. This is termed a post-hoc comparison and is used to evaluate any trends among means. There are several methods available for testing the significance of post-hoc comparisons. For purposes of this study, it was decided that if an overall significant F test were achieved, differences between treatment means would be probed by the Newman-Keuls method.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>THREE-GROUP ANALYSIS OF VARIANCE FOR COMPARISON OF RETURN RATE TWENTY-EIGHT DAYS AFTER CHECKOUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Variation</td>
<td>Mean Squares</td>
</tr>
<tr>
<td>Between groups</td>
<td>10.7628</td>
</tr>
<tr>
<td>Within groups</td>
<td>.2352</td>
</tr>
<tr>
<td>Total</td>
<td>.2499</td>
</tr>
<tr>
<td>* Significant beyond the .01 level (Winer, Statistical Principles, p.646-47).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>THREE-GROUP ANALYSIS OF VARIANCE FOR COMPARISON OF RETURN RATE THIRTY-FIVE DAYS AFTER CHECKOUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Variation</td>
<td>Mean Squares</td>
</tr>
<tr>
<td>Between groups</td>
<td>1.1805</td>
</tr>
<tr>
<td>Within groups</td>
<td>.2286</td>
</tr>
<tr>
<td>Total</td>
<td>.2312</td>
</tr>
<tr>
<td>* Significant beyond the .01 level (Winer, Statistical Principles, p.646-47).</td>
<td></td>
</tr>
</tbody>
</table>

The first hypothesis tested differences across all three groups twenty-eight days after books were checked out. The analysis of variance of the data for these three groups, as illustrated in Table 1, revealed an overall significant difference between the means. Further, the Newman-Keuls test indicated that all
pairs of means were significantly different at the .05 level. The data revealed that Ss in Group A (overdue notice and threat of encumbrance) had a significantly higher return rate than Ss in Group C (no overdue notice and no threat of encumbrance). Also, Ss in Group B (overdue notice only) had a significantly higher return rate than Ss in Group C (no overdue notice and no threat of encumbrance). However, no significant difference in return rate was found between Ss in Group A (overdue notice and threat of encumbrance) and Ss in Group B (overdue notice only).

Figure 2 displays the book return rate for Ss in each of the three treatment groups. At least 60 percent of the books
Overdue Policies

had been returned by the twenty-first day, i.e., the date due. Overdue notices were in the mail on the twenty-fourth day, and in most instances received on the twenty-fifth or twenty-sixth day. Marked differences are illustrated in book return rate for the three treatment groups once overdue notices were received in Groups A and B. These differences are particularly apparent from the twenty-sixth through the thirty-fifth day after checkout.

CONCLUSION

The investigation pursued in this study supports the value of overdue notices. They appear to have an important reminder effect and improve the return rate of overdue books. Thus, under current conditions, an overdue policy seems preferable from the standpoint of book availability and improved service to users. The threat of encumbrance is effective in urging students to return library materials near the due date. Although the effect of the encumbrance threat diminishes several days after the receipt of the overdue notice, the encumbrance system does not appear to have the cumulative and deterring effect of a fine system. Users are not deterred from returning long-overdue books as they might be under a fine system where costs to users accumulate over time.

Libraries interested in examining the effects of variant overdue policies in their own libraries could do so by replicating the data collection and analysis described above. Even an inspection of the raw data itself would yield book return trends that would provide guidance in the reconsideration of overdue policies.

REFERENCES

Centralization of University Library Services: Some Compelling Factors in Nigerian Universities

In Nigerian universities certain patterns of library service have emerged which are neither ideal nor in the best interest of users and library staff. The most effective way of improving these patterns is by centralizing operations in these libraries. Insufficient funds, the need for planned growth, necessity for a union catalog at local and national levels, and effective deployment of library staff are compelling factors for such centralization.

In each of Nigeria’s six universities—Ibadan, Nigeria (Nsukka), Ahmadu Bello, Ife, Lagos, and Benin—there are a variety of libraries, ranging from the main library to small departmental reading rooms. Departmental reading rooms as they now exist cannot be called libraries, since in most cases they are unorganized and are developed by the departments for reference purposes and as supplementary collections to the main library collection. Only the main libraries and faculty, school, institute, and college libraries come within the scope of this study.

Rather than discussing centralization versus decentralization, this paper focuses on those factors that make it imperative for university libraries to incorporate a certain degree of centralization in their development. As M. F. Tauber points out, centralization conveys different meanings depending upon the adjective used with it—administrative, physical, or operational centralization.1 In this article centralization has an operational slant, so that certain functions like administration and technical services, if centralized, would be performed in the same place by the same personnel for the various units of a system.

At the University of Ibadan, only the medical library is directly controlled by the main library. Others are autonomous with the main library playing solely an advisory role in their development. There is most complete centralization at the University of Nigeria, Nsukka, where all the institute and faculty libraries are controlled by the main library. Each of the libraries at Ahmadu Bello University is autonomous in conducting its business. At the University of Ife, although the official policy states that all libraries are under the jurisdiction of the university librarian, in practice this is not so; the other three libraries are independent of the main library. The University of Lagos has two college libraries apart from the main library, and these are virtually autono-

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Centralization of University Library Services

The University of Benin is a relatively young institution with only a main library. The number of libraries in each university, their staff strength, and 1972-73 budgets are shown in Table 1.

With the exception of the University of Nigeria, Nsukka, other libraries within the universities operate independently of the main libraries. The hiring of staff, development and processing of stock, services to readers, etc., are virtually left to the various faculties or schools, institutes, and colleges.

In a few cases independent libraries are lucky to be manned by professional librarians, but even then the performance of the librarians is subject to the interest shown by the deans or heads. Because no performance standards are set for these libraries, the whims and caprices of the deans or heads set the norms. At the University of Ibadan, an attempt has been made by the main library to establish standards for the other libraries, but it lacks the statutory power to enforce them. It plays an advisory role only.

Such a loose relationship is not ideal for effective library service. Lack of effective control in the development of libraries within the universities leads to duplication of stock, as one library does not know what the other has. It is also responsible for the general nonexistence of union catalogs—a crucial need for developing resource sharing among these libraries. The lack of qualified personnel to staff these libraries is no longer as serious as it used to be, but the staff situation is still not entirely satisfactory, especially in the newer universities. There is, however, a need for effective deployment of available human resources.

Four factors, particularly, make operational centralization a sine qua non of library organization in Nigerian universities: (1) insufficient funds, (2) need for planned growth, (3) need for inter-library cooperation, and (4) effective deployment of library staff.

**INSUFFICIENT FUNDS**

Dipeolu mentions this factor when he writes: "Where money and staff are scarce, one cannot afford to decentralize in the European manner. Even when some of the conditions that call for departmentalization apply, all technical activities should be centralized whilst assistance to readers might be given in the sectional libraries." In view of the limited financial resources of most of these universities, it is essential that duplication of stock and services, which invariably increases cost, should be eliminated as much as possible. Rather than allow the various libraries in each university to do their own ordering, processing, binding of journals, and repairs to damaged books, centralization would reduce

<table>
<thead>
<tr>
<th>Libraries in the System</th>
<th>Professional Librarians</th>
<th>Budget (Books and Periodicals)</th>
<th>Union Catalog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibadan</td>
<td>6</td>
<td>$173,598</td>
<td>None</td>
</tr>
<tr>
<td>Nsukka</td>
<td>7</td>
<td>223,998</td>
<td>Yes (but not comprehensive)</td>
</tr>
<tr>
<td>Ahmadu Bello</td>
<td>6</td>
<td>133,000</td>
<td>None</td>
</tr>
<tr>
<td>Ife</td>
<td>4</td>
<td>157,400</td>
<td>None</td>
</tr>
<tr>
<td>Lagos</td>
<td>3</td>
<td>200,189</td>
<td>None</td>
</tr>
<tr>
<td>Benin</td>
<td>1</td>
<td>98,000</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

* Information obtained from questionnaires sent to the various libraries and the latest university calendars and library annual reports.
operational costs. The money thus saved could be usefully spent for buying multiple copies of titles for student use. This is a particularly important aspect of service to readers in Nigeria, for many students cannot afford to buy basic texts; and added to this is the problem of the rising prices of books.

**Need for Planned Growth**

This need arises from the currently uncontrolled pattern governing the establishment and growth of libraries in most Nigerian universities. As noted above, the relationship among main libraries and other libraries is, in most cases, advisory. This allows the various libraries to evolve their own types of service, however unsatisfactory. If planned growth for these libraries is to be achieved, the main libraries must be in a position to formulate standards and be statutorily empowered to enforce them. This is a sound basis for operational centralization. The University of Nigeria library system operates in this way:

The University of Nigeria consists of the Nnamdi Azikiwe Library and the Economic Development Institute Library also located at the Enugu Campus, together with small collections in the Agriculture and Education Faculties on the Nsukka Campus. All the collections are serviced from the Nnamdi Azikiwe Library which is the main library where the union catalogue is housed.8

**Need for a Union Catalog**

The only way to utilize fully the library resources in each university is for the main library to maintain a union catalog of all materials held in the various libraries. This can be achieved with proper directives from the main library concerning procedures for sending in cards on the holdings of all the other libraries, uniform catalog entry patterns, and the general adoption of a classification scheme. At the moment, much time and effort is wasted in trying to ascertain the holdings of each library, because union catalogs generally do not exist. Union catalogs provide the basis for speedy and efficient resource sharing—a cooperative venture much needed in Nigeria. This is a particularly important issue, because no library in the world (let alone in Nigeria) can be self-sufficient.

**Effective Deployment of Staff**

Within a centralized system, it is possible to deploy library staff in the most effective way. This can be achieved by deploying staff along subject lines in the main library as well as in other libraries (which invariably cater to a particular subject interest or a group of allied subjects). For too long deployment has been along functional lines, e.g., cataloging or acquisitions sections. Rather than encouraging subject specialization among staff, it tends to make them general practitioners. How can a cataloger easily win the respect of his academic colleagues? If library staff are deployed along subject lines, they will become specialists in their own right, competent to assist scholars and students in their subject areas. Herein lies their valid claim to academic status.

Centralization should thus offer Nigerian university libraries an atmosphere in which to solve the problem of staff advancement. The current hierarchy of one librarian, one deputy, a few senior sublibrarians, several sublibrarians, and several assistant librarians makes advancement difficult. Within a centralized system, it would be possible and rational to have a director of library services and three deputy directors (one responsible for general collection development, one in charge of technical services, the third responsible for readers' services). The duties of these levels would be both intellectual and administrative. Subordinate to the deputy responsible for technical services
should be acquisitions librarians and catalogers who are subject specialists. These in turn should be assisted by bibliographic searchers. The deputy in charge of readers’ services would be assisted by reference librarians in different or allied subject areas. At this level also would be special collection librarians and faculty librarians. The deputy in charge of collection development should be responsible for evaluating the stock and for insuring its development along established lines.

Development of these additional posts would be dependent on the subjects in each university’s curriculum, the number of faculty libraries, the size and growth rate of the collection, the number of special collections in the library, faculty and student enrollment numbers, and the size of the library staff. It is quite possible, using these criteria, that some of these additional posts may not be necessary in a particular university library.

**CONCLUSION**

Because of these compelling conditions, Nigerian university libraries have only one option: operational centralization. Where money is scarce, effective financial control can greatly stretch resources; the organizational framework that enables librarians to practice as specialists in their own right is of tremendous benefit to readers and enhances staff prestige; a service hierarchy with built-in guarantees of advancement eliminates frustration among staff; speed and ease of access to library materials are assured by the existence of a union catalog. All these benefits are offshoots of operational centralization.

**REFERENCES**

Automation of Technical Services: Northwestern's Experience

Library automation requires significant adjustments in attitudes and procedures to work effectively. When Northwestern University Library made a commitment to develop computer support of the entire technical processing system, a chain of basic decisions was necessary, each with an individual impact on staff outlook and system productivity. Key decisions involved reassessing manual operations prior to automation; defining resources—human and financial; determining on-line and batch processing requirements, hardware usage, and necessary modifications; considering essential staff reorganization and retraining; and assuring communication. These decisions, the resulting on-line interactive system, and its impact are described.

WHAT DOES A UNIVERSITY LIBRARY ENCOUNTER when it makes a commitment to develop computer support of the entire technical processing system? Northwestern's experience began with the need for a chain of basic decisions involving determination of the potential for basic operational improvements, identification of available hardware capabilities and possibilities for modification, and examination of financial implications within the university as a whole and directly related to library priorities. Total library systems analysis, re-assessing existing manual operations, and identifying possibilities for staff reorganization became essential.

A primary aim of any automated system is to reduce per unit costs for acquisitions and cataloging while allowing the library to handle more material without a proportional increase in staff size in years to come. Hardware costs are decreasing as personnel expenses soar. Northwestern University's operational system owes its existence to university and library administrative recognition of this essential fact.

BACKGROUND

As libraries have become rather painfully aware, automation does not arrive instantaneously. Reaching the implementation phase requires substantial advance planning. At Northwestern, university administrative interest was given added impetus by a librarian-faculty-student Library Planning Committee which served as an advisory group during the design and construction phases of a new library building. In the early 1960s this group projected the development of an automated library support system and indicated the strength of its confidence by providing a special room for a "dedicated" library computer as the blueprints developed. This special room, which was not removed from the plans by the eventual decision to share a computer already available elsewhere
on campus, has proved most useful as a typewriter terminal center for the library project.

As planning progressed, recognition that a "dedicated" library computer was financially impractical resulted in a decision to utilize the hardware at the Administrative Data Processing Center, which already maintained payroll, student registration, and alumni records. This machine has text handling capabilities which are superior to those of the larger computer at the scientific research computing center, and the library also was assured priority in usage. Unlike many library systems which share a computer with other campus applications, Northwestern University Library has always had sufficient computer time for both operation and development. Although the equipment limitations of the very small capacity 96K IBM 370/135 computer cause occasional irritation, the use of such a machine keeps computer costs down to the bedrock level the library can afford.

An important early decision was to develop the system in an on-line mode. Unlike batch processing, the on-line interactive mode provides for immediate access to and modification of information in the computer file and prevents the automated system from becoming as unwieldy as the previous manual system. One unified computer record replaces a multiplicity of order and processing control slips formerly filed in separated sequences. Printed purchase orders, claim forms, worksheets for catalogers, catalog cards, pocket labels, circulation charge cards, and various indexes are batch produced; but inquiry and update operations for some 100,000 in-process and recently cataloged items are all on-line. Order, receipt, payment, location, call number, and internal processing data are immediately entered in the computer record via direct terminal input.

THE TECHNICAL SERVICES SYSTEM

The technical services system, implemented October 4, 1971, after nearly two years' successful operation of the computerized circulation system, currently utilizes nine IBM 2740 typewriter communication terminals linked to the computer via two telephone lines. This is a total system in that it is designed to cover every aspect of acquisition and processing. Library computer records include all monographs on order, in process, and recently cataloged; bibliographic and holdings information for some 35,000 current and noncurrent serial titles held by the main and branch science libraries; and the circulation file. These records were originally stored on data cell, long the most inexpensive form of computer storage, but after approximately one year of library system operation disc packs were installed to increase general operating efficiency. At the project's inception the computer had no tape drives, a situation which necessitated transfer of MARC records from tape to disc at another institution. This arrangement was most inconvenient and often resulted in considerable delays. Both the disc pack and tape drive hardware alterations were instigated because of library computer usage.

The small size of the computer has challenged the impressive talents and ingenuity of the programmer, while the constraint of limited core and disc storage available for the teleprocessing program has kept on-line data validation and index development to a minimum. Limited file capacity has also resulted in the necessity to "dump" data onto historical file tapes for monographs cataloged at least nine months and without added copy orders. Operationally, the most significant current equipment limitation is the display rate (only 14 characters per second) of the typewriter terminals, which is far from ideal when long bibliographic records are involved.
The use of cathode ray tube (CRT) terminals, now in a testing phase, will greatly speed inquiry displays and be particularly advantageous for the individual issue check-in operation for serials.

**Staff Relationships**

In the development of a viable computer support design, the importance of a strong, direct relationship between librarians and systems staff is impossible to overemphasize. More than five years prior to automation implementation a systems analyst was officially appointed to the library staff, a decision which allowed the development of thorough familiarity with both the theories and specific applications of library operations. The mutual confidence which evolved was a significant factor in facilitating the massive retraining project necessitated by systems implementation. The library also gained a unique and inestimable benefit by interesting a member of the university’s Computer Sciences and Electrical Engineering Faculty in the automation project. On an official half-time appointment to the library staff, he singlehandedly designed and programmed the teleprocessing system and wrote most of the assembly language batch programs which allow the best possible utilization of the limited amount of computer memory available to the library. The official library staff appointments of both systems analyst and faculty computer expert have been vitally important in insuring essential communication, developing designs tailored specifically to meet the library’s sometimes rather peculiar needs, and allowing quick action when problems are detected.

One of the most important aspects of the automated system implemented by Northwestern is that it was put into full operation without the addition of any extra line staff. This proved to be a considerable accomplishment since technical services had been demonstrably understaffed in the most recent years of manual operations (based on the University of Washington formula in *Model Budget Analysis System for Libraries*, 1970, as well as in-house calculations). The decision to add no new staff to aid in the transition was partially a result of the tight financial restrictions under which the project must operate. Northwestern’s automation program has developed as a “shoestring” operation with a need to justify its existence and methods to the university administration, which provides its sole support. No grant funds have aided the development. This was mainly due to a general feeling that there would be less trouble suiting Northwestern’s individual needs if the library faced the realities of university funding from the outset. Otherwise, it might plunge into a potentially overambitious project using special funds which would eventually run out and leave operations in a position where a retrenchment might be necessary.

Since new staff were not added, it was necessary to redefine or reallocate certain positions within the technical services division. Interdepartmental procedural coordination has been ably managed by a professional also serving as head of the Search Department. A vacancy from the Catalog Department provided the nonprofessional supervisor for a newly established Data Center where the six 2740 terminals for monograph processing are located (the room in the new building originally intended for a library computer). Terminal operators from the general staff have been assigned in short shifts, returning to their regular departments with a broader understanding of the total system. This arrangement provides variety in job assignments and helps sustain the peak efficiency which is difficult to maintain in any long-term typing assignment. It also has been important to avoid cre-
ating an “elite” group of Data Center staff. Another advantage of using general library personnel as terminal operators lies in their grasp of the format and importance of bibliographic data. Since these staff members work with the same data as it applies to their regular assignments in the Search, Order, Catalog, and Bindery & Marking departments, they are less prone to make mistakes at the terminal than new typists without such additional experience. Unlike administrative keypunch operators who are trained to operate their machines as a primary objective and understand the material only secondarily, the library terminal operators have been trained to deal with the bibliographic data first and then given part-time terminal typing assignments.

**Preparation**

A number of procedural and organizational changes in manual operations resulted from anticipatory planning during the years immediately preceding implementation of the automated system. Preorder and precatalog searching were consolidated in a special Search Department. Cataloging with LC copy was organized into a Fast Cataloging Unit staffed by nonprofessionals under the supervision of a professional cataloger. The Acquisitions Department was split into monographic Order and Serials departments. These staff organizational patterns prevented a number of potential bottlenecks during system implementation and lent themselves effectively to group retraining. After the inauguration of the automated system, the need to face several other long-standing problem areas became clear, and two additional specialized units were organized. The first deals with problems in correctly identifying and handling added copies. In the second, serial bindery preparation procedures have been reorganized. Automation sometimes makes a library face up to problems which previously could be ignored but were significant nonetheless.

Perhaps the most difficult problems encountered involved transitional procedures rather than equipment and program limitations. Since the library implemented a total system, all aspects of the technical services operations were affected simultaneously. The changeover was not done on a “piecemeal” basis, and everyone became immediately involved. Misconceptions about various aspects of the system were rampant, in spite of an extensive informational campaign which began during the summer preceding implementation and continued intensively throughout the first year. The strain of simultaneously dealing with materials still tied into the manual system while inaugurating new methods of handling items ordered via the automated system, shifting responsibilities among individuals and departments, giving up treasured files, and getting used to looking at the same information in a new format (e.g., log and work sheets instead of LC card copy) proved a major challenge.

A decision to emphasize communication encouraged cooperation, promoted special efforts, and reduced anxieties. General orientation sessions, progress reports, and demonstrations, as well as specialized training, occupied a considerable amount of staff time but amply repaid the investment in boosted morale both within the technical services division and in other areas of the library. A general meeting for all library staff was held shortly before the time of implementation, followed up by a staff announcement briefly describing the extent of the project and requesting patience and cooperation during the transitional period. During the first three months of operation an almost continuous string of information-discussion-problem-solving meetings was held. Demonstration sessions were arranged to allow divisional staff not normally
scheduled at the computer terminals to receive basic instruction and have a chance to perform some actual operations at the keyboard. These sessions preceded a slide-illustrated description of the automated system presented for the whole staff under the aegis of the Library Staff Association. In turn this was followed by another set of terminal demonstrations for nontechnical services personnel. Although some of the detailed slide narrative presentation presumed a fairly clear understanding of technical processing operations under any system (manual or automated) and therefore was not completely comprehensible to every staff member, the general reaction was very positive, indicating intense interest. The slightly threatening mystery disappeared.

**ADJUSTMENT**

During the early adjustment period, lasting approximately three months, occasional negative remarks came from nontechnically oriented staff impatient with the slow-up in ordering and processing evident while training was in progress. Much material still arrived which had been ordered under the old manual system, and Thanksgiving and Christmas holidays intervened. By January 1972, when out-going firm orders had reached a normal level (over 2,500 per month), objections diminished. One phenomenon demanding alertness during the implementation of the new system, particularly because it involved a computer, was the tendency to blame the system for unrelated or marginally associated problems arising during the same time period. Although automation can be held responsible for certain amounts of stress and strain and resulting conflicts, it is little understood by many librarians. Thus it often serves as a scapegoat for other kinds of difficulties (e.g., slow-downs resulting from staff turn-over, problems related to absorbing processing for additional branch libraries). Faced with possibilities of this type, the only way to implement any system successfully is to have the full cooperation and dedication of the library staff who must make it work. A superbly designed system, excellently programmed, will fail if personnel lack understanding or are unwilling to contribute the extra effort needed to accomplish a major change in procedures. Although an excellent system is a necessity, Northwestern’s experience indicates that attitudes are at least equally important among the many requirements for successful implementation.

**RESULTS**

While certain key people bear the brunt of responsibility for systems planning and explanation, general staff acceptance, based on a perception of the project’s actual worth, determines ultimate success. The immediate workload was certainly not lightened during the early months of operation. Some of the filing drudgery was, however, quickly eliminated, and the increased accuracy in record-keeping became obvious as a long-term benefit. From the standpoint of improved operations, the greatest immediate impact was in catalog card production. Cards are produced once a week at the rate of over 6,000 in two hours, thereby equalling the production of the original typing pool for approximately seven-and-a-half work days. Cards are printed in correct filing order, sorted to the eighth character, and grouped for each of the various catalogs. Another system benefit, automatic punching of charge cards, has reduced the workload of the Circulation Department, which formerly had a staff member operating a keypunch. The increased accuracy of these cards is another plus.

Among the possibilities offered for the future by library automation is the chance to share files of cataloging data beyond those provided by the MARC project. Such sharing will reduce the
need to enter full non-MARC data via the terminal keyboard and spare the time currently spent tagging information for input. The computerized serial holdings records have potential for a regional serials data bank and promise for an expanded interlibrary loan operation. Naturally a cost savings can be anticipated if other libraries choose to join Northwestern's system in cooperative acquisitions and processing arrangements.

Regardless of the cooperative potential, Northwestern has decided that automation is the only way to deal with the problems to be faced by technical services operations in a large research library now and in the foreseeable future. The ever-increasing volume of material to be acquired and processed without additional staff and the demand for the rapid preparation of items and accompanying cards for use permit no acceptable alternative. Northwestern's experience has confirmed the value of a direct systems and library staff relationship, close attention to fiscal realities, development of on-line capabilities, complete utilization of available hardware and personnel, and a primary emphasis on communication. With full attention to library needs and informed enthusiastic staff cooperation, automation can and does succeed.

**Reference**

To the Editor:

The title of Joseph Kohut’s paper (CRL, May 1974), “Allocating the Book Budget: A Model,” is misleading. Mr. Kohut does not offer “a mechanism for equitable distribution of book budget funds” (p.199). Instead, he has offered a model for maintaining a given proportion, or “balance,” between books and periodicals during years of inflation.

The model does not explain how one originally divides the total budget among funding units nor how each “library resource unit” is subsequently divided into monograph and serial units. If these allocations are arbitrary to begin with, no subsequent correction for inflation will establish “equitable distribution” of funds. The model assumes that the monograph-serial resource unit ratios should remain constant from year to year. What is the rationale for this? For maximum possible equity, or effectiveness, such allocations and ratios should be empirically based on scientifically controlled surveys of library use and user interest.

Mr. Kohut ambitiously states that he “formulated basic goals and assumptions for setting budgetary policies,” and that he defined “the underlying principles which should guide these [budgetary] decisions.” Nowhere in his paper has he spelled out any such goals, assumptions, or principles. His “major contribution,” as he puts it, is much less ambitious—to show how a budget can be divided between periodicals and books for each funding unit, and how the division can be corrected for inflation. And that is useful.

William E. McGrath
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To the Editor:

In retrospect, the title of my paper, “Allocating the Book Budget: A Model,” does indeed appear to me to be misleading. If Mr. McGrath had, therefore, limited his objection to this point, then this letter would be unnecessary.

In his letter, however, Mr. McGrath states that: “The model assumes that the monograph-serial resource unit ratios should remain constant from year to year.” Not true. For simplicity the example assumed this, but the methodology is applicable whether it remains constant or not. Adjustments can be made as long as one continues to measure the collection in terms of resource units, not dollars. Further, Mr. McGrath recommends allocations and ratios “based on scientifically controlled surveys of library use and user interest.” Good point. Unfortunately, these are virtually nonexistent for many fields. Where research along these lines has been relatively active, for example, in the sciences (e.g., bibliometric studies) certain relationships (e.g., Bradfordian and Zipf distributions, etc.) indicate a constancy in overall literature use patterns.

Mr. McGrath also states that the model maintains the monograph serial balance “during years of inflation.” Inflationary considerations were, of course, the primary reason for this paper, but it should be pointed out that the model also applies to deflationary circumstances and increases or decreases in the actual book budget.

Mr. McGrath is correct in that the “model does not explain how one originally divides the total budget among funding units.” As I stated “... criteria are not set here for identifying an optimum proportional distribution of library resources among funding units.” However, whether optimal or not, by expressing their related distribution in forms of resource units rather than dollars, a clearer impression of collection development will result. In fact, the general tenor of my paper was not to seek for ideal solutions, but to provide a mechanism for more clearly describing current
To the Editor:

The May issue of CRL has published a paper by L. Peep and K. Sinkevicius, titled "The Financing System of USSR University Libraries." It appears that the authors have not accurately presented certain historic facts. While listing the oldest universities of the area which is presently controlled by the Soviet Union, they mention Vilnius (1579), Moscow (1756), Tartu (1802), and Kharkov (1805).

Some readers of CRL might be surprised that Tartu appears in the third place and that the university's birth year is given as "1802." Historic facts seem to point to a much older date. Namely, in 1632, in Tartu, in Estonia, during the rule of Gustavus Adolphus of Sweden, the Academia Gustaviana was opened as an institution of higher education. In 1690 it was renamed to become Academia Gustavo-Carolina.

During the ensuing war years and the plague the work of the Academia was disrupted. In 1710 Estonia came under the rule of czar Peter the Great who, within the terms of the peace treaty, had promised to maintain "the existing Lutheran university." Only years later, in 1802, the university was reopened as Universitas Dorpatensis. It was a German-oriented university, consistent with the wishes of the local nobility. Later, in 1896, the university became completely russified, and its name was changed to Universitas Jurjevensis.

It is hard to believe that the authors did not know the complete history of the venerable Universitas Tartuensis, as it was known during the independence of Estonia, 1919-1940. Therefore, it is very difficult to understand why the authors ignore the Swedish beginnings and prefer the Baltic-German continuation of this university.

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BOOK REVIEWS


"International" and "comparative" are among the "in" concepts in librarianship these days, as witness the marked increase in library school curricula offerings, both in Great Britain and the United States, and the geometric increase of index entries under these rubrics in *Library Literature* and *Library and Information Science Abstracts*.

Mr. Sable, too, has climbed aboard this bandwagon in choosing the title of his new book. Its purpose is to enable "students and teachers at library schools world-wide to become more aware of their international responsibilities and opportunities" (p.vi). The twenty-nine cases presented do not, unfortunately, accomplish this aim. They offer, rather, a series of problems in acquisitions, cataloging, circulation, bibliography, personnel, and reference in academic libraries. Some, though by no means all, of the questions appended to the cases have to do with "foreign" publications, organizations, or institutions, but the basic problems posed by the cases are not international in nature; the international aspect is often incidental and not essential to the issues involved. Further, the questions for each case are generally a mixed bag; some have nothing to do with the "solution" of the problem, as do cases in law or business administration texts. Thus, the first case, "The Chinese Cataloger," is concerned solely with personnel policy questions which do not in the least depend upon the fact that the staff member involved happens to be competent in Chinese (p.16-17). In case four, "Foreign Folklore," the principal questions addressed to the student are whether folklore materials are essential in the teaching of Spanish and appropriate for a college library; what obligation the college librarian has in aiding an instructor to obtain materials she deems necessary for her teaching; who is responsible for setting acquisitions policy; whether folklore is a discipline; and abstracting and indexing services in the field of folklore (p.34). Again, in case twenty-four, "International Noise Pollution Abstracts," the questions are bibliographical and reference ones (p.142-143). To call cases like these "international and area studies" seems to be stretching the concepts a bit.

The cases are presented clearly and logically, though often rather naively, and they offer useful, often important questions concerning academic library policy, particularly personnel policy, and on reference and bibliography, sometimes of a "foreign" nature. Library school teachers should find the work useful.

They will need to correct or modify, for the benefit of their students, a number of statements that appear throughout the work such as, for example, the following: "Dr. Avon has made it a practice of walking off with books without checking them out. Books that haven't even been cataloged yet" (p.36). [The anthropology department has] "commandeered the head of the reference department and she is now virtually working for the anthropology department." "It also seems that recently [professor] Avon has acquired one of our other reference librarians" (p.37). [The director of the University Library has] "introduced [the Farmington Plan] at those universities in which he served as acquisitions head" (p.120). [The titles acquired by the National Program for Acquisitions and Cataloging are] collected by the Library of Congress for distribution to universities... all over the country" (p.122).—J. Periam Danton, School of Librarianship, University of California, Berkeley.


Dr. White, in his introduction, states that "the purpose of the book is simple, to make
it easier to get at knowledge and information of importance to all of us . . . , to throw light on the workings of the social science information system, and to support subject bibliography as a branch of study.” While the intent may be simple, no doubt execution of the intent was not. The book clearly is a result of meticulous scholarship, creative effort, and thoughtful selection. These combine beautifully under Dr. White’s direction into a thorough, scholarly contribution to bibliographic literature.

The guide is divided into nine sections; social sciences in general, history, geography, economics and business administration, sociology, anthropology, psychology, education, and political science. Each section, as in the first edition, is made up of a bibliographic essay on the discipline and its literature, followed by guides to the literature and major reference works. The essays are excellent and readable. The lists of sources and guides have been selected and annotated by authorities active in their respective fields. Biographical and professional information about each contributor is included in the introduction and each section is signed.

A library would do well to keep both editions in its current reference collection. Because Dr. White’s associates have changed, the essays and emphases have changed. In the case of anthropology, Bernard J. Siegel (professor of anthropology, Stanford University, and editor of Biennial Review of Anthropology) states specifically that his survey in the second edition covers the literature in anthropology between 1960 and 1971. It is inevitable that his bibliographic essay differs tremendously from that written by Felix Keesing in the first edition. The guides to the literature sections and reference materials sections are obviously more repetitive.

The format of the second edition is, in my opinion, far more inviting and pleasing than the first. The annotations are authoritative and useful. Cross-references are used extensively and well in dealing with this overlapping body of literature of the social sciences. The index is thorough.

I would recommend that general reference librarians at the college and university level not only buy this guide but read it as well. We all need to be reminded of current developments in each of these fields, to be reminded of sources we do not use frequently, and to be reminded that guides of this quality exist. Many sit forever on the shelves unused unless recommended to the scholar by the librarian.—Joyce Ball, University of Nevada Libraries, Reno.


Consistency. If one word must catch the attention of a librarian or archivist, be this it. Perhaps more so for the archivist who must maintain a complexity of specific procedures within his/her department to provide adequate bibliographic control and organization. The entire gamut of acquisitions, processing, storage, and reference are involved within the archival limits. Recently, many archival institutions have been formalizing daily procedures within their department by way of a manual. Such attempts at standardization are commendable, for without procedural manuals archival consistency cannot be maintained. It is to this point that the staff at the archives of the Washington University School of Medicine Library addresses itself. This manual has been published to aid other archivists who might be considering setting up their own procedural system. Although the directions and forms apply to the specific situation at Washington University, the Washington University archival staff believes that the manual should be useful to the larger profession of archivists.

The format is a spiral-type notebook printed in typescript with accessibility somewhat restricted due to no index and an insufficiently concise table of contents. The manual lists in minute detail the established steps entailed for the archival process from acquiring material through providing reference service. In addition to the textual explanation, excellent work-flow charts provide an added depth to the work. Also included are chapters that deal with procedures for such material as sound recordings, pictures, maps, and microforms. Examples of specific request forms and internal control forms employed at the Washington University Archives are also present-
ed, but unfortunately, are carried to extremes—such as thirty-three pages of targets used for microfilming. Such examples illustrate the attention to detail apparent throughout this manual.

Criticism of specific procedures would be both unfair and unwise. In the larger context, many ideas contained within the manual are applicable to other archival institutions. Yet, a large degree of success with archival organization is rooted to the pragmatic qualities exhibited by the head of the archives department. Thus, procedures that might be applicable to specific institutions with certain characteristics may not be workable at another institution. Future archival procedural writers hoping to glean insight into archival organization and processes should keep in mind that this manual represents procedures developed for a medical archives and that such an archival collection is somewhat restricted in both scope and size compared to many college and university collections. Nonetheless, the manual will provide guidance to those attempting to produce a procedural manual for their own institution—especially if used in conjunction with Forms Manual, published by the College and University Archives Committee of the Society of American Archivists (1973). One hopes that archives with procedural manuals will respond positively to Washington University Medical Archives' suggestion to make them available for outside examination. The creation of more such manuals will help standardize procedures and will lead directly to the improved control, service, and benefit of archives—and most importantly—consistency.—Charles R. McClure, Head, History-Government Department, University of Texas at El Paso Library.


Libraries acquire for use by their patrons only a small fraction of the doctoral dissertations written annually in the United States. If the research is not acquired extensively in its original format, do dissertations serve as information sources in other

traditional formal communication channels of open literature?

That question is addressed in this monograph, which was originally written for a Ph.D. at the University of Texas. The investigation was undertaken to determine to what extent dissertations serve as information sources and what are the characteristics of assimilation and diffusion patterns of dissertation contents. After all, with the average cost of each dissertation in the sciences being $62,000, shouldn't the findings be available to a wider audience? Using the proper research methodology of defining the population and then selecting the sample, the author chose the four disciplines of botany, chemical engineering, chemistry, and psychology to prove his point. He further refined his sample to three universities, and his final sample included 441 dissertations. The original portion of the study is preceded by a brief history of the dissertation and a more lengthy review of related literature.

Boyer found through his literature search that dissertations as a form of literature represent a miniscule percentage of cited literature and that they represent an even more miniscule percentage of materials acquired by libraries.

In his research he found that most dissertation-based materials, in the sciences, appear in journals with an average of 1.43 articles per dissertation. Fifty-three percent of those had not been cited, and of those cited nearly two-thirds of the citations were made by persons known to the dissertation author, including 22 percent self-citations.

One weakness of the research, readily admitted by the author, is that examination was made of the formal written communication channels only—including journal articles, books, or chapters of books. It completely excludes oral communication in seminars, conferences, symposia, interpersonal communications, and closed literature such as preprints, reprints, and technical reports. Therefore this study covers only one part, perhaps the less important one, in the communication process.

Another point which should not be overlooked in the information flow is that, particularly in the sciences, the value of the content may be transitory or the quality may be questionable.
The author has posed an important question and examined one aspect of it. Hopefully someone will take the topic from there and examine other aspects.—Robert D. Stuearl, Graduate School of Librarianship, University of Denver, Denver, Colorado.


In 1970 the Sloan Foundation established a program in educational technology which included "library technology" as one of the areas to be studied. Dr. Herman H. Fussier of the University of Chicago was commissioned to do this study. Upon receipt of the report the foundation felt that it deserved general circulation. The published work is basically the same report that was submitted as an "internal document" not addressed to librarians (preface). The question remains, "What is the purpose of the report and to whom is it addressed?"

The report contains the thoughts of Dr. Fussier, a nationally known and respected library technologist, concerning some of the problems facing large, research-oriented university libraries. The title is slightly misleading since the author has been self-selective in reporting on only a few problems and issues. In addition, there are problems with the report's focus and scope, as well as a scarcity of definitions of frequently used terms.

After a nondescript foreword and an anemic preface, chapter one, "Libraries and Technology from Several Perspectives," contains a review of a few selected studies of technologies used by libraries within the last decade. Chapter two, "Some Current Aspects of the Large University Library," switches from an emphasis on specific technologies to problems involved in library costs. This is the only chapter containing tables, all of which are extracted from existing reports and studies. As noted by the author, a new book by Professor W. J. Baumol, entitled \textit{Economics of Academic Libraries}, was about to be published. It is now available, and it contains a more comprehensive treatment of this topic. Chapter three, "Bibliographical and Library Processing Functions," is seven pages in length and attempts to do the impossible by combining a discussion of bibliographic access and library processing functions. References to more detailed accounts covering these topics are lacking. Chapter four, "Shared Resources, Photocopying, and Facsimile Transmission," combines the conceptual topic of shared resources with the specific technologies of reprography and facsimile transmission; it is at best confusing and at worst inadequate. In addition, there are three paragraphs devoted to copyright problems. Chapter five, "The Computer and the Library," is a sound general discussion of how computer technology can be used to confuse and defuse problems in the management of information systems. Chapter six, "Examples of Computer Applications in Library Operations and Information Access," complements the preceding chapter by giving a brief description of specific locations: Columbia, NLM, Northwestern, OCLC, Ohio State, MIT, Stanford, and Chicago. Each description was based on information supplied by the institution. Chapter seven, "Some General Observations and Conclusions," amplifies the confusion concerning the focus of the report. On page 73 the author states that the report is "limited essentially to the problems of literature and information access" when, in fact, the emphasis is on internal operations and functions of the library. Following the last chapter there is a section containing fifty-nine references, "acknowledgements," and an index. The index contains at least one error (p.89—National Advisory Commission on Libraries, 18 should be 17).

In conclusion, the author has made a report to the Sloan Foundation; he has raised many relevant and poignant points concerning the problems and issues facing the large, research-oriented university library. There are useful parts to this report, especially the up-to-date references made to more complete and empirically based studies and reviews; however, these parts are interspersed with less useful monologues. The remaining unresolved question in this reviewer's mind is, "Who will read this internal document?"

This book is recommended to the reader with the initiative, interest, background, and time to analyze the author's opinions.

It may seem a discourtesy to the author to write a review of a book that one has not read thoroughly, but that, unfortunately, is the situation in which I find myself. I have examined this anthology, but I cannot say that I have read it, nor do I intend to read it, despite the fact that change in libraries is not only a subject which I recognize as being of some importance but also one in which I have an immediate and practical interest.

Mr. Hug's anthology consists of twenty-four articles, mainly dating from 1969 on, arranged in two equal parts. The first part is entitled "The Subtle and Ubiquitous Nature of Change" and the second "Alternative Strategies or Ways to Aim at a Moving Target." There is also a three-page preface which describes generally the intent of the anthology and a five-page introduction to each part which comments briefly on each of the articles.

There are only four articles by librarians: Wasserman on "Professional Adaptation," McAnally and Downs on "The Changing Role of Directors of University Libraries," Atherton on "Putting Knowledge to Work in Today's Library Schools," and, of course, Shera on "Documentation into Information Science." The remaining articles are by people in a number of other disciplines. Many of the contributions by librarians on a topic such as this may not be significant, but a scanning of those articles that are included here leads me to believe that they are not very significant either. One of the articles that I did read, for example, was a two-page one called "Ex-Innovators as Barriers to Change," by Bob F. Steere. Apart from his creation of the incredibly horrible jargon word "complacentor," one need cite only his concluding remarks: "Look around you, Mr. Ex-Innovator! Are you today's traditionalist? Are you the present barrier to change?" Mr. Hug's description of this article as "thought-provoking"—I would better describe it as "thought-revolting"—gave me no confidence in his ability to identify the most significant articles on this subject. In addition I can readily cite a number of other more substantial and useful articles on this topic such as Victor Thompson's "Bureaucracy and Innovation" (Administrative Science Quarterly 10:1-20 [1965]), and my knowledge is somewhat limited.

I am increasingly dismayed by anthologies, generally designed to serve some poorly defined purpose, in which all of the material is readily available in any decent library and for which, therefore, a solid bibliographical article might well suffice and might, indeed, be even more useful since it could cover a wider range of material. Such anthologies only contribute to what can best be described as information pollution. They might have some value as a supplementary textbook in a course, but they have relatively little other value. Surely there are less expensive and less polluting ways to make readings readily available to students. Such anthologies would be more bearable if they managed to include reasonably lengthy, understandable, and useful introductory remarks that put the material into perspective, analyzed it, and used it to arrive at some kind of useful and meaningful conclusions.

In this case Mr. Hug's preface is so brief and so jargon filled that it is of limited value, and he appears to reach no real conclusions. The material is simply presented for the reader to make of it what she/he will. I came away from a scanning of this book with the feeling that to read it carefully would leave me no better informed about the nature and meaning of change and how to effectively accomplish meaningful change in a library setting. I cannot recommend it to others.—Norman D. Stevens, University of Connecticut Library, Storrs, Connecticut.
My main criticism of Ford’s book, however, lies with editorial aspects. On page 50 Ford mentions that the annual supplements to the British Museum Catalogue appear periodically. But the worst sentence must be on page 123 where it reads: “Non-periodical serials also differ from other library purchasing when they are purchased as series rather than as monographs. Librarians call these standing orders or continuations.”

It is truly unfortunate that so much time and effort have been spent on this project by the author and numerous others. A less ambitious and more practical searching and acquisitions manual, such as the one Clara Brown did recently for serials (EBSCO, 1973), would have been far more useful, especially for those librarians involved in the continuous training of new staff.

For the time being, we will have to go back to dog-eared homemade manuals, Wynar’s bibliography, and photocopies of good articles.—Hendrik Edelman, Assistant Director, Cornell University Libraries, Ithaca, New York.


Here is a little volume that will delight the cockles of many a bookish antiquary’s heart. It first appeared, in a severely limited edition and largely without notice, some forty-five years ago in London, and this Gryphon reprint now makes it for the first time generally available in this country. Individuals and libraries with interest in bibliographic printing and the early book clubs and scholarly text societies will want copies.

The author prefaces his text with a clear and succinct definition of his subject. “On the study of texts,” he writes, “on the appeal of antiquarianism, on wayfarings among forgotten books or rare editions, and the contribution these ventures bring to our knowledge of history, of social life, and of literature, are founded those societies whose work this essay follows.”

After a brief survey of seventeenth- and
eighteenth-century precursors to this particular genre of book club, Sir Harold chronicles the establishment in 1812 and the early history of the Roxburghe Club. "In addition to the practice of heavy dining," he reports, "it was early resolved that each member . . . should, in turn, print 'some rare old tract, or composition—chiefly of poetry,' at his own expense."

Roxburghe was followed in 1823 by the founding of the Bannatyne Club by Sir Walter Scott with the purpose of printing texts illustrative of the history of Scotland, a pattern promptly followed by a number of other similar associations in that country. Others—throughout the British Isles—dedicated their activities to slightly different specializations, and such names as the Camden, Chetham, Caxton, and Hakluyt societies soon became well known to the historian of British life and culture. These in turn led to a proliferation of printing historical societies—such as the Pipe Roll, the Selden, and the Folk-Lore societies—and of printing literary societies—including the Early English Text Society, the Shakespeare Society, and the Chaucer Society. Collectors soon had their printing clubs, such as Ye Sette of Odd Volumes and The First Edition Club, by which the book here under review was first commissioned. Bibliographical societies were not far behind.

As a result of the work of these sixty or so organizations, many of which are still active, virtually thousands of texts have been made available to scholars, texts which would otherwise be languishing still in single manuscript. Although motivated in part by considerations of vanity and dilettantism, these printing societies have accrued a large debt of gratitude from scholarship, a debt which has not yet been fully recognized or acknowledged. But that is another book. —David Kaser, Graduate Library School, Indiana University, Bloomington.


And now rides forth on a white charger another brave knight to succor that elderly damsel in distress, Universal Decimal Classification. Boldly he chants again the oft-told tale of her royal (albeit with bar sinister) descent from Good King Melvil, her auspicious birth, her trials and tribulations, the mighty feats of her noble protectors, Sir Otlet, Sir LaFontaine, and Sir Duyvis, and the evil days which have fallen on her since their passing.

Then he gets down to the nitty-gritty:

There are full editions of UDC and medium editions and abridged editions and special subject editions, all in various stages of development, in various degrees of modernity, and in various languages. Schedules are produced in volumes, in fascicles, in loose-leaf, and by computer. UDC still has the general intellectual pattern of DC with its bias and notational problems; and in development of detail synthesis appears alongside enumeration. Revision is spasmodic, cumbersome, decentralized, and slow. Two Unesco surveys have suggested that UDC could no longer serve as an adequate international general classification scheme.

Ideas for the future of UDC have ranged from tinkering with its schedules and notation (e.g., Caless, Perreault, and others) to fundamental reconstruction of the scheme (e.g., Mrs. I. Dahlberg). Perhaps even more important than a restructured scheme is a restructured management—more efficient, more centralized, and above all, adequately funded (cf. Wellisch and others). But where to get the money? Although "the English edition of UDC sells quite well," yet "the United States would present a more difficult market" and "without fairly considerable support from sales in the USA it would be difficult to finance the improvements which all agree are necessary" (p.67-68).

At this point Foskett sticks in a chapter on mechanization and another on the Classification Research Group (CRG): mechanization and UDC would go well together—e.g., the Freeman-Atherton project sponsored by the American Institute of Physics. The work of CRG toward the construction of a new general classification scheme developed a number of theories which might be helpful in revising UDC—e.g., levels of integration, categories, etc.

And then we are returned to the future
of UDC, this time as Foskett himself sees it. A few of his suggestions:

UDC should be “a broad classification . . . with a detailed analytic-synthetic scheme to replace the current full/medium editions” (p.105). The scheme should use several CRC ideas, and it should be accompanied by “a thesaurus rather than a simple alphabetical index” (p.108). UDC should develop “through use in mechanized information retrieval systems and through computer production of the schedules” (p.103); by use of Computer Output Microfilm “at the end of each year a complete new edition could be published” (p.117). Just as LC and DC are “tied to a collection,” and “developed through the daily work of classifying the books received by the Library of Congress,” so “the British Library should accept as one of its responsibilities the maintenance of a team to maintain and utilize UDC” (p.102-3). “The English edition could then become the basis for all versions of UDC” but “policy would remain in the hands of the FID/CCC; a situation analogous to that of DC” where “revision is carried out” in the Library of Congress “but overall policy is decided by Forest Press Inc., acting on the advice of the Decimal Classification Editorial Policy Committee” (p.119). Funding would come from the British Library and from the sale of the completed edition (p.120).

This is a book whose detail may be for experts more about penguins than they wish to read and for the interested non-experts more jargon than they can easily understand. Organization of the material is rather more haphazard than one might expect from a classification expert (there are even tacked on four not too obviously needed appendices). It is not impossible that the solutions offered would transform (rather than save) UDC and repel some present producers and some present users. But Foskett’s statement of the problem rings loud and clear:

The old girl can no longer get by with just love and a lone faithful servitor; what she needs now are cash and a retinue. But first she must have a face lift.—Paul S. Dunkin, Professor Emeritus, Rutgers Graduate School of Library Service.


The title is somewhat misleading. The reader may be anticipating a discussion on the provision of reference service using an electronic data base and how a library should go about doing this. The on-the-line librarian may well have questions about the implications and costs in getting involved in such a venture. Librarians are becoming aware of commercially available data bases and are probably beginning to ask basic questions about the direction to take. For example, is it best to opt for the commercial product offered by such corporations as SDC or Lockheed, or is it better to start one’s own shop of electronic reference tools? How does a library market this new service? What are the staffing requirements: their numbers and educational background; and how does a library pay for this?

What this book turns out to be is an introductory technical manual (based on a 1971 ALA preconference) on some aspects of electronic data use; e.g., document processing in ERIC, binary numeration, Boolean Logic, and weighing. The authors appear to have the viewpoint that librarians will, by working through this book, be less likely to be snowed by computer people when electronic data services are talked about. The authors state that librarians must be versatile in discussing computer-based services. This is true, but do librarians need to know binary arithmetic (14 pages) or Boolean logic (12 pages) to carry on intelligent conversations. Some librarians will need to know how to use a computer terminal and to act as facilitators in arranging for a user’s search of the literature. (No doubt for such an individual all of this book is relevant.) Most other librarians will need to know about the administrative and user-oriented aspects of such services.

The best and most original part of this book deals with search strategies and their refinement in realizing the full benefit of an electronic data base. This section provides useful information on how one goes about structuring and refining the language of a search request.
The editors should have provided a different direction for this book to face the fundamental questions librarians should or do have regarding the use of such reference tools. The obvious expertise of the authors could have been used to help other librarians learn about providing electronic data bases in reference service to a library's users.—John Lubans, Jr., Assistant Director for Public Services, University of Colorado Libraries, Boulder, Colorado.


This volume is a potpourri of materials on the application of computerized information handling techniques to one of the most complex and convoluted of today's "hot topics" in librarianship—networking. We have here a good mix of people, including library systems personnel, senior administrators, and information specialists, chosen specifically for their professional experience with networking at one stage or another—designing, planning, developing, operating, and evaluating. Library school teachers are conspicuously absent, for the emphasis is squarely on the practical, not the academic. Most of the activities discussed are attempts at centralized technical processing, but information retrieval services for users are covered in McCarn (MEDLINE) and in parts of the papers by Randall and by Evans, whose generalized schematic approach is intriguing enough to steal the show from the particular project he is describing.

There are accounts of libraries "backing into network operations" (Brodman), where a system was designed for one library and then adapted for many, and of formally organized and chartered affairs like OCLC (Long), which had its objectives well enough defined at the outset to let a contract for the simulation of computer performance characteristics in order to make the right choice of machine for its purpose. Jolliffe provides the only European contribution with a succinct account of Project LOC, a joint attempt to create a machine-readable union catalog of pre-1801 materials held at Oxford, Cambridge, and the British Museum. This is not a network, of course, but it could become the basis for one, and much more should be known about it in the U.S.

Whether or not the clinic succeeded in imparting help at the nuts and bolts level I do not know, but in published form the more interesting contributions are those that go beyond technical description to give us the flavor of what it is really like to be involved in computerized cooperation. The oft-repeated platitude that runs "The major problems are not technological, but organizational and administrative" seems depressingly confirmed by recurring comments on the problems of properly financing cooperative activity; or persuading librarians to give up some control of their operations and services; or being dependent upon a computer center which has many other missions and user groups; of increasing user expectations which then are not fulfilled; of whether and how to charge for services, etc. Even taken singly, most libraries have found it difficult enough, organizationally, to understand and exploit the computer (as any Gentleman of Quality knows). The immediate chances of them multiplying their manifestly severe bureaucratic problems by ten and then succeeding cannot be very high. Joseph Becker ends the volume with the hortatory comment that a national network of all types of libraries cooperating about everything is "just around the bend." Given the general tenor of the preceding papers, that seems a trifle optimistic.—Peter G. Watson, University Library, University of California, Los Angeles.

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